



United States
Department of
Agriculture



NRCS

Natural
Resources
Conservation
Service

In cooperation with
United States Department
of the Interior, Bureau of
Land Management; State
of California, Department
of Conservation; and
Regents of the University
of California, Agriculture
and Natural Resources
(Agricultural Experiment
Station)

Soil Survey of Kern County, Northeastern Part, and Southeastern Part of Tulare County, California



How To Use This Soil Survey

General Soil Map

The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

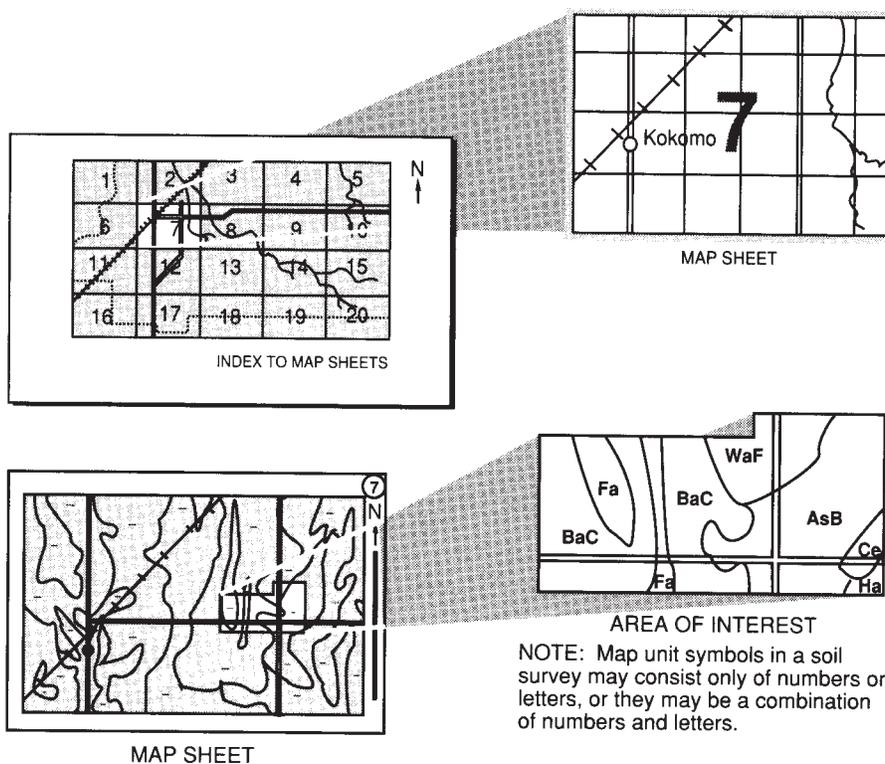
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the United States Department of Agriculture, Natural Resources Conservation Service; United States Department of the Interior, Bureau of Land Management; State of California, Department of Conservation; and Regents of the University of California, Agriculture and Natural Resources (Agricultural Experiment Station). The survey is part of the technical assistance furnished to the Eastern Kern Resource Conservation District, the Kern Valley Resource Conservation District, the Tehachapi Resource Conservation District, Mojave Desert-Mountain Resource Conservation and Development, and San Joaquin Valley Resource Conservation and Development.

Major fieldwork for this soil survey was completed in 2002. Soil names and descriptions were approved in 2007. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2002. The most current official data are available on the Internet.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover Caption

The South Fork of the Kern River enters Isabella Lake from the east in South Fork Valley. Land uses include livestock grazing, irrigated crops and pasture, recreation, wildlife habitat, and homesite development.

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Foreword

This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Lincoln E. Burton
State Conservationist
Natural Resources Conservation Service

Soil Survey of Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with United States Department of the Interior, Bureau of Land Management; State of California, Department of Conservation; and Regents of the University of California, Agriculture and Natural Resources (Agricultural Experiment Station)

This survey area includes much of the northeastern part of Kern County and parts of southeastern Tulare County (fig. 1). It has an area of about 913,000 acres (369,491 hectares). It is bordered on the northwest by Tulare County; on the north by the Sequoia National Forest; on the northeast by Inyo County; on the east by the survey area called “Mojave Desert Area, Northwest Part”; on the south by the survey area called “Kern County, Southeastern Part”; and on the west by the survey area called “Kern County, Northwestern Part.”

General Nature of the Survey Area

This section provides general information about the survey area. It describes history and development; population trends; the transportation infrastructure; physiography, relief, and drainage; geology; and climate .

History and Development

Prepared by Robin M. Roberts, MA, NRCS Earth Team Volunteer.

The earliest residents of the survey area were native Californians from three different language groups that each took up residence in a different topological portion of the survey area. Arriving about 9,000 years ago, the Paleuyami Tribe of the Yokuts American Indians resided in the area between Poso Creek and the Kern River



Figure 1.—Location of Kern County, northeastern part, and southeastern part of Tulare County in California.

(Kroeber, 1976; Latta, 1949). Except for grinding rocks located at dwelling locations where acorns were “processed,” the Paleuyami had little permanent impact on the land. Their practice of setting deliberate fires to stimulate certain seed plants and promote the growth of certain plants used for basketry, however, set the stage for the later dominance of non-native plant species (Anderson and Moratto, 1996).

The Kawaisu, a nomadic tribe related to the southern Paiute peoples of the Uto-Aztecan language family, lived along the southern edge of the survey area, around Tehachapi Pass (California Native American Heritage Commission, 2007). In the mountain areas, particularly the Kern River Valley, dwelt the Tubatulabal Tribe, also

members of the Uto-Aztecan language family, but related to the Shoshone American Indians and speaking a unique dialect, called in their tongue, Pakanapul (USDI, 2004; Smith, 1978; Voegelin, 1938). The Kawaiisu left no permanent sign of their residence on the land, but the Tubatulabal, like the Yokuts, used fire to keep the area around their villages clear of plants and shrubs, modifying the native plant growth in the process.

In the Tulare County portion of the survey area, tribes of the Monache people, also from the Uto-Aztecan language stock, spent the summer season in the area of Monache Meadows (California Native American Heritage Commission, 2007). This area takes its modern name from those earliest seasonal residents (Farquhar, 1926).

In 1776, Francisco Garces crossed the Kern River east of present-day Bakersfield, becoming the first non-native individual to enter the survey area (Carson, 1852; Comfort, 1934; Lewis Publishing, 1892). In 1834, Joseph Walker passed through the Kern River Valley seeking a southern pass through the Sierra Nevada Mountains and discovered the pass named in his honor (Comfort, 1934; Leonard, 1839; Lewis Publishing, 1892). Charles Fremont camped near the confluence of the North and South Forks of the Kern River during the winter of 1845-46 and named the river in honor of his topographer, Edward M. Kern (Comfort, 1934; Fremont, 1854; Lewis Publishing, 1892).

In 1851, the first permanent settlers of European descent arrived in the survey area, attracted by the discovery of gold earlier that year (USDI, 2004; Comfort, 1934). Many of the prospectors came from the Southeast to try to raise money for the Confederate cause. The first town of any consequence in the survey area was Keyesville, founded in 1853 after Richard M. Keyes' discovery of gold (USDI, 2004). This discovery was the first of many that made gold mining the first industry to take place within the confines of the soil survey borders (Kern River Valley Historical Society, 2007; Lewis Publishing, 1892).

Kern County was organized on April 2, 1866, from parts of Tulare and Los Angeles Counties. The first county seat was Havilah, founded 2 years earlier and boasting a population of around 3,000 (Comfort, 1934; Lewis Publishing, 1892). The mines played out, and when the first Southern Pacific railroad laid track through Sumner (East Bakersfield) in 1874, the county seat was transferred to Bakersfield. The focus of development shifted from mining in the Kern River Valley to cattle ranching and other agricultural enterprises in the valley. As elsewhere in the State, mining left behind permanent changes on the landscape. Many of the mines that began in the 1850s can still be seen today covering the surface with subterranean rock and dirt (Comfort, 1934; Kern River Valley Historical Society, 2007; Lewis Publishing, 1892).

The first agricultural enterprise on record started in 1860, when cattle and sheep were brought into the area. Because of low precipitation, the growing of crops has depended largely on the availability of irrigation water. Development of water sources for irrigation began, however, with the growth of the mining industry. As miners moved into the area, irrigation ditches were established and vegetable crops were grown (Comfort, 1934; USDI, 2004).

In 1874, James Haggin and Lloyd Tevis bought a considerable amount of land in the southern portion of the survey area and used water from the Kern River to irrigate it. So great was the diversion of water that the Miller and Lux Cattle Company, which held downstream riparian rights to the Kern River water, sued them over the co-opted water. The suit resulted in the landmark 1886 water rights decision, Lux vs. Haggin. Eventually, the two giant land companies agreed to split the water and Haggin and Tevis, who formed the Kern County Land Company in 1890 (Comfort, 1934; Gia, 2006), built the first dam across the Kern River and controlled the flow into Buena Vista Lake (Morgan, 2003; Rose, 2000; Treadwell, 1981). The failure of this dam to meet the growing needs of Kern County eventually led to the building of Isabella

Dam. Agriculture modified the surface soils more profoundly than any prior land use had.

By the late 1850s, ranchers began running cattle among the foothills and mountain valleys in the survey area, including Lynn's Valley, northwest of Greenhorn Mountain; the Kern River Valley, across the river from Keyesville; and the Kelso, Scodie, and Squirrel Valleys, to the south and east and in Monache Meadows in Tulare County. By the 1880s, sheep herding had supplanted cattle ranching on the higher elevation grazing lands (Comfort, 1934; Lewis Publishing, 1892). Both cattle and sheep ranching had a profound impact on the soil and plantlife in the survey area, impacting a greater area than either the native Californians or the miners.

In 1899, the discovery of an oilfield (called the Kern River Oilfield) profoundly altered the economic dynamics of Kern County and the survey area (Comfort, 1934). By 1905, this field was the largest oil producer in the State, producing approximately 15 millions barrels during that year. Peak production continued through 1910 and tapered off during the Depression. World War II created a huge demand for oil products that stimulated a spike in production from the oilfields, and the advent of steam injection brought about another peak production period during the 1960s (Christie, 1999). Oil production has had a profound effect on the surface of the land, but most oilfields are dual-use, providing grazing for cattle between the pumps. The withdrawal of oil and ground water and the injection of steam have contributed to land subsidence in many portions of the survey area. Oil production is the main industry in the survey area. The major oilfields in the area are Kern River, Kern Front, Mount Poso, Sharktooth, Round Mountain, and McVan. Kern County is the leading oil-producing county in the United States. The Kern River Oilfield alone has produced over 2 billion barrels of oil over the last 100 years.

By 1914, Kern River hydroelectric plants made electrical power available (Comfort, 1934) and more than 1,500 water-pumping plants were operating in the survey area (Burtch, 1937), supplementing Kern River water with deep-well ground water.

A major impact on the survey area occurred in 1953, when the Isabella Dam across the Kern River in the Kern River Valley created Lake Isabella. Built by the U.S. Army Corps of Engineers for flood control and irrigation, this dam supplanted the old Kern Land Company dam that kept Buena Vista Lake filled. Damming of the Kern River and of the Kings River (by Pine Flat Dam) to the north renders both Tulare and Buena Vista Lakes dry during most years. In addition to its role in water control, Isabella Lake provided new opportunities for recreation. The historic towns of Isabella, after which the lake and dam are named, and Kernville to the north had to relocate as the waters of the reservoir rose. The sites of the ancient Tubatulabal villages of Tulonoya and Pitnamiu were likewise inundated (Kern Valley Sun, 2006).

Agriculture remains a major industry in the survey area. Most of the mountains, foothills, and desert areas are used as rangeland for cattle or sheep. The Kern County Cattle Company is said to control more acreage than any other cattle company in the United States (Cypher, 1996). Alfalfa is grown where water is available in the southern parts of the survey area. Some crops are grown in the Kern and Kelso Valleys and in the Walker Basin.

Recreation and tourism are major industries in the survey area, centered around Lake Isabella in the mountains and in Hart Park, in an area along the Kern River on the extreme southern edge of the survey area. The North Fork of the Kern River is one of the premier white-water rafting rivers in the country. It accounts for a major portion of the economy of Kernville.

Population Trends

The population of Kern County has grown considerably since 1870, when it was 2,925. In 2005, it was 756,825. Of that population, approximately 17,000 people lived

within the confines of the survey area. Few people live in the part of the survey area in Tulare County.

The survey area has no major cities but has several small towns, most of which owe their existence to outdoor recreation or the oilfields. The largest town in the survey area is Lake Isabella, taking its name from the reservoir upon which its existence and economy depend. The economy of Kernville and that of Wofford Heights also depend on the lake, along with winter recreation.

Glennville, which is located where Highway 155, Granite Road, and Jack Ranch Road intersect, is the western gateway to the Lake Isabella recreation area and to portions of the Sequoia National Forest. The part of Highway 155 east of Glennville is often closed by snow in winter, and chains are required most of the winter.

Transportation Infrastructure

The transportation infrastructure in the survey area includes roads, railroads, canals and waterways, and airports.

Roads.—State Highway 65 runs along the western edge of the survey area. State Highway 155 runs along the northern edge, connecting State Highway 65 with State Highway 178 at Lake Isabella. State Highway 178 runs northeast from Bakersfield to Lake Isabella, where it turns directly east through Walker Pass, the southernmost pass through the Sierra Nevada Range, and connects with Freeway 14 and Highway 395 near Inyokern. Highway 14 does not enter the survey area, but it provides the main north-south access for the east side of the survey area. State Highway 58 runs along the southern edge of the survey area until it intersects with Caliente-Bodfish Road, where it turns south through Tehachapi Pass. Caliente-Bodfish Road roughly bisects the survey area east and west and runs from State Highway 58 on the south to Lake Isabella, where it connects with State Highway 178. Kelso Valley Road runs north and south in the eastern portion of the survey area and connects with State Highway 178 at Weldon on the north and Jawbone Canyon Road on the south, in the Kelso Valley.

Railroads.—The main Union Pacific Railroad line runs along the southern border of the survey area, leading to the world-famous Tehachapi Loop, about 15 miles outside the survey area. Numerous short branch lines serve the oilfields north of Oildale and can thus be considered a major transportation feature of the survey area.

Canals and waterways.—Water-based transportation in the survey area is limited to minor recreational purposes. The Kern River dominates the survey area, but its primary use is for white-water rafting and power generation. A few small agricultural canals are in the oilfields on the west side of the survey area. They are used mainly by ranchers in that part of the survey area.

Airports.—The nearest airport of significant size is the Kern County Airport (Meadows Field), which is directly outside the survey area. The main airport runway ends at the southwest corner of the survey area. A designated airport is near Kernville, and several private landing strips are throughout the southern part of the survey area.

Physiography, Relief, and Drainage

This survey area includes the mountains and foothills of the southern Sierra Nevada Range. It also includes small portions of the Central Valley on the western side. Elevation ranges from about 400 feet (122 meters) near the Kern River, in the western part of the survey area, to 8,599 feet (2,621 meters) in the northeastern part of the area.

The Sierra Nevada Mountains dominate the landscape in the survey area. The part of the area in Tulare County has many peaks with elevations of more than 8,000 feet

(3,238 meters). The western and southern peripheries of the survey area are covered by hills. There are three main mountain valleys in this part of the survey area. These are the Kern River and Kelso Valleys and Walker Basin.

A large area of uplifted, dissected fan remnants is west of the Sierra Nevada Mountains. Directly north of Oildale, this landform grades into an area of uplifted, dissected valley fill. This area extends along the southern border of the survey area from the western boundary to the Edison area, ending at Caliente Creek. It is dominated by nearly level to very steep hills with narrow drainageways. The sediments that make up the terraces were laid down by heavy runoff from the Sierra Nevada Range during or following the Pleistocene Epoch. The valley fill is of marine origin. The part of the survey area on the floor of the San Joaquin Valley consists of nearly level and gently sloping alluvial fans, fan remnants, flood plains, and stream terraces. It makes up a very minor part of the survey area.

The Kern River bisects the survey area roughly from northeast to southwest and is the dominant geographical feature of the area (fig. 2). It drains into the ancient Buena Vista Lake (now dry), but its water is largely depleted through agricultural, industrial, and municipal uses before it can reach the lakebed. Isabella Lake controls the flow in the lower reaches of the Kern River, accounting for this depletion.

To the west of the Kern River, the Poso Creek complex drains into the Kern Wildlife Refuge and is the main watershed for the hills and west-facing slope of the Sierra Nevada. On the extreme north, tributaries to the White River eventually drain into the area of the Pixley Wildlife Refuge.

On the south, the Caliente Creek-Walker Basin Creek complex drains into the Lamont area. This drainage is dry much of the year, but it carries a heavy flow during thunderstorms and spring runoff. On rare occasions, it floods the town of Lamont, leaving deposits of mud on the streets.

The east side of the survey area ends roughly at the western divide, so the only east drainage is by the Cottonwood Creek branch of Jawbone Canyon Creek, which drains into the Fremont Valley.

The survey area has two main lakes (Lake Isabella and Hart Lake) and has portions of a third one (Lake Ming). All three of the lakes result from restriction or impoundment of the Kern River.

Natural rainfall and winter snowpack are the main sources of drainage in the area. In addition, ground-water sources are throughout the mountain areas and in the southern desert region. The area near Caliente Creek and Edison is part of the Arvin-Edison Water District.

Geology

This survey area is seismically active. Major earthquakes (5.0 or above) occurred in 1952 and 1995, and numerous other earthquakes occurred within the past 200 years. The Kern Canyon Fault is associated with a significant linear trend of accurately located epicenters of magnitude 2.0 or greater. This ancient fault line bisects the survey area, running north and south, under the Isabella Dam. The Edison Fault, the most active fault, is the along the southwest corner of the survey area. Along with the Kern Front Fault, it is responsible for the most recent seismic activity. The Mt. Poso Fault trends north and south through the western third of the survey area, and the Pond-Poso Fault runs at roughly right angles to it through the southwestern part of the survey area. Both have been seismically active within the past 1.6 million years. The Kern Front and Pond Faults are historic faults that have experienced recent creep, probably caused by the withdrawal of oil and ground water (California Department of Conservation, Division of Mines and Geology, 1992).

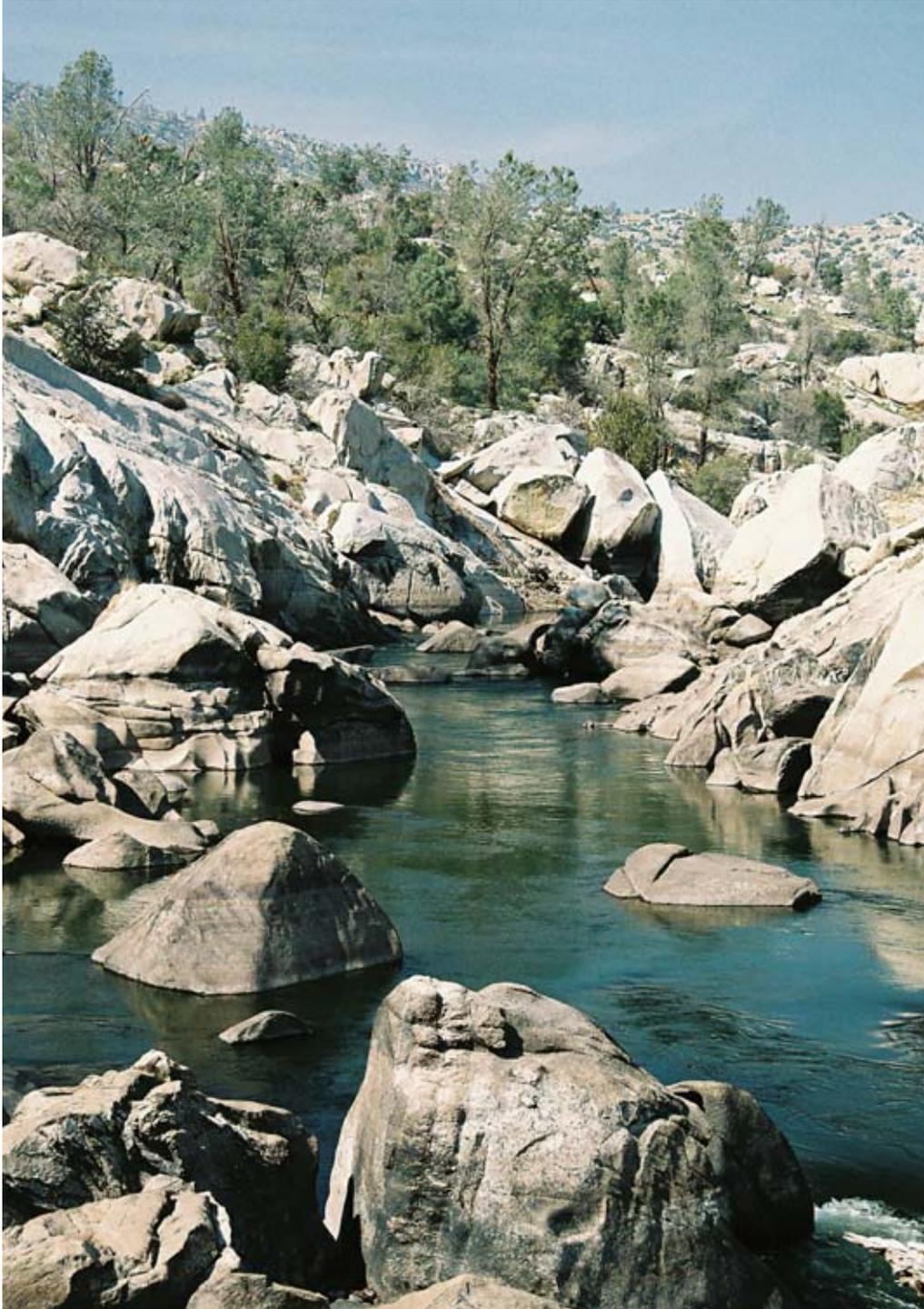


Figure 2.—The Kern River running through map unit 330 (Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes).

The mountains in the survey area are made up chiefly of Mesozoic granites, quartz monzonites, and granodiorites with areas of gabbro and dark dioritic rocks. The westernmost hills are largely Pre-Cenozoic sandstone, shale, and moderately consolidated to well consolidated conglomerates, trending to more loosely

consolidated Pliocene or Pleistocene conglomerates within the oilfields. Most of the soils on hills in the survey area formed in material weathered from granitoid rocks. The alluvium along the Kern River is of Recent (Holocene Epoch) deposition (Jennings, 1991).

Climate

Prepared by the National Water and Climate Center, Natural Resources Conservation Service, Portland, Oregon. The temperature and precipitation information in figures 3, 4, and 5 was derived from climate data developed by the PRISM modeling system at Oregon State University (<http://www.ncgc.nrcs.usda.gov/products/datasets/climate/docs/fact-sheet.html>).

Table 1 gives data on temperature and precipitation for the survey area as recorded in the period 1971 to 2000 at Bakersfield, Glennville, Inyokern, and Kern River, California. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, the average temperatures at Bakersfield, Glennville, Inyokern, and Kern River are 49.9, 43.5, 47.1, and 47.6 degrees F, respectively. The average daily minimum temperatures are 40.2, 29.7, 32.1, and 33.9 degrees, respectively. Figure 3 shows January minima. The lowest temperatures on record are 19 degrees at Bakersfield (December 23, 1998); 1 degree at Glennville (February 6, 1989); 1 degree at Inyokern (January 13, 1963); and 10 degrees at Kern River (December 22, 1990). In summer, the average temperatures at Bakersfield, Glennville, Inyokern, and Kern River are 81.3, 87.2, 82.0, and 94.7 degrees, respectively. The average daily maximum temperatures are 95.6, 87.2, 100.2, and 94.7, respectively. Figure 4 shows July maxima. The highest temperatures on record are 115 degrees at Bakersfield (July 1, 1950); 107 degrees at Glennville (July 11, 1964); 119 degrees at Inyokern (July 30, 1972); and 112 degrees at Kern River (July 19, 1998).

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average

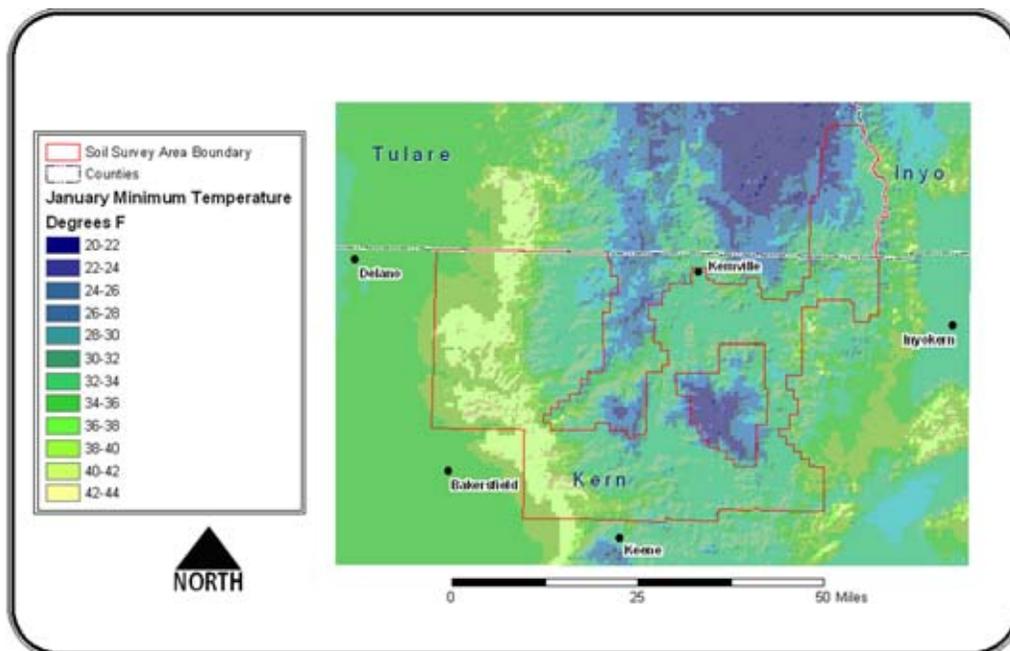


Figure 3.—PRISM (1971-2000) average minimum January temperatures for the region centered on the northeastern part of Kern County and the southeastern part of Tulare County, California.

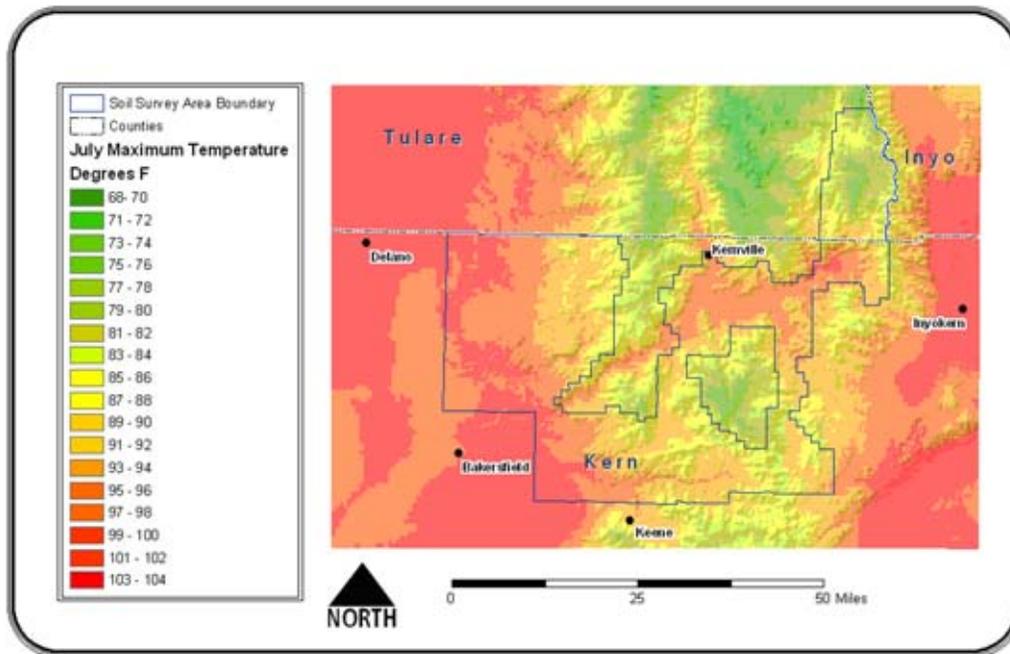


Figure 4.—PRISM (1971-2000) average maximum July temperatures for the region centered on the northeastern part of Kern County and the southeastern part of Tulare County, California

temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The average annual precipitation throughout the survey area varies greatly because of the complex topography in the area (fig. 5). The smallest annual amount of precipitation occurs in the easternmost desert areas, where only 3 to 6 inches of precipitation falls annually. The average annual precipitation increases to between 10 and 15 inches along the eastern foothills of the southernmost Sierra. It is more than 20 inches at the highest elevations in the survey area. It is 24 inches at the highest elevations south and southwest of Lake Isabella and 25 to 30 inches at the highest elevations northwest and northeast of the lake, on the Tulare County boundary. West of the Sierra, it drops to less than 6 inches on the floor of the San Joaquin Valley. It is 6.51 inches at Bakersfield, 20.04 inches at Glennville, 4.61 inches at Inyokern, and 13.42 inches at Kern River.

The frost-free period is generally between March and October at the lower elevations and between May and October at the higher elevations. During these periods, only about 15 percent of the annual precipitation falls at the higher elevations and only about 35 percent falls at the lower elevations. The growing season for most crops falls within these periods. The heaviest recorded 1-day rainfall is 2.29 inches at Bakersfield (February 9, 1978); 5.25 inches at Glennville (September 30, 1976); 2.39 inches at Inyokern (August 15, 1984); and 3.37 inches at Kern River (November 19, 1950).

At the lower elevations, thunderstorms occur on about 3 days each year and most occur in the period July through September. They are slightly more common at the higher elevations.

The average seasonal snowfall is highly dependent on elevation and location. It is less than 1 inch at Bakersfield, 9.0 inches at Glennville, 0.8 inch at Inyokern, and less than 1 inch at Kern River. The highest elevations in the survey area receive between 40 and 70 inches of snowfall in a normal water year. The greatest recorded snow

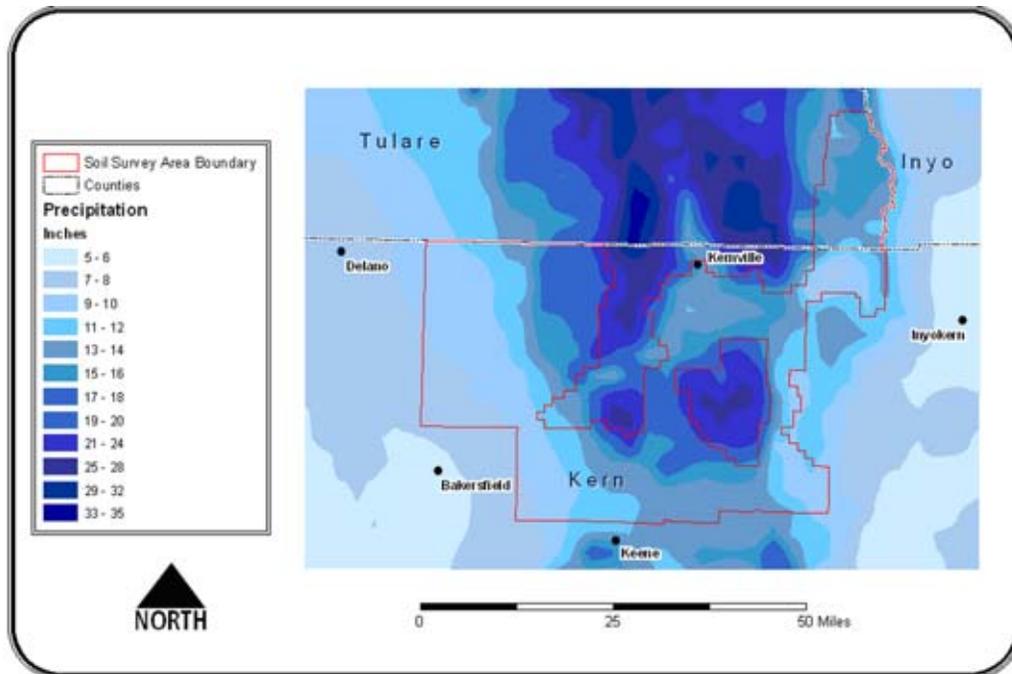


Figure 5.—PRISM (1961-1990) average annual precipitation for the region centered on the northeastern part of Kern County and the southeastern part of Tulare County, California.

depths are 1.5 inches at Bakersfield (March 8, 1974); 11 inches at Glennville (November 12, 1985); and 8 inches at Inyokern (January 5, 1974). On the average, less than 1 day per year has at least 1 inch of snow on the ground at the lowest elevations, including Bakersfield and Inyokern. In fact, a snowstorm at Bakersfield on January 25, 1999, was the first in 25 years; this was only the second time measurable snow was on the ground since 1938. At the higher elevations, snow is on the ground more frequently, including 1 day per year on average at Glennville. The heaviest 1-day snowfall on record is 3.0 inches at Bakersfield (January 25, 1999); 9 inches at Glennville (March 1, 1953); 4.5 inches at Inyokern (January 4, 1995); and 6 inches at Kern River (January 14, 1997).

Throughout the eastern valley region of Kern County, the average relative humidity in midafternoon is about 22 percent. Humidity is higher at night, and the average at dawn is about 44 percent. The sun shines 90 percent of the time possible in summer and 60 percent in winter. The prevailing wind is from the north. Average windspeed is highest, 10.0 miles per hour, in April.

Throughout the western valley region of Kern County, the average relative humidity in midafternoon is about 39 percent. Humidity is higher at night, and the average at dawn is about 69 percent. The sun shines 92 percent of the time possible in summer and 57 percent in winter. The prevailing wind is from the west-northwest. Average windspeed is highest, 7.7 miles per hour, in July and August.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile,

which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

General Soil Map Units

The general soil map in this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one map unit can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road or building or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

Soils on Flood Plains, Alluvial Fans, Stream Terraces, and Fan Remnants of Southeastern San Joaquin Valley

1. Calicreek-Whitewolf

Very deep, nearly level or gently sloping, well drained or somewhat excessively drained soils that formed in alluvium derived from granitoid or mixed rocks; on alluvial fans and flood plains

Map unit setting

Landform: Alluvial fans and flood plains

Slope: 0 to 5 percent

Map unit composition

Extent of the map unit:

1 percent of the survey area

Extent of the components in the map unit:

Calicreek and similar soils—45 percent

Whitewolf and similar soils—29 percent

Minor components—26 percent

Soil properties and qualities

Calicreek

Depth class: Very deep

Drainage class: Well drained

Landform: Flood plains

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Loamy coarse sand

Slope: Nearly level

Whitewolf

Depth class: Very deep

Drainage class: Somewhat excessively drained

Landform: Alluvial fans and flood plains

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Loamy sand

Slope: Nearly level or gently sloping

Minor components

- Riverwash in drainageways and channels
- Cinco soils on fan remnants
- Dune land in areas of eolian deposits
- Hesperia soils on alluvial fans
- Cuyama soils on fan remnants and stream terraces

Major uses

- Irrigated crops and oil-extraction activities

2. Delano-Pleito-Hesperia

Very deep, nearly level to moderately sloping, well drained soils that formed in alluvium derived from granitoid and/or mixed rocks; on alluvial fans, stream terraces, and fan remnants

Map unit setting

Landform: Alluvial fans, stream terraces, and fan remnants

Slope: 0 to 9 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Delano and similar soils—50 percent

Pleito and similar soils—18 percent

Hesperia and similar soils—15 percent

Minor components—17 percent

Soil properties and qualities

Delano

Depth class: Very deep

Drainage class: Well drained

Landform: Stream terraces and fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Loamy sand

Slope: Nearly level to moderately sloping

Pleito

Depth class: Very deep

Drainage class: Well drained

Landform: Fan remnants, stream terraces, and alluvial fans

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Gravelly sandy clay loam

Slope: Nearly level or gently sloping

Hesperia

Depth class: Very deep

Drainage class: Well drained

Landform: Alluvial fans

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Sandy loam

Slope: Nearly level to moderately sloping

Minor components

- Cuyama and Chanac soils on fan remnants and stream terraces
- Calicreek soils on flood plains
- Delvar soils on fan remnants
- Riverwash in drainageways and channels

Major uses

- Irrigated crops and oil-extraction activities

Soils on Alluvial Fans, Stream Terraces, and Fan Remnants of Southeastern San Joaquin Valley

3. Chanac-Pleito

Very deep, gently sloping to very steep, well drained soils that formed in alluvium derived from mixed rocks; on fan remnants and stream terraces

Map unit setting

Landform: Fan remnants and stream terraces

Slope: 2 to 60 percent

Map unit composition

Extent of the map unit:

19 percent of the survey area

Extent of the components in the map unit:

Chanac and similar soils—36 percent

Pleito and similar soils—22 percent

Minor components—42 percent

Soil properties and qualities

Chanac

Depth class: Very deep

Drainage class: Well drained

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Sandy clay loam

Slope: Gently sloping to very steep

Pleito

Depth class: Very deep

Drainage class: Well drained

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Gravelly sandy clay loam

Slope: Gently sloping to very steep

Minor components

- Trigo soils on hillslopes
- Xeric Torriorthents, Premier soils, and Brecken soils on fan remnants and stream terraces
- Calcic Haploxerepts on fan remnants, stream terraces, and hillslopes

Major uses

- Livestock grazing, irrigated crops, recreation, wildlife habitat, and oil-extraction activities

4. Premier-Haplodurids-Delano

Very deep or moderately deep, nearly level to moderately steep, well drained soils that formed in alluvium derived from granitoid, sedimentary, and/or mixed rocks; on alluvial fans, fan remnants, and stream terraces

Map unit setting

Landform: Alluvial fans, fan remnants, and stream terraces

Slope: 1 to 30 percent

Map unit composition

Extent of the map unit:

1 percent of the survey area

Extent of the components in the map unit:

Premier and similar soils—41 percent

Haplodurids and similar soils—19 percent

Delano and similar soils—15 percent

Minor components—25 percent

Soil properties and qualities

Premier

Depth class: Very deep

Drainage class: Well drained

Landform: Alluvial fans, fan remnants, and stream terraces

Parent material: Alluvium derived from granitoid and sedimentary rocks

Typical textural class of the surface layer: Coarse sandy loam

Slope: Gently sloping to moderately steep

Haplodurids

Depth class: Moderately deep

Drainage class: Well drained

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Fine sandy loam

Slope: Gently sloping to moderately steep

Delano

Depth class: Moderately deep

Drainage class: Well drained

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Loamy sand

Slope: Nearly level to moderately sloping

Minor components

- Cuyama and Chanac soils on fan remnants and stream terraces
- Arents on alluvial fans, fan remnants, and stream terraces
- Pits on alluvial fans and fan remnants
- Elkhills soils on fan remnants

Major uses

- Livestock grazing, recreation, wildlife habitat, and oil-extraction activities

5. Delvar-Pleito-Centerville

Very deep or deep, gently sloping to moderately steep, moderately well drained or well drained soils that formed in alluvium derived from granitoid or mixed rocks; on fan remnants

Map unit setting

Landform: Fan remnants

Slope: 2 to 30 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Delvar and similar soils—32 percent

Pleito and similar soils—27 percent

Centerville and similar soils—24 percent

Minor components—17 percent

Soil properties and qualities

Delvar

Depth class: Very deep

Drainage class: Moderately well drained

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Clay loam

Slope: Gently sloping to moderately steep

Pleito

Depth class: Very deep

Drainage class: Well drained

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Gravelly sandy clay loam

Slope: Gently sloping or moderately sloping

Centerville

Depth class: Deep

Drainage class: Well drained

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Clay

Slope: Gently sloping or moderately sloping

Minor components

- Chanac and Exeter soils on fan remnants
- Premier soils on fan remnants and stream terraces
- Rock outcrop
- Riverwash in drainageways and channels

Major uses

- Irrigated crops, livestock grazing, recreation, and wildlife habitat

Soils and Rock Outcrop on Hillslopes, Mountain Slopes, Flood Plains, Stream Terraces, Alluvial Fans, and Fan Remnants on the Western and Central Slopes of the Southern Sierra Nevada and Greenhorn Ranges

6. Tweedy-Tunis

Moderately deep or shallow, strongly sloping to very steep, well drained or somewhat excessively drained soils that formed in residuum weathered from granitoid, mica schist, and/or gneiss rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 9 to 75 percent

Map unit composition

Extent of the map unit:

7 percent of the survey area

Extent of the components in the map unit:

Tweedy and similar soils—28 percent

Tunis and similar soils—13 percent

Minor components—59 percent

Soil properties and qualities

Tweedy

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid and/or mica schist rocks

Typical textural class of the surface layer: Sandy loam

Slope: Strongly sloping to very steep

Tunis

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid or gneiss rocks

Typical textural class of the surface layer: Sandy loam

Slope: Steep or very steep

Minor components

- Tollhouse, Walong, Rankor, and Edmundston soils on mountain slopes
- Rock outcrop on mountain slopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

7. Havala-Steuber

Very deep, nearly level to strongly sloping, well drained soils that formed in alluvium derived from granitoid rocks; on alluvial fans, stream terraces, fan remnants, and flood plains and in mountain valleys

Map unit setting

Landform: Alluvial fans, stream terraces, fan remnants, and mountain valleys
Slope: 0 to 15 percent

Map unit composition

Extent of the map unit:

1 percent of the survey area

Extent of the components in the map unit:

Havala and similar soils—43 percent

Steuber and similar soils—13 percent

Minor components—44 percent

Soil properties and qualities

Havala

Depth class: Very deep

Drainage class: Well drained

Landform: Fan remnants, stream terraces, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Gravelly sandy loam

Slope: Gently sloping to strongly sloping

Steuber

Depth class: Very deep

Drainage class: Well drained

Landform: Alluvial fans, stream terraces, and flood plains

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Gravelly sandy loam

Slope: Nearly level or gently sloping

Minor components

- Kernfork soils on flood plains and in mountain valleys
- Walong soils in mountain valleys and on hillslopes
- Riverwash in drainageways and channels
- Aquolls in mountain valleys and closed depressions and on flood plains
- Rock outcrop on hillslopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

8. Kernville-Faycreek-Rock Outcrop

Areas of very shallow or shallow, moderately sloping to very steep, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks and areas of Rock outcrop; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes

Slope: 5 to 75 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Kernville and similar soils—38 percent

Faycreek and similar soils—20 percent

Rock outcrop—18 percent

Minor components—24 percent

Soil properties and qualities

Kernville

Depth class: Very shallow or shallow

Drainage class: Somewhat excessively drained

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Moderately sloping to very steep

Faycreek

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Steep or very steep

Minor components

- Hogeeye, Hungrygulch, Tollhouse, and Xyno soils on mountain slopes
- Riverwash in drainageways and channels

Major uses

- Livestock grazing, recreation, and wildlife habitat

9. Hyte-Erskine-Sorrell

Shallow or moderately deep, steep or very steep, well drained soils that formed in residuum weathered from igneous, granitoid, and/or gabbro rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 30 to 60 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Hyte and similar soils—32 percent

Erskine and similar soils—31 percent

Sorrell and similar soils—14 percent

Minor components—23 percent

Soil properties and qualities

Hyte

Depth class: Shallow

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid and/or gabbro rocks

Typical textural class of the surface layer: Gravelly sandy loam

Slope: Steep or very steep

Erskine

Depth class: Shallow

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from igneous and gabbro rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Steep or very steep

Sorrell

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Bouldery coarse sandy loam

Slope: Steep or very steep

Minor components

- Walong soils on mountain slopes
- Rock outcrop
- Riverwash in drainageways
- Soils on flood plains

Major uses

- Livestock grazing, recreation, and wildlife habitat

10. Tollhouse-Sorrell-Rock Outcrop

Areas of shallow or moderately deep, steep or very steep, somewhat excessively drained or well drained soils that formed in residuum weathered from granitoid rocks and areas of Rock outcrop; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 30 to 60 percent

Map unit composition

Extent of the map unit:

6 percent of the survey area

Extent of the components in the map unit:

Tollhouse and similar soils—26 percent

Sorrell and similar soils—23 percent

Minor components—51 percent

Soil properties and qualities

Tollhouse

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Stony coarse sandy loam

Slope: Steep or very steep

Sorrell

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Bouldery coarse sandy loam

Slope: Steep or very steep

Minor components

- Tunis, Martee, Arujo, Edmundston, and Tweedy soils on mountain slopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

11. Arujo-Walong

Deep or moderately deep, strongly sloping to very steep, well drained soils that formed in residuum weathered from granitoid rocks; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes

Slope: 9 to 75 percent

Map unit composition

Extent of the map unit:

12 percent of the survey area

Extent of the components in the map unit:

Arujo and similar soils—36 percent

Walong and similar soils—14 percent

Minor components—50 percent

Soil properties and qualities

Arujo

Depth class: Deep

Drainage class: Well drained

Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical textural class of the surface layer: Sandy loam
Slope: Strongly sloping to very steep

Walong

Depth class: Moderately deep
Drainage class: Well drained
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical textural class of the surface layer: Gravelly sandy loam
Slope: Moderately steep to very steep

Minor components

- Feethill, Tunis, and Sesame soils on hillslopes and mountain slopes
- Cieneba and Blasingame soils on hillslopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

12. Walong-Vista

Moderately deep, strongly sloping to very steep, well drained soils that formed in residuum weathered from granitoid rocks; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes
Slope: 9 to 60 percent

Map unit composition

Extent of the map unit:
11 percent of the survey area

Extent of the components in the map unit:
Walong and similar soils—17 percent
Vista and similar soils—14 percent
Minor components—69 percent

Soil properties and qualities

Walong

Depth class: Moderately deep
Drainage class: Well drained
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical textural class of the surface layer: Gravelly sandy loam
Slope: Moderately steep to very steep

Vista

Depth class: Moderately deep
Drainage class: Well drained
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical textural class of the surface layer: Sandy loam
Slope: Strongly sloping to very steep

Minor components

- Rock outcrop
- Feethill, Tunis, Blasingame, and Sesame soils on hillslopes and mountain slopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

13. Strahle-Tweedy-Sesame

Shallow or moderately deep, steep or very steep, well drained soils that formed in residuum weathered from igneous, granitoid, mica schist, andesite, and/or rhyolite rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 30 to 75 percent

Map unit composition

Extent of the map unit:

3 percent of the survey area

Extent of the components in the map unit:

Strahle and similar soils—34 percent

Tweedy and similar soils—23 percent

Sesame and similar soils—21 percent

Minor components—22 percent

Soil properties and qualities

Strahle

Depth class: Shallow

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from rhyolite and/or andesite rocks

Typical textural class of the surface layer: Gravelly sandy loam

Slope: Steep or very steep

Tweedy

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from igneous, granitoid, and/or mica schist rocks

Typical textural class of the surface layer: Sandy loam

Slope: Steep or very steep

Sesame

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Sandy loam

Slope: Steep or very steep

Minor components

- Rock outcrop
- Feethill, Arujo, and Tunis soils on hillslopes and mountain slopes
- Soils on flood plains

Major uses

- Livestock grazing, recreation, and wildlife habitat

14. Edmundston-Tollhouse-Sorrell

Deep to shallow, moderately steep to very steep, well drained or somewhat excessively drained soils that formed in residuum weathered from granitoid rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 15 to 60 percent

Map unit composition

Extent of the map unit:

1 percent of the survey area

Extent of the components in the map unit:

Edmundston and similar soils—26 percent

Tollhouse and similar soils—24 percent

Sorrell and similar soils—14 percent

Minor components—36 percent

Soil properties and qualities

Edmundston

Depth class: Deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Coarse sandy loam

Slope: Moderately steep to very steep

Tollhouse

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Stony coarse sandy loam

Slope: Moderately steep or steep

Sorrell

Depth class: Moderately deep

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Bouldery coarse sandy loam

Slope: Steep

Minor components

- Rankor, Tweedy, and Crouch soils on mountain slopes
- Rock outcrop
- Soils on flood plains

Major uses

- Livestock grazing, recreation, and wildlife habitat

Soils in Mountain Valleys, on Flood Plains, in Depressions, and on Stream Terraces, Inset Fans, Fan Aprons, Alluvial Fans, Fan Piedmonts, and Fan Remnants on the Eastern Slopes of the Southern Sierra Nevada Range, Primarily Near Isabella Lake in South Fork Valley

15. Kernfork-Kelval

Very deep, nearly level or gently sloping, somewhat poorly drained or well drained soils that formed in alluvium derived from granitoid rocks; in mountain valleys, on flood plains, in depressions, and on stream terraces

Map unit setting

Landform: Mountain valleys, flood plains, depressions, and stream terraces

Slope: 0 to 5 percent

Map unit composition

Extent of the map unit:

1 percent of the survey area

Extent of the components in the map unit:

Kernfork and similar soils—45 percent

Kelval and similar soils—23 percent

Minor components—32 percent

Soil properties and qualities

Kernfork

Depth class: Very deep

Drainage class: Somewhat poorly drained

Landform: Mountain valleys, flood plains, depressions, and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Fine sandy loam

Slope: Nearly level or gently sloping

Kelval

Depth class: Very deep

Drainage class: Well drained

Landform: Mountain valleys and flood plains

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Fine sandy loam

Slope: Nearly level

Minor components

- Aquents and Aquolls in channels, in depressions, on flood plains, and in mountain valleys
- Riverwash in drainageways, channels, and mountain valleys
- Inyo soils on alluvial fans, inset fans, and stream terraces and in mountain valleys
- Chollawell soils on fan remnants and in mountain valleys

Major uses

- Irrigated cropland, livestock grazing, recreation, and wildlife habitat

16. Inyo-Chollawell

Very deep, nearly level to moderately steep, excessively drained or well drained soils that formed in alluvium derived from granitoid or mixed rocks; in mountain valleys and on fan piedmonts, alluvial fans, inset fans, fan aprons, stream terraces, and fan remnants

Map unit setting

Landform: Mountain valleys, stream terraces, alluvial fans, inset fans, fan aprons, fan remnants, and fan piedmonts

Slope: 0 to 20 percent

Map unit composition

Extent of the map unit:

6 percent of the survey area

Extent of the components in the map unit:

Inyo and similar soils—36 percent

Chollawell and similar soils—30 percent

Minor components—34 percent

Soil properties and qualities

Inyo

Depth class: Very deep

Drainage class: Excessively drained

Landform: Mountain valleys, stream terraces, alluvial fans, inset fans, and fan aprons

Parent material: Alluvium derived from mixed rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Nearly level to strongly sloping

Chollawell

Depth class: Very deep

Drainage class: Well drained

Landform: Mountain valleys, fan piedmonts, and fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Gently sloping to moderately steep

Minor components

- Southlake soils in mountain valleys and on fan remnants
- Kelval soils in mountain valleys and on flood plains
- Alberti soils on hillslopes and mountain slopes
- Riverwash in drainageways, channels, and intermittent streams

- Goodale soils in mountain valleys, on inset fans, and in channels and drainageways

Major uses

- Irrigated cropland, livestock grazing, recreation, and wildlife habitat

Soils on Hillslopes and Mountain Slopes on the Eastern Slopes of the Southern Sierra Nevada Range

17. Stineway-Kiscove

Shallow or very shallow, moderately sloping to very steep, well drained soils that formed in residuum weathered from metamorphic and/or schist rocks; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes

Slope: 5 to 60 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Stineway and similar soils—47 percent

Kiscove and similar soils—30 percent

Minor components—23 percent

Soil properties and qualities

Stineway

Depth class: Shallow

Drainage class: Well drained

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from metamorphic and/or schist rocks

Typical textural class of the surface layer: Very gravelly loam

Slope: Moderately sloping to very steep

Kiscove

Depth class: Very shallow or shallow

Drainage class: Well drained

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from metamorphic rocks

Typical textural class of the surface layer: Gravelly loam

Slope: Moderately steep to very steep

Minor components

- Rock outcrop
- Backcanyon and Sesame soils on hillslopes and mountain slopes
- Southlake soils in mountain valleys and on fan piedmonts
- Soils in mountain valleys and drainageways and on flood plains

Major uses

- Livestock grazing, recreation, and wildlife habitat

18. Hoffman-Tips

Moderately deep to very shallow, moderately steep to very steep, well drained soils that formed in residuum weathered from granitoid rocks; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes

Slope: 15 to 60 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Hoffman and similar soils—30 percent

Tips and similar soils—20 percent

Minor components—50 percent

Soil properties and qualities

Hoffman

Depth class: Moderately deep

Drainage class: Well drained

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Moderately steep to very steep

Tips

Depth class: Very shallow or shallow

Drainage class: Well drained

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Moderately steep to very steep

Minor components

- Wingap soils on mountains
- Pinyonpeak soils on hills
- Pilotwell soils on hillslopes
- Rock outcrop
- Jawbone soils on hills

Major uses

- Livestock grazing, recreation, and wildlife habitat

19. Xyno-Canebrake

Very shallow or shallow, strongly sloping to very steep, somewhat excessively drained soils that formed in colluvium and/or residuum weathered from granitoid rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 9 to 60 percent

Map unit composition

Extent of the map unit:

7 percent of the survey area

Extent of the components in the map unit:

Xyno and similar soils—30 percent

Canebrake and similar soils—16 percent

Minor components—54 percent

Soil properties and qualities

Xyno

Depth class: Very shallow or shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Colluvium and/or residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Steep or very steep

Canebrake

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Strongly sloping to very steep

Minor components

- Rock outcrop
- Faycreek, Tips, Kernville, and Scodie soils on mountain slopes

Major uses

- Livestock grazing, recreation, and wildlife habitat

20. Sacatar-Wortley

Moderately deep to very shallow, moderately sloping to moderately steep, well drained soils that formed in residuum weathered from granitoid and/or gabbro rocks; on hillslopes and mountain slopes

Map unit setting

Landform: Hillslopes and mountain slopes

Slope: 5 to 30 percent

Map unit composition

Extent of the map unit:

3 percent of the survey area

Extent of the components in the map unit:

Sacatar and similar soils—23 percent

Wortley and similar soils—17 percent

Minor components—60 percent

Soil properties and qualities

Sacatar

Depth class: Moderately deep

Drainage class: Well drained
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical textural class of the surface layer: Loamy coarse sand
Slope: Moderately sloping to moderately steep

Wortley

Depth class: Very shallow or shallow
Drainage class: Well drained
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid and/or gabbro rocks
Typical textural class of the surface layer: Coarse sandy loam
Slope: Moderately sloping to moderately steep

Minor components

- Toll soils on alluvial fans and stream terraces and in mountain valleys
- Calpine soils on alluvial fans and low pediments
- Canebrake soils on hillslopes and mountain slopes
- Grandora soils on mountains
- Deerspring soils on flood plains and in mountain valleys

Major uses

- Livestock grazing, recreation, and wildlife habitat

21. Canebrake-Scodie-Deadfoot

Very shallow to moderately deep, steep or very steep, somewhat excessively drained soils that formed in colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes
Slope: 30 to 60 percent

Map unit composition

Extent of the map unit:
7 percent of the survey area

Extent of the components in the map unit:
Canebrake and similar soils—24 percent
Scodie and similar soils—21 percent
Deadfoot and similar soils—17 percent
Minor components—38 percent

Soil properties and qualities

Canebrake

Depth class: Shallow
Drainage class: Somewhat excessively drained
Landform: Mountain slopes
Parent material: Colluvium derived from granitoid rocks
Typical textural class of the surface layer: Gravelly loamy coarse sand
Slope: Steep or very steep

Scodie

Depth class: Very shallow
Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Gravelly loamy coarse sand

Slope: Steep or very steep

Deadfoot

Depth class: Moderately deep

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Very bouldery loamy coarse sand

Slope: Steep or very steep

Minor components

- Rock outcrop
- Wortley, Lachim, and Indiano soils on mountain slopes
- Soils on mountain slopes and flood plains and in mountain valleys

Major uses

- Livestock grazing, recreation, and wildlife habitat

22. Tunawee-Kenypeak

Shallow or very shallow, moderately steep to very steep, somewhat excessively drained or well drained soils that formed in residuum weathered from granitoid, schist, and/or metasedimentary rocks; on mountain slopes

Map unit setting

Landform: Mountain slopes

Slope: 15 to 80 percent

Map unit composition

Extent of the map unit:

2 percent of the survey area

Extent of the components in the map unit:

Tunawee and similar soils—34 percent

Kenypeak and similar soils—28 percent

Minor components—38 percent

Soil properties and qualities

Tunawee

Depth class: Shallow

Drainage class: Somewhat excessively drained

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical textural class of the surface layer: Bouldery loamy coarse sand

Slope: Moderately steep or steep

Kenypeak

Depth class: Very shallow or shallow

Drainage class: Well drained

Landform: Mountain slopes

Parent material: Residuum weathered from metasedimentary and/or schist rocks

Typical textural class of the surface layer: Gravelly fine sandy loam

Slope: Steep or very steep

Minor components

- Rock outcrop
- Torriorthentic Haploxerolls on mountain slopes
- Tibbcreek soils on ridges and plateaus
- Soils on mountain slopes and flood plains and in drainageways and mountain valleys
- Rubble land

Major uses

- Livestock grazing, recreation, and wildlife habitat

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses (USDA, 2005).

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis

of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Delano sandy loam, 5 to 9 percent slopes, is a phase of the Delano series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or associations.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Chanac-Pleito complex, 5 to 30 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

115—Chanac clay loam, 15 to 30 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 570 to 2,000 feet (175 to 610 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 57 to 68 degrees F (14 to 20 degrees C)

Frost-free period: 200 to 275 days

Map unit composition

Chanac—85 percent

Minor components—15 percent

Characteristics of Chanac and similar soils

Slope: 15 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 18 inches; clay loam

Bk1—18 to 46 inches; sandy clay loam

Bk2—46 to 60 inches; loam

Minor components

Cuyama and similar soils

Extent: About 8 percent of the map unit

Slope: 5 to 25 percent

Landform: Fan remnants

Delano Variant and similar soils

Extent: About 7 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

128—Pits-Delano-Oil waste land complex, 1 to 9 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 555 to 695 feet (170 to 213 meters)

Mean annual precipitation: 7 to 8 inches (178 to 203 millimeters)

Mean annual air temperature: 63 to 66 degrees F (17 to 19 degrees C)

Frost-free period: 270 to 310 days

Map unit composition

Pits—35 percent

Delano—30 percent

Oil waste land—15 percent

Minor components—20 percent

Characteristics of Pits

Slope: 2 to 9 percent

Landform: Fan remnants

Typical vegetation: None assigned

Surface features: Pits are open excavations in which removal of soil and commonly of underlying material has exposed rock or other material. Examples are mine pits, gravel pits, and quarries.

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: Very low

Hydrologic properties

Surface runoff class: Negligible

Current water table: None noted

Hydrologic soil group: None

Land capability classification

Nonirrigated areas: 8

Characteristics of Delano and similar soils

Slope: 1 to 5 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 18 inches; sandy loam

Btk1—18 to 37 inches; sandy clay loam

Btk2—37 to 60 inches; sandy loam

Characteristics of Oil waste land

Slope: 1 to 9 percent

Landform: Alluvial fans and depressions

Land capability classification

Nonirrigated areas: 8

Minor components

Arents, loamy, and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 9 percent

Landform: Alluvial fans

Calicreek and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Chanac and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 9 percent

Landform: Fan remnants

Hesperia and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Channels

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Fan remnants

136—Hesperia sandy loam, 2 to 9 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 600 feet (152 to 183 meters)

Mean annual precipitation: 6 to 12 inches (152 to 303 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Hesperia—75 percent

Minor components—25 percent

Characteristics of Hesperia and similar soils

Slope: 2 to 9 percent

Landform: Alluvial fans

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses and forbs in uncultivated areas

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.1 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 20 inches; sandy loam

C—20 to 60 inches; sandy loam

Minor components

Whitewolf and similar soils

Extent: About 7 percent of the map unit

Slope: 2 to 7 percent

Landform: Alluvial fans and inset fans

Premier and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 9 percent

Landform: Alluvial fans

Calicreek, flooded, and similar soils

Extent: About 4 percent of the map unit

Slope: 1 to 3 percent

Landform: Drainageways and flood plains

Delano and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 5 percent

Landform: Fan remnants

Durids and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants

Riverwash

Extent: About 2 percent of the map unit

Slope: 2 to 5 percent

Landform: Drainageways

Xerofluvents, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and valleys

138—Hesperia sandy loam, 0 to 2 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 200 to 3,995 feet (61 to 1,219 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 61 to 70 degrees F (16 to 21 degrees C)

Frost-free period: 225 to 310 days

Map unit composition

Hesperia—85 percent

Minor components—15 percent

Characteristics of Hesperia and similar soils

Slope: 0 to 2 percent

Landform: Alluvial fans

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.2 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 2s-1
Nonirrigated areas: 6e

Typical profile

A—0 to 18 inches; sandy loam
C1—18 to 34 inches; fine sandy loam
C2—34 to 70 inches; sandy loam

Minor components

Digiorgio and similar soils

Extent: About 9 percent of the map unit
Slope: 0 to 2 percent
Landform: Basin floors and flood plains

Hesperia, occasionally flooded, and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 2 percent
Landform: Alluvial fans

Whitewolf and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 2 percent
Landform: Alluvial fans and flood plains

139—Riverwash

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 445 to 755 feet (137 to 231 meters)
Mean annual precipitation: 6 to 12 inches (152 to 305 millimeters)
Mean annual air temperature: 63 to 66 degrees F (17 to 19 degrees C)
Frost-free period: 270 to 330 days

Map unit composition

Riverwash—80 percent
Minor components—20 percent

Characteristics of Riverwash

Slope: 0 to 5 percent
Landform: Channels and flood plains
Kind of material: Alluvium derived from granitoid rocks
Typical vegetation: Barren

Hydrologic properties

Altered hydrology: Hydrology has been altered in some or all areas through drainage and/or protection from flooding. Soil characteristics indicate that hydric soil conditions existed prior to alteration of hydrology.

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: Very high

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7w

Minor components

Xerofluvents, flooded, and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels and flood plains

Xerolls, stony, flooded, and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels and valleys

Calicreek and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 4 percent

Landform: Flood plains

143—Calicreek loamy coarse sand, 0 to 2 percent slopes, rarely flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 1,000 feet (152 to 305 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 320 days

Map unit composition

Calicreek—85 percent

Minor components—15 percent

Characteristics of Calicreek and similar soils

Slope: 0 to 2 percent

Landform: Flood plains

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.9 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3s-2

Nonirrigated areas: 6e

Typical profile

A—0 to 7 inches; loamy coarse sand

C1—7 to 30 inches; stratified coarse sand to fine sandy loam

C2—30 to 60 inches; stratified gravelly coarse sand to fine sandy loam

Minor components

Whitewolf and similar soils

Extent: About 8 percent of the map unit

Slope: 0 to 3 percent

Landform: Alluvial fans and flood plains

Riverwash

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Hesperia and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans

144—Calicreek sandy loam, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 520 to 1,000 feet (160 to 305 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Calicreek—85 percent

Minor components—15 percent

Characteristics of Calicreek and similar soils

Slope: 0 to 2 percent

Landform: Flood plains

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3w-4

Nonirrigated areas: 6w

Typical profile

Ap—0 to 5 inches; sandy loam

C—5 to 60 inches; stratified coarse sand to fine sandy loam

Minor components

Whitewolf and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans and stream terraces

Riverwash

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Hesperia and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans and fan aprons

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions and flood plains

145—Delano loamy sand, 0 to 2 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 290 days

Map unit composition

Delano—85 percent
Minor components—15 percent

Characteristics of Delano and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.1 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 3s-1

Nonirrigated areas: 6e

Typical profile

Ap—0 to 7 inches; loamy sand

A—7 to 20 inches; sandy loam

Bt—20 to 55 inches; sandy clay loam

Bk—55 to 60 inches; loamy sand

Minor components

Cuyama and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent

Landform: Stream terraces

Calicreek and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Hesperia and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 2 percent

Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and valleys

146—Delano sandy loam, 1 to 5 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 695 feet (152 to 213 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 290 days

Map unit composition

Delano—80 percent

Minor components—20 percent

Characteristics of Delano and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 18 inches; sandy loam

Btk1—18 to 37 inches; sandy clay loam

Btk2—37 to 60 inches; sandy loam

Minor components

Hesperia and similar soils

Extent: About 7 percent of the map unit

Slope: 0 to 2 percent

Landform: Inset fans

Pleito and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 3 percent

Landform: Fan remnants

Arents, loamy, and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans

Calicreek and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Oil waste land

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans and depressions

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Drainageways

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Alluvial fans

147—Chanac clay loam, 2 to 9 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 570 to 2,000 feet (175 to 610 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 57 to 68 degrees F (14 to 20 degrees C)

Frost-free period: 200 to 275 days

Map unit composition

Chanac—80 percent

Minor components—20 percent

Characteristics of Chanac and similar soils

Slope: 2 to 9 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 4e-1

Typical profile

A—0 to 18 inches; clay loam

Bk1—18 to 46 inches; sandy clay loam

Bk2—46 to 60 inches; loam

Minor components

Soils that have no subsoil and similar soils

Extent: About 10 percent of the map unit

Slope: 2 to 15 percent

Landform: Fan remnants

Zerker and similar soils

Extent: About 10 percent of the map unit

Slope: 0 to 9 percent

Landform: Alluvial fans

148—Delano sandy clay loam, 0 to 2 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 695 feet (152 to 213 meters)

Mean annual precipitation: 7 to 9 inches (177 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 290 days

Map unit composition

Delano—85 percent

Minor components—15 percent

Characteristics of Delano and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 1

Nonirrigated areas: 6c

Typical profile

A—0 to 18 inches; sandy clay loam

Btk1—18 to 37 inches; sandy clay loam

Btk2—37 to 60 inches; sandy loam

Minor components

Pleito and similar soils

Extent: About 8 percent of the map unit

Slope: 0 to 4 percent

Landform: Fan remnants and stream terraces

Hesperia and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants

Calicreek and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

149—Delano sandy loam, 5 to 9 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 695 feet (152 to 213 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 260 to 300 days

Map unit composition

Delano—85 percent

Minor components—15 percent

Characteristics of Delano and similar soils

Slope: 5 to 9 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 3s-1
Nonirrigated areas: 6e

Typical profile

A—0 to 18 inches; sandy loam
Btk1—18 to 37 inches; sandy clay loam
Btk2—37 to 60 inches; sandy loam

Minor components

Cuyama and similar soils

Extent: About 5 percent of the map unit
Slope: 2 to 8 percent
Landform: Fan remnants and stream terraces

Premier and similar soils

Extent: About 4 percent of the map unit
Slope: 3 to 9 percent
Landform: Alluvial fans

Calicreek and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Pleito and similar soils

Extent: About 2 percent of the map unit
Slope: 2 to 9 percent
Landform: Fan remnants and stream terraces

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Drainageways

150—Pits and dumps

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 980 to 5,575 feet (300 to 1,700 meters)

Map unit composition

Pits—50 percent
Dumps—40 percent
Minor components—10 percent

Characteristics of Pits

Slope: 0 to 5 percent

Landform: Alluvial fans, fan remnants, and gravel pits

Typical vegetation: None assigned

Surface features: Pits are open excavations in which removal of soil and commonly of underlying material has exposed rock or other material. Examples are mine pits, gravel pits, and quarries.

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: Very low

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Current water table: None noted

Hydrologic soil group: None

Land capability classification

Nonirrigated areas: 8

Characteristics of Dumps

Slope: 0 to 10 percent

Landform: Dump, fan remnants, and stream terraces

Typical vegetation: None assigned

Surface features: Dumps are areas of smoothed or uneven accumulations or piles of waste rock and general refuse.

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: Very low

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Current water table: None noted

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Minor components

Cuyama and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 5 percent

Landform: Fan remnants, stream terraces, and valleys

Delano and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 5 percent

Landform: Fan remnants and stream terraces

Oil waste land

Extent: About 1 percent of the map unit

Slope: 0 to 20 percent

Landform: Fan remnants and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent
Landform: Drainageways

152—Pleito gravelly sandy clay loam, 2 to 5 percent slopes

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 495 to 2,700 feet (152 to 823 meters)
Mean annual precipitation: 8 to 12 inches (203 to 304 millimeters)
Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 250 to 280 days

Map unit composition

Pleito—85 percent
Minor components—15 percent

Characteristics of Pleito and similar soils

Slope: 2 to 5 percent
Landform: Alluvial fans
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 2 to 15 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 9.0 inches (high)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-3
Nonirrigated areas: 4e-3

Typical profile

A—0 to 27 inches; gravelly sandy clay loam
Bk1—27 to 38 inches; gravelly sandy clay loam
Bk2—38 to 60 inches; gravelly sandy loam

Minor components

Chanac and similar soils

Extent: About 5 percent of the map unit
Slope: 4 to 8 percent
Landform: Fan remnants

Delvar and similar soils

Extent: About 5 percent of the map unit
Slope: 1 to 5 percent

Landform: Fan remnants

Exeter and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 6 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 6 percent

Landform: Drainageways

Xerofluvents, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

153—Chanac clay loam, 9 to 15 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 570 to 2,000 feet (175 to 610 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 57 to 68 degrees F (14 to 20 degrees C)

Frost-free period: 200 to 275 days

Map unit composition

Chanac—85 percent

Minor components—15 percent

Characteristics of Chanac and similar soils

Slope: 9 to 15 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 18 inches; clay loam

Bk1—18 to 46 inches; loam

Bk2—46 to 60 inches; loam

Minor components

Cuyama and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 25 percent

Landform: Fan remnants

Delano Variant and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 9 percent

Landform: Fan remnants

Soils that have no subsoil and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 15 percent

Landform: Fan remnants

154—Dam

Map unit setting

General location: Dam on Isabella Lake

MLRA: 29—Southern Nevada Basin and Range

Map unit composition

Dam—100 percent

Characteristics of Dam

Landform: Floodways

Typical vegetation: None assigned

166—Delano-Urban land complex, 0 to 2 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 695 feet (152 to 213 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 280 to 320 days

Map unit composition

Delano—60 percent

Urban land—20 percent

Minor components—20 percent

Characteristics of Delano and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 1

Nonirrigated areas: 6c

Typical profile

A—0 to 18 inches; sandy loam

Btk1—18 to 37 inches; sandy clay loam

Btk2—37 to 60 inches; sandy loam

Characteristics of Urban land

Slope: 0 to 1 percent

Landform: Alluvial fans

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Arents, loamy, and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans

Cuyama and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants and stream terraces

Hesperia and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

174—Xeric Torriorthents-Calcic Haploxerepts association, 15 to 60 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 695 to 1,295 feet (213 to 396 meters)

Mean annual precipitation: 7 to 9 inches (179 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Xeric Torriorthents, silty—45 percent

Calcic Haploxerepts—40 percent

Minor components—15 percent

Characteristics of Xeric Torriorthents, silty, and similar soils

Slope and aspect: 15 to 60 percent, northeast to south aspects

Landform: Fan remnants, hills, and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 50 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.6 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

Ak—0 to 15 inches; silt loam

Ck—15 to 20 inches; silt loam

Cnyz1—20 to 50 inches; silty clay loam

Cnyz2—50 to 60 inches; silty clay

Characteristics of Calcic Haploxerepts and similar soils

Slope and aspect: 15 to 60 percent, south to northwest aspects

Landform: Fan remnants, hillslopes, and stream terraces

Parent material: Mixed marine deposits and/or residuum

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 25 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.4 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; silty clay loam
Bk—2 to 12 inches; silt loam
Bky—12 to 23 inches; silt loam
Cny—23 to 60 inches; loam

Minor components

Pleito and similar soils

Extent: About 6 percent of the map unit
Slope: 15 to 35 percent
Landform: Fan remnants and stream terraces

Chanac and similar soils

Extent: About 4 percent of the map unit
Slope: 9 to 50 percent
Landform: Fan remnants and stream terraces

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 20 to 50 percent
Landform: Hills

Riverwash

Extent: About 1 percent of the map unit
Slope: 2 to 8 percent
Landform: Drainageways

Trigo and similar soils

Extent: About 1 percent of the map unit
Slope: 10 to 30 percent
Landform: Hillslopes

176—Elkhills sandy loam, 9 to 50 percent slopes, eroded

Map unit setting

General location: The east edge of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 645 to 750 feet (198 to 229 meters)
Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)
Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 260 to 300 days

Map unit composition

Elkhills, eroded—75 percent
Minor components—25 percent

Characteristics of Elkhills, eroded, and similar soils

Slope: 9 to 50 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks and/or lacustrine deposits

Typical vegetation: Shrubs, forbs, and annual grasses

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 8 inches; gravelly sandy loam

AC—8 to 17 inches; gravelly sandy loam

C1—17 to 34 inches; gravelly coarse sandy loam

C2—34 to 42 inches; gravelly sandy loam

C3—42 to 60 inches; gravelly sandy loam

Minor components

Chanac and similar soils

Extent: About 7 percent of the map unit

Slope: 9 to 30 percent

Landform: Fan remnants and stream terraces

Torriorthents, stratified, and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 50 percent

Landform: Dissected fan remnants and dissected stream terraces

Cuyama and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 9 percent

Landform: Fan remnants

Delano and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 5 percent

Landform: Fan remnants

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 20 to 50 percent

Landform: Hills

Ponded soils and similar soils

Extent: About 2 percent of the map unit

Slope: 1 to 3 percent

Landform: Depressions and flood plains

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 10 percent

Landform: Drainageways

177—Chanac-Torriorthents, stratified, association, 15 to 50 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 695 to 1,095 feet (213 to 335 meters)

Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 63 to 68 degrees F (17 to 20 degrees C)

Frost-free period: 270 to 310 days

Map unit composition

Chanac—55 percent

Torriorthents, stratified—25 percent

Minor components—20 percent

Characteristics of Chanac and similar soils

Slope and aspect: 15 to 50 percent, south to west aspects

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Shrubs, forbs, and annual grasses

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 7 inches; sandy clay loam

Btk—7 to 36 inches; sandy clay loam

C—36 to 60 inches; sandy loam

Characteristics of Torriorthents, stratified, and similar soils

Slope and aspect: 15 to 50 percent, northeast to south aspects

Landform: Dissected fan remnants and dissected stream terraces

Parent material: Alluvium derived from mixed rocks and/or lacustrine deposits

Typical vegetation: Shrubs, forbs, and annual grasses

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; stratified gravelly sand to silty clay loam

Cnz—4 to 54 inches; stratified gravelly sand to silty clay loam

C—54 to 60 inches; stratified gravelly sandy loam to clay

Minor components

Badlands

Extent: About 5 percent of the map unit

Slope: 30 to 75 percent

Landform: Hills and hillslopes

Cuyama, cobbly, and similar soils

Extent: About 4 percent of the map unit

Slope: 9 to 20 percent

Landform: Fan remnants and stream terraces

Delano and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Elkhills and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 50 percent

Landform: Fan remnants and stream terraces

Pleito and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 50 percent

Landform: Fan remnants and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 30 to 50 percent

Landform: Hills

178—Delano-Cuyama-Premier complex, 5 to 30 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 600 to 750 feet (183 to 229 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 290 days

Map unit composition

Delano—40 percent

Cuyama—25 percent

Premier—15 percent

Minor components—20 percent

Characteristics of Delano and similar soils

Slope: 5 to 9 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Shrubs, forbs, and annual grasses

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.7 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 8 inches; sandy clay loam

Btk1—8 to 36 inches; sandy clay loam

Btk2—36 to 60 inches; loam

Characteristics of Cuyama and similar soils

Slope: 5 to 30 percent

Landform: Stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Shrubs, forbs, and annual grasses

Percentage of the surface covered by rock fragments: 30 to 60 percent by coarse, subangular gravel and 5 to 20 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.0 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

Ap—0 to 10 inches; sandy loam
Btk—10 to 21 inches; gravelly loam
Bk1—21 to 39 inches; gravelly sandy clay loam
Bk2—39 to 60 inches; gravelly loam

Characteristics of Premier and similar soils

Slope: 5 to 30 percent
Landform: Fan remnants and stream terraces
Parent material: Alluvium derived from sedimentary rocks and/or from granitoid rocks
Typical vegetation: Shrubs, forbs, and annual grasses
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 12 inches; coarse sandy loam
C—12 to 60 inches; coarse sandy loam

Minor components

Chanac and similar soils

Extent: About 5 percent of the map unit
Slope: 9 to 30 percent
Landform: Fan remnants and stream terraces

Elkhills and similar soils

Extent: About 5 percent of the map unit
Slope: 9 to 30 percent
Landform: Fan remnants and stream terraces

Arents, loamy, and similar soils

Extent: About 4 percent of the map unit
Slope: 2 to 30 percent
Landform: Fan remnants and stream terraces

Oil waste land

Extent: About 2 percent of the map unit

Slope: 2 to 5 percent

Landform: Fan remnants and stream terraces

Urban land

Extent: About 2 percent of the map unit

Slope: 0 to 1 percent

Landform: Fan remnants and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 15 to 35 percent

Landform: Hills

179—Torriorthents, stratified, eroded-Elkhills complex, 9 to 50 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 400 to 3,500 feet (122 to 1,067 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 240 to 300 days

Map unit composition

Torriorthents, stratified, eroded—50 percent

Elkhills—30 percent

Minor components—20 percent

Characteristics of Torriorthents, stratified, eroded, and similar soils

Slope: 9 to 50 percent

Landform: Dissected fan remnants

Parent material: Alluvium derived from mixed rocks and/or lacustrine deposits

Typical vegetation: Sparse grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Cnz—4 to 54 inches; stratified sand to silty clay loam

C—54 to 60 inches; stratified clay loam to clay

Characteristics of Elkhills and similar soils

Slope: 9 to 50 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed sources and/or lacustrine deposits

Typical vegetation: Grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.6 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 29 inches; gravelly sandy loam

C1—29 to 49 inches; gravelly sandy loam

C2—49 to 65 inches; stratified sand to gravelly silt loam

Minor components

Severely eroded soils and similar soils

Extent: About 12 percent of the map unit

Slope: 9 to 50 percent

Landform: Fan remnants and hills

Soils that have a hardpan or are sandy and similar soils

Extent: For each of the two components, about 4 percent of the map unit

Slope: 9 to 50 percent (soils that have a hardpan); 2 to 15 percent (sandy soils)

Landform: Fan remnants and hills

184—Cuyama sandy loam, 2 to 5 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 2,700 feet (152 to 823 meters)

Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 280 days

Map unit composition

Cuyama—85 percent

Minor components—15 percent

Characteristics of Cuyama and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel and 1 to 5 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.6 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 6e

Typical profile

Ap—0 to 10 inches; sandy loam

Btk1—10 to 21 inches; sandy clay loam

Btk2—21 to 32 inches; gravelly sandy loam

Bk1—32 to 44 inches; gravelly sandy loam

Bk2—44 to 54 inches; gravelly sandy loam

Bk3—54 to 60 inches; gravelly sandy loam

Minor components

Calicreek and similar soils

Extent: About 7 percent of the map unit

Slope: 1 to 3 percent

Landform: Flood plains

Whitewolf, rarely flooded, and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 3 percent

Landform: Inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions and flood plains

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans and fan remnants

185—Brecken-Cuyama-Pleito complex, 15 to 60 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Hills and valleys

Elevation: 695 to 2,000 feet (213 to 610 meters)

Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 63 to 66 degrees F (17 to 19 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Brecken—40 percent

Cuyama—20 percent

Pleito—20 percent

Minor components—20 percent

Characteristics of Brecken and similar soils

Slope: 15 to 60 percent

Landform: Dissected fan remnants and dissected stream terraces

Parent material: Alluvium derived from mixed rocks (fig. 6)

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 50 to 70 percent by coarse, subangular gravel and 10 to 30 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.9 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; gravelly sandy loam

Bt1—3 to 12 inches; cobbly sandy loam

Bt2—12 to 19 inches; very cobbly sandy clay loam

Bt3—19 to 39 inches; extremely cobbly sandy loam

BC—39 to 60 inches; extremely cobbly coarse sandy loam

Characteristics of Cuyama and similar soils

Slope: 15 to 30 percent

Landform: Fan remnants and stream terraces



Figure 6.—Cobbly to extremely cobbly alluvium in the subsoil of the Brecken soil in map unit 185. Depth is marked in feet.

Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel and 5 to 15 percent by subangular cobbles
Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.6 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 4 inches; sandy loam
Btk—4 to 22 inches; gravelly loam
C—22 to 60 inches; gravelly sandy clay loam

Characteristics of Pleito and similar soils

Slope: 15 to 50 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 12 inches; gravelly clay loam
Bk—12 to 24 inches; gravelly sandy clay loam
C—24 to 60 inches; gravelly clay loam

Minor components

Chanac and similar soils

Extent: About 8 percent of the map unit

Slope: 15 to 60 percent

Landform: Fan remnants and stream terraces

Trigo and similar soils

Extent: About 7 percent of the map unit

Slope: 15 to 40 percent

Landform: Hillslopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 20 to 50 percent

Landform: Hills

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

186—Cuyama loam, 9 to 15 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 1,000 feet (152 to 305 meters)

Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 63 to 66 degrees F (17 to 19 degrees C)

Frost-free period: 260 to 310 days

Map unit composition

Cuyama—85 percent

Minor components—15 percent

Characteristics of Cuyama and similar soils

Slope: 9 to 15 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel and 1 to 10 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.0 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 4 inches; loam

Btk1—4 to 28 inches; gravelly sandy clay loam

Btk2—28 to 36 inches; gravelly loam

Btk3—36 to 60 inches; cobbly sandy clay loam

Minor components

Chanac and similar soils

Extent: About 5 percent of the map unit

Slope: 10 to 20 percent

Landform: Fan remnants and stream terraces

Delano and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 12 percent

Landform: Fan remnants

Pleito and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans, fan remnants, and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

187—Trigo-Chanac association, 15 to 60 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Hills

Elevation: 600 to 1,800 feet (183 to 549 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 225 to 275 days

Map unit composition

Trigo—50 percent

Chanac—35 percent

Minor components—15 percent

Characteristics of Trigo and similar soils

Slope and aspect: 15 to 60 percent, east to southwest aspects

Landform: Dissected fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 5 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; fine sandy loam
C—2 to 10 inches; fine sandy loam
Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Chanac and similar soils

Slope and aspect: 15 to 50 percent, southwest to north aspects

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 8 inches; sandy clay loam
Bk—8 to 36 inches; loam
C—36 to 60 inches; sandy loam

Minor components

Pleito and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 30 percent

Landform: Fan remnants and stream terraces

Xeric Torriorthents and similar soils

Extent: About 5 percent of the map unit

Slope: 20 to 65 percent

Landform: Fan remnants and stream terraces

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 20 to 50 percent

Landform: Hills

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and open depressions

188—Tweedy-Tollhouse-Locobill complex, 9 to 30 percent slopes

Map unit setting

General location: West and central parts of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,400 to 5,500 feet (1,037 to 1,677 meters)

Mean annual precipitation: 10 to 20 inches (254 to 508 millimeters)

Mean annual air temperature: 52 to 55 degrees F (11 to 13 degrees C)

Frost-free period: 150 to 175 days

Map unit composition

Tweedy—50 percent

Tollhouse—20 percent

Locobill—15 percent

Minor components—15 percent

Characteristics of Tweedy and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Grasses, forbs, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 50 to 70 percent by coarse, subangular gravel and 1 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 11 inches; sandy loam

Bt—11 to 32 inches; sandy clay loam

BCt—32 to 38 inches; sandy loam

Cr—38 to 48 inches; soft, weathered bedrock

Characteristics of Tollhouse and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Grasses, forbs, shrubs, and scattered oaks and pine trees

Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel; 1 to 10 percent by subangular cobbles; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches (fig. 7)

Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 5 inches; sandy loam

A2—5 to 14 inches; gravelly coarse sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Locobill and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from metamorphic rocks

Typical vegetation: Grasses, forbs, shrubs, and scattered junipers, oaks, and pine trees



Figure 7.—A shallow Tollhouse soil occurring with moderately deep Tweedy and Locobill soils in an area of map unit 188.

Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 3 inches; sandy loam

Bt1—3 to 28 inches; sandy loam

Bt2—28 to 35 inches; gravelly sandy clay loam

Cr—35 to 45 inches; soft, weathered bedrock

Minor components

Kernville and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 40 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 15 to 35 percent

Landform: Hills and mountain slopes

Sesame and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 35 percent

Landform: Hillslopes and mountain slopes

Feethill and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 25 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils and springs

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 2 percent (flooded soils); 2 to 15 percent (springs)

Landform: Drainageways

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Hills and mountain slopes

189—Tweedy-Walong association, 30 to 50 percent slopes

Map unit setting

General location: The west and central parts of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 1,995 to 5,495 feet (610 to 1,676 meters)

Mean annual precipitation: 10 to 15 inches (254 to 381 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 150 to 210 days

Map unit composition

Tweedy—40 percent

Walong—35 percent

Minor components—25 percent

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 50 percent, northeast to southwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Annual and perennial grasses, forbs, pinyon pine, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 50 to 70 percent by coarse, subangular gravel and 1 to 5 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 7 inches; sandy loam

Bt—7 to 40 inches; sandy clay loam

Cr—40 to 50 inches; soft, weathered bedrock

Characteristics of Walong and similar soils

Slope and aspect: 30 to 50 percent, southwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and oaks

Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel and 1 to 5 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 6e

Typical profile
A—0 to 13 inches; gravelly sandy loam
Bw—13 to 25 inches; gravelly coarse sandy loam
Cr—25 to 35 inches; soft, weathered bedrock

Minor components

Arujo and similar soils

Extent: About 5 percent of the map unit
Slope: 9 to 40 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 30 to 55 percent
Landform: Mountain slopes

Locobill and similar soils

Extent: About 3 percent of the map unit
Slope: 20 to 50 percent
Landform: Mountain slopes

Tunis and similar soils

Extent: About 3 percent of the map unit
Slope: 30 to 60 percent
Landform: Upper mountain slopes

Friant and similar soils

Extent: About 2 percent of the map unit
Slope: 30 to 60 percent
Landform: Upper mountain slopes

Sacatar and similar soils

Extent: About 2 percent of the map unit
Slope: 9 to 40 percent
Landform: Lower mountain slopes

Tollhouse and similar soils

Extent: About 2 percent of the map unit
Slope: 25 to 55 percent
Landform: Upper mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils and springs

Extent: For each of the two components, about 1 percent of the map unit
Slope: 0 to 2 percent (flooded soils); 15 to 45 percent (springs)
Landform: Flood plains

Xerofluvents and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 4 percent

Landform: Flood plains

192—Chanac-Pleito complex, 5 to 30 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 1,200 feet (152 to 366 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 225 to 275 days

Map unit composition

Chanac—55 percent

Pleito—30 percent

Minor components—15 percent

Characteristics of Chanac and similar soils

Slope: 5 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.8 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

Ap—0 to 8 inches; sandy clay loam

AB—8 to 22 inches; loam

Bk1—22 to 31 inches; loam

Bk2—31 to 42 inches; loam

2Btk1—42 to 52 inches; loam

2Btk2—52 to 60 inches; clay loam

Characteristics of Pleito and similar soils

Slope: 5 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.3 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

Ap—0 to 21 inches; gravelly sandy clay loam

Bk1—21 to 53 inches; gravelly sandy clay loam

Bk2—53 to 60 inches; sandy loam

Minor components

Delano and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 15 percent

Landform: Fan remnants

Delvar and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants

Exeter and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 6 percent

Landform: Fan remnants

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 15 to 35 percent

Landform: Hills

Unnamed soils and wet soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 2 to 10 percent (unnamed soils); 0 to 15 percent (wet soils)

Landform: Drainageways

193—Chanac-Pleito complex, 2 to 5 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys (fig. 8)

Elevation: 600 to 2,000 feet (183 to 610 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 200 to 275 days

Map unit composition

Chanac—50 percent
Pleito—30 percent
Minor components—20 percent

Characteristics of Chanac and similar soils

Slope: 2 to 5 percent
Landform: Fan remnants
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 9.2 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1



Figure 8.—Orange orchards in an area of map unit 193. Map unit 115 occurs between the orchards. Map unit 187 is the dominant map unit on the hills in the background.

Typical profile

- A—0 to 9 inches; sandy clay loam
- Bk—9 to 50 inches; sandy clay loam
- C—50 to 63 inches; sandy loam

Characteristics of Pleito and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed sources

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.0 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 4e-1

Typical profile

- A—0 to 25 inches; gravelly sandy clay loam
- Bk1—25 to 48 inches; gravelly sandy clay loam
- Bk2—48 to 60 inches; gravelly sandy loam

Minor components

Delvar and similar soils

Extent: About 6 percent of the map unit

Slope: 2 to 5 percent

Landform: Fan remnants

Premier and similar soils

Extent: About 6 percent of the map unit

Slope: 2 to 9 percent

Landform: Alluvial fans and fan remnants

Exeter and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 6 percent

Landform: Fan remnants

Flooded soils and similar soils and springs

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 2 percent (flooded soils); 0 to 5 percent (springs)

Landform: Flood plains and open depressions

Xerofluvents and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains

194—Pleito-Delvar complex, 2 to 15 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 280 days

Map unit composition

Pleito—40 percent

Delvar—40 percent

Minor components—20 percent

Characteristics of Pleito and similar soils

Slope: 2 to 15 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops or annual and perennial grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 10.0 inches (very high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-1

Nonirrigated areas: 4e-1

Typical profile

A—0 to 30 inches; gravelly clay loam

Bk1—30 to 48 inches; gravelly clay loam

Bk2—48 to 60 inches; gravelly sandy clay loam

Characteristics of Delvar and similar soils

Slope: 2 to 15 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops or annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.3 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-3

Nonirrigated areas: 4e-3

Typical profile

Ap—0 to 17 inches; sandy clay loam

Bt—17 to 35 inches; clay

Btk1—35 to 55 inches; clay

Btk2—55 to 60 inches; sandy clay loam

Minor components

Chanac and similar soils

Extent: About 9 percent of the map unit

Slope: 7 to 20 percent

Landform: Fan remnants and stream terraces

Delano and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 5 percent

Landform: Fan remnants

Premier and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 20 percent

Landform: Fan remnants and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

195—Centerville-Delvar complex, 9 to 30 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 600 to 800 feet (183 to 244 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 275 days

Map unit composition

Centerville—60 percent
Delvar—20 percent
Minor components—20 percent

Characteristics of Centerville and similar soils

Slope: 9 to 30 percent
Landform: Fan remnants
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Irrigated and nonirrigated crops or annual grasses and forbs
Percentage of the surface covered by rock fragments: 10 to 40 percent by fine, subangular gravel
Depth to a restrictive feature (dense material): 30 to 59 inches
Available water capacity to a depth of 60 inches: About 8.3 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 4e-3

Typical profile

Ap—0 to 10 inches; clay
ABss—10 to 39 inches; clay
Btk—39 to 56 inches; sandy clay loam
2Bd—56 to 60 inches; sandy loam

Characteristics of Delvar and similar soils

Slope: 9 to 30 percent
Landform: Fan remnants
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Irrigated and nonirrigated crops or annual grasses and forbs
Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 8.3 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Moderately well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-3

Typical profile

Ap—0 to 18 inches; clay loam
Btk1—18 to 48 inches; clay

Btk2—48 to 60 inches; sandy clay loam

Minor components

Pleito and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 25 percent

Landform: Fan remnants

Chanac and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 35 percent

Landform: Fan remnants

Premier and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 25 percent

Landform: Fan remnants

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 20 to 35 percent

Landform: Hills

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 10 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains

196—Exeter sandy loam, 2 to 9 percent slopes

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 8 to 11 inches (203 to 279 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 275 days

Map unit composition

Exeter—75 percent

Minor components—25 percent

Characteristics of Exeter and similar soils

Slope: 2 to 9 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs

Percentage of the surface covered by rock fragments: 25 to 75 percent by fine, subangular gravel

Depth to a restrictive feature (duripan): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.9 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 3e-8

Nonirrigated areas: 4e-8

Typical profile

Ap1—0 to 4 inches; sandy loam

Ap2—4 to 8 inches; sandy loam

ABt—8 to 12 inches; sandy clay loam

BAt—12 to 18 inches; sandy clay loam

Bt—18 to 25 inches; sandy clay loam

Bsqm—25 to 39 inches; duripan

C—39 to 60 inches; sandy loam

Minor components

Arents, loamy, and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 5 percent

Landform: Fan remnants

Chanac and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 12 percent

Landform: Fan remnants

Nord and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Delvar and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Ponded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Closed Depressions and flood plains

197—Nord fine sandy loam, 0 to 2 percent slopes, rarely flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 8 to 9 inches (203 to 229 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 275 days

Map unit composition

Nord—85 percent

Minor components—15 percent

Characteristics of Nord and similar soils

Slope: 0 to 2 percent

Landform: Flood plains

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops or annual grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 35 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.6 inches (high)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 1

Nonirrigated areas: 4c-4

Typical profile

Ap—0 to 9 inches; fine sandy loam

C—9 to 65 inches; sandy loam

Minor components

Premier and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans

Calicreek and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Pleito and similar soils

Extent: About 2 percent of the map unit

Slope: 1 to 3 percent
Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

198—Centerville-Delvar complex, 2 to 9 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 600 to 800 feet (183 to 244 meters)
Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)
Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)
Frost-free period: 250 to 275 days

Map unit composition

Centerville—65 percent
Delvar—20 percent
Minor components—15 percent

Characteristics of Centerville and similar soils

Slope: 2 to 9 percent
Landform: Fan remnants
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs
Percentage of the surface covered by rock fragments: 5 to 25 percent by fine, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated areas: 3e-3
Nonirrigated areas: 4e-3

Typical profile

Ap—0 to 6 inches; clay
Bkss1—6 to 26 inches; clay

Bkss2—26 to 48 inches; gravelly sandy clay loam
Bd—48 to 60 inches; gravelly sandy clay loam

Characteristics of Delvar and similar soils

Slope: 2 to 9 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.4 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-3

Nonirrigated areas: 4e-3

Typical profile

Ap—0 to 21 inches; clay loam

Btk1—21 to 48 inches; clay

Btk2—48 to 60 inches; sandy clay loam

Minor components

Cuyama and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 13 percent

Landform: Fan remnants

Chanac and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants

Pleito and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Hills

199—Exeter sandy loam, 0 to 2 percent slopes

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 275 days

Map unit composition

Exeter—80 percent

Minor components—20 percent

Characteristics of Exeter and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs

Percentage of the surface covered by rock fragments: 30 to 60 percent by fine, subangular gravel

Depth to a restrictive feature (duripan): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.3 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 3s-8

Nonirrigated areas: 4s-8

Typical profile

A—0 to 20 inches; sandy loam

Bt—20 to 38 inches; sandy clay loam

Bsqm—38 to 60 inches; duripan

Minor components

Arents, ripped hardpan, and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan remnants

Delano, loamy, and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants

Chanac and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 4 percent

Landform: Fan remnants

Delvar and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan remnants

Pleito and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan remnants

Ponded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Closed depressions, fan remnants, and valleys

200—Urban land-Delano complex, 0 to 2 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 695 feet (152 to 213 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 300 days

Map unit composition

Urban land—60 percent

Delano—25 percent

Minor components—15 percent

Characteristics of Urban land

Slope: 0 to 1 percent

Landform: Alluvial fans and fan remnants

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Characteristics of Delano and similar soils

Slope: 0 to 2 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.9 inches (high)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 18 inches; sandy loam
Btk1—18 to 37 inches; sandy clay loam
Btk2—37 to 60 inches; sandy loam

Minor components

Arents, loamy, and similar soils

Extent: About 9 percent of the map unit
Slope: 1 to 3 percent
Landform: Fan remnants

Hesperia and similar soils

Extent: About 5 percent of the map unit
Slope: 0 to 2 percent
Landform: Inset fans

Oil waste land

Extent: About 1 percent of the map unit
Slope: 1 to 3 percent
Landform: Fan remnants

201—Pleito-Chanac-Raggulch complex, 5 to 30 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Hills
Elevation: 600 to 2,000 feet (183 to 610 meters)
Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)
Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)
Frost-free period: 240 to 275 days

Map unit composition

Pleito—30 percent
Chanac—30 percent
Raggulch—30 percent
Minor components—10 percent

Characteristics of Pleito and similar soils

Slope: 5 to 30 percent
Landform: Fan remnants

Parent material: Alluvium derived from mixed sources

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.3 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 7 inches; gravelly sandy clay loam

Bk1—7 to 53 inches; gravelly sandy clay loam

Bk2—53 to 66 inches; sandy loam

Characteristics of Chanac and similar soils

Slope: 5 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.1 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 17 inches; loam

Bk1—17 to 52 inches; loam

Bk2—52 to 62 inches; loam

Characteristics of Raggulch and similar soils

Slope: 5 to 30 percent

Landform: Ancient, dissected fan remnants

Parent material: Residuum weathered from conglomerate and/or from sedimentary rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 25 percent by coarse, subangular gravel, 5 to 10 percent by subangular cobbles, and 10 to 25 percent by subrounded stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 15 to 40 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-8

Typical profile

A—0 to 4 inches; sandy loam

Bt—4 to 16 inches; sandy clay loam

Cr—16 to 18 inches; soft, weathered bedrock

R—18 to 28 inches; bedrock

Minor components

Delano and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Delvar and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 12 percent

Landform: Fan remnants

Exeter and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 6 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 10 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 15 to 35 percent

Landform: Hills

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains

205—Pleito-Trigo-Chanac complex, 15 to 50 percent slopes

Map unit setting

General location: The east edge of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Hills

Elevation: 495 to 2,000 feet (152 to 610 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 225 to 275 days

Map unit composition

Pleito—40 percent

Trigo—25 percent

Chanac—20 percent

Minor components—15 percent

Characteristics of Pleito and similar soils

Slope: 15 to 50 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.8 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 13 inches; gravelly clay loam

B—13 to 42 inches; gravelly sandy clay loam

Ck—42 to 60 inches; gravelly sandy clay loam

Characteristics of Trigo and similar soils

Slope: 15 to 50 percent

Landform: Dissected fan remnants and stream terraces

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 5 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 6 to 20 inches

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 2 inches; fine sandy loam
C—2 to 9 inches; fine sandy loam
Cr—9 to 19 inches; soft, weathered bedrock

Characteristics of Chanac and similar soils

Slope: 15 to 50 percent
Landform: Fan remnants
Parent material: Alluvium derived from mixed sources
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 8 inches; loam
Bk—8 to 36 inches; loam
C—36 to 60 inches; sandy loam

Minor components

Brecken and similar soils

Extent: About 5 percent of the map unit
Slope: 5 to 25 percent
Landform: Fan remnants

Premier and similar soils

Extent: About 4 percent of the map unit
Slope: 2 to 15 percent
Landform: Fan remnants

Raggulch and similar soils

Extent: About 2 percent of the map unit
Slope: 15 to 45 percent
Landform: Ancient, dissected fan remnants

Cieneba and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 50 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 20 to 50 percent

Landform: Hills

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

207—Whitewolf loamy sand, 0 to 2 percent slopes, rarely flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 550 to 1,000 feet (168 to 305 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 270 to 310 days

Map unit composition

Whitewolf—85 percent

Minor components—15 percent

Characteristics of Whitewolf and similar soils

Slope: 0 to 2 percent

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.7 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 3s-4

Nonirrigated areas: 6e

Typical profile

A—0 to 10 inches; loamy sand

C—10 to 60 inches; sand

Minor components

Calicreek and similar soils

Extent: About 8 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Hesperia and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent

Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

209—Whitewolf loamy sand, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 1,000 feet (152 to 305 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 270 to 310 days

Map unit composition

Whitewolf—85 percent

Minor components—15 percent

Characteristics of Whitewolf and similar soils

Slope: 0 to 2 percent

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated and nonirrigated crops and, in a few nonirrigated areas, annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 40 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.9 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: A

Land capability classification

Irrigated areas: 3s-4
Nonirrigated areas: 6e

Typical profile

A—0 to 15 inches; loamy sand
C1—15 to 25 inches; loamy sand
C2—25 to 60 inches; sand

Minor components

Calicreek and similar soils

Extent: About 7 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Hesperia and similar soils

Extent: About 6 percent of the map unit
Slope: 1 to 3 percent
Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

210—Kernfork fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 2,650 to 2,995 feet (808 to 914 meters)
Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)
Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 200 to 220 days

Map unit composition

Kernfork—85 percent
Minor components—15 percent

Characteristics of Kernfork and similar soils

Slope: 0 to 2 percent
Landform: Flood plains and mountain valleys
Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Grasses and shrubs

Percentage of the surface covered by rock fragments: 5 to 15 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.9 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: High

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: D

Land capability classification

Irrigated areas: 4w-2

Nonirrigated areas: 6w

Typical profile

Ap—0 to 6 inches; fine sandy loam

Bg—6 to 27 inches; fine sandy loam

Cg1—27 to 30 inches; loamy sand

Cg2—30 to 60 inches; stratified loamy sand to sandy loam

Minor components

Kelval and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, frequently flooded, saline-sodic, and similar soils

Extent: About 5 percent

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

Inyo and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Inset fans and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains, mountain valleys, and open depressions

212—Kernfork fine sandy loam, 0 to 2 percent slopes, frequently flooded

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Intermontane basins

Elevation: 2,595 to 2,995 feet (792 to 914 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Kernfork—80 percent

Minor components—20 percent

Characteristics of Kernfork and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Saltgrass, willows, cottonwood, and shrubs; dominantly willows, cottonwood, and rubber rabbitbrush in the active drainageway in the Kelso Valley area

Percentage of the surface covered by rock fragments: 5 to 15 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.1 inches (moderate)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: Rare

Surface runoff class: Very low

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7w

Typical profile

Ap—0 to 10 inches; fine sandy loam

Bg—10 to 31 inches; sandy loam

Cg—31 to 60 inches; stratified loamy sand to silt loam

Minor components

Kelval and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Inyo, gently sloping, and similar soils

Extent: About 8 percent of the map unit

Slope: 1 to 5 percent

Landform: Alluvial fans and inset fans

Aquolls, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Closed depressions and lower flood plains

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent
Landform: Channels and drainageways

Southlake and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 4 percent
Landform: Fan remnants and mountain valleys

213—Calicreek loamy coarse sand, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: The east side of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 495 to 1,000 feet (152 to 305 meters)
Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)
Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 250 to 300 days

Map unit composition

Calicreek—85 percent
Minor components—15 percent

Characteristics of Calicreek and similar soils

Slope: 0 to 2 percent
Landform: Flood plains
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Irrigated crops; annual grasses, forbs, and shrubs in uncultivated areas
Percentage of the surface covered by rock fragments: 15 to 60 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 4.7 inches (low)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 3w-2
Nonirrigated areas: 6w

Typical profile

Ap—0 to 7 inches; loamy coarse sand
C1—7 to 26 inches; stratified gravelly coarse sand to fine sandy loam
C2—26 to 60 inches; stratified gravelly coarse sand to fine sandy loam

Minor components

Whitewolf and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 3 percent
Landform: Alluvial fans

Cuyama and similar soils

Extent: About 5 percent of the map unit
Slope: 1 to 3 percent
Landform: Fan remnants

Hesperia and similar soils

Extent: About 3 percent of the map unit
Slope: 1 to 2 percent
Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways

**215—Kelval loamy sand, 0 to 2 percent slopes,
occasionally flooded**

Map unit setting

General location: Kern Valley, Kelso Valley, and the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 6 to 10 inches (152 to 254 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Kelval—85 percent

Minor components—15 percent

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Grasses and forbs with some shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.1 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2w-4

Nonirrigated areas: 6w

Typical profile

Ap—0 to 7 inches; loamy sand

A—7 to 43 inches; gravelly fine sandy loam

C—43 to 60 inches; stratified gravelly sand to fine sandy loam

Minor components

Chollawell and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants and mountain valleys

Inyo and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, mountain valleys, and stream terraces

Kernfork and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 1 percent

Landform: Depressions, flood plains, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Southlake and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains, mountain valleys, and swales

216—Inyo-Riverwash complex, 0 to 5 percent slopes, frequently flooded

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and intermontane basins

Elevation: 2,600 to 2,995 feet (793 to 914 meters)

Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—60 percent

Riverwash—25 percent
Minor components—15 percent

Characteristics of Inyo and similar soils

Slope: 0 to 5 percent
Landform: Stream terraces
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Mainly shrubs
Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Frequent
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Excessively drained
Hydrologic soil group: A

Land capability classification

Irrigated areas: 4w-4
Nonirrigated areas: 6w

Typical profile

A—0 to 14 inches; loamy coarse sand
C—14 to 60 inches; gravelly loamy coarse sand

Characteristics of Riverwash

Slope: 1 to 5 percent
Landform: Drainageways and intermittent streams
Kind of material: Alluvium derived from granitoid rocks
Typical vegetation: Barren

Hydrologic properties

Present annual flooding: Frequent
Present annual ponding: None
Surface runoff class: High
Current water table: Present
Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7w

Minor components

Kernfork, flooded, and similar soils

Extent: About 10 percent of the map unit
Slope: 0 to 2 percent
Landform: Stream terraces

Goodale, stony and bouldery, and similar soils

Extent: About 5 percent of the map unit
Slope: 0 to 5 percent
Landform: Channels

217—Whitewolf-Riverwash complex, 0 to 5 percent slopes, frequently flooded

Map unit setting

General location: The east side of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 600 to 2,000 feet (183 to 610 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Whitewolf—55 percent

Riverwash—25 percent

Minor components—20 percent

Characteristics of Whitewolf and similar soils

Slope: 0 to 5 percent

Landform: Alluvial fans and flood plains

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, and a few shrubs

Percentage of the surface covered by rock fragments: 40 to 80 percent by coarse, subangular gravel and 0 to 5 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.9 inches (low)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 4w-4

Nonirrigated areas: 6w

Typical profile

A—0 to 14 inches; gravelly loamy coarse sand

C—14 to 60 inches; gravelly loamy coarse sand

Characteristics of Riverwash

Slope: 0 to 3 percent

Landform: Drainageways

Kind of material: Alluvium derived from granitoid rocks

Typical vegetation: Barren

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: High

Current water table: Present

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7w

Minor components

Calicreek and similar soils

Extent: About 8 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Cobbly, stratified soils and similar soils

Extent: About 8 percent of the map unit

Slope: 1 to 3 percent

Landform: Flood plains

Delano and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 4 percent

Landform: Fan remnants

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions and flood plains

220—Aquents-Aquolls-Riverwash complex, 0 to 5 percent slopes, flooded

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 3,100 feet (792 to 945 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 59 to 64 degrees F (15 to 18 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Aquents—40 percent

Aquolls—35 percent

Riverwash—15 percent

Minor components—10 percent

Characteristics of Aquents and similar soils

Slope: 0 to 5 percent

Landform: Channels, depressions, flood plains, and mountain valleys

Parent material: Alluvium derived from granite

Typical vegetation: Salt-tolerant grasses, forbs, and willows

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.6 inches (moderate)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: Frequent

Surface runoff class: Very high

Current water table: Present
Natural drainage class: Very poorly drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4w-2
Nonirrigated areas: 6w

Typical profile

A—0 to 7 inches; loamy fine sand
Cng—7 to 18 inches; fine sandy loam
C—18 to 60 inches; loamy fine sand

Characteristics of Aquolls and similar soils

Slope: 0 to 5 percent
Landform: Channels, flood plains, and mountain valleys
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Salt-tolerant grasses, forbs, sedges, cottonwood, and willows
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: Frequent
Present annual ponding: Frequent
Surface runoff class: Very high
Current water table: Present
Natural drainage class: Very poorly drained
Hydrologic soil group: C

Land capability classification

Irrigated areas: 4w-2
Nonirrigated areas: 6w

Typical profile

An—0 to 3 inches; silt loam
A—3 to 12 inches; very fine sandy loam
C—12 to 60 inches; loamy fine sand

Characteristics of Riverwash

Slope: 0 to 2 percent
Landform: Channels, drainageways, and mountain valleys
Kind of material: Alluvium derived from granitoid rocks
Typical vegetation: Barren

Hydrologic properties

Present annual flooding: Frequent
Present annual ponding: Occasional
Surface runoff class: High
Current water table: Present
Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7w

Minor components

Kelval and similar soils

Extent: About 6 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Inyo, stratified, and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Inset fans, mountain valleys, and stream terraces

222—Kelval fine sandy loam, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 200 to 230 days

Map unit composition

Kelval—85 percent

Minor components—15 percent

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Shrubs, grasses, and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 2w-2

Nonirrigated areas: 6w

Typical profile

A—0 to 13 inches; fine sandy loam

C—13 to 60 inches; stratified gravelly sand to fine sandy loam

Minor components

Chollawell and similar soils

Extent: About 4 percent of the map unit

Slope: 1 to 3 percent

Landform: Fan remnants and mountain valleys

Inyo and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 3 percent

Landform: Alluvial fans and mountain valleys

Kernfork and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 1 percent

Landform: Depressions, flood plains, and mountain valleys

Riverwash

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Aquolls and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, lower flood plains, and mountain valleys

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, flood plains, and mountain valleys

223—Kelval stony sandy loam, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 200 to 225 days

Map unit composition

Kelval—70 percent

Minor components—30 percent

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Shrubs, annual grasses, and a few scattered foothill pine trees

Percentage of the surface covered by rock fragments: 25 to 50 percent by subangular stones, 5 to 10 percent by subangular cobbles, and 5 to 15 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.4 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4w-2

Nonirrigated areas: 6w

Typical profile

A—0 to 13 inches; stony sandy loam

C—13 to 60 inches; stony sandy loam

Minor components

Riverwash

Extent: About 9 percent of the map unit

Slope: 1 to 3 percent

Landform: Drainageways and mountain valleys

Steuber and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 5 percent

Landform: Flood plains and mountain valleys

Havala and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 5 percent

Landform: Mountain valleys and stream terraces

Kernfork, frequently flooded, and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 2 to 6 percent

Landform: Hills and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

224—Inyo gravelly loamy coarse sand, 0 to 9 percent slopes, occasionally flooded

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts

Elevation: 2,495 to 4,100 feet (762 to 1,250 meters)

Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—85 percent

Minor components—15 percent

Characteristics of Inyo and similar soils

Slope: 0 to 9 percent

Landform: Alluvial fans and inset fans

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Shrubs and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by coarse, subangular gravel and 1 to 5 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; loamy coarse sand

C—12 to 60 inches; gravelly loamy coarse sand

Minor components

Kelval and similar soils

Extent: About 7 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, wet, flooded, and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways, lower flood plains, and mountain valleys

Urban land

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, flood plains, and mountain valleys

Pinyonpeak and similar soils

Extent: About 1 percent of the map unit

Slope: 9 to 15 percent

Landform: Hills

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways and mountain valleys

238—Cinco gravelly loamy sand, 50 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 635 to 1,195 feet (195 to 365 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 200 to 250 days

Map unit composition

Cinco—85 percent

Minor components—15 percent

Characteristics of Cinco and similar soils

Slope: 50 to 75 percent

Landform: Steep fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 40 to 70 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; gravelly loamy sand

C—3 to 60 inches; gravelly loamy sand

Minor components

Cuyama and similar soils

Extent: About 10 percent of the map unit

Slope: 15 to 60 percent

Landform: Fan remnants

Delano and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants

Dune land

Extent: About 2 percent of the map unit

Slope: 15 to 45 percent

Landform: Dunes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

240—Dune land

Map unit setting

General location: The east edge of the southern Sierra Nevada Mountains

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 645 to 1,000 feet (198 to 305 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 64 to 66 degrees F (18 to 19 degrees C)

Frost-free period: 260 to 290 days

Map unit composition

Dune land—85 percent

Minor components—15 percent

Characteristics of Dune land

Slope: 2 to 50 percent

Landform: Dunes

Kind of material: Eolian deposits derived from granite

Typical vegetation: Sparse cover of shrubs and grasses

Percentage of the surface covered by rock fragments: 1 to 15 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 8

Minor components

Cuyama and similar soils

Extent: About 8 percent of the map unit

Slope: 2 to 30 percent

Landform: Fan remnants

Delano and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Gravelly soils and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants

241—Inyo gravelly loamy coarse sand, 0 to 5 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts

Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)

Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—75 percent

Minor components—25 percent

Characteristics of Inyo and similar soils

Slope: 0 to 5 percent

Landform: Alluvial fans and inset fans

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 8 inches; loamy coarse sand

C—8 to 60 inches; gravelly loamy coarse sand

Minor components

Chollawell and similar soils

Extent: About 9 percent of the map unit

Slope: 2 to 6 percent

Landform: Alluvial fans and fan remnants

Riverwash

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and intermittent streams

Kelval and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Kernfork and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Lower flood plains

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans

242—Inyo gravelly loamy coarse sand, 5 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 6 to 8 inches (153 to 203 millimeters)

Mean annual air temperature: 59 to 61 degrees F (15 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—80 percent

Minor components—20 percent

Characteristics of Inyo and similar soils

Slope: 5 to 15 percent

Landform: Alluvial fans and inset fans (fig. 9)

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 6 inches; loamy coarse sand



Figure 9.—Alluvial fans in an area of map unit 242 in Short Canyon. Map unit 507 is in the mountains. In the foreground, Rock outcrop stands out above the shallow Xyno soil in map unit 516.

C—6 to 60 inches; gravelly loamy coarse sand

Minor components

Chollawell and similar soils

Extent: About 7 percent of the map unit

Slope: 2 to 8 percent

Landform: Alluvial fans and fan remnants

Kelval and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 2 percent

Landform: Flood plains and stream terraces

Riverwash

Extent: About 5 percent of the map unit

Slope: 2 to 8 percent

Landform: Drainageways and intermittent streams

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 2 to 8 percent

Landform: Drainageways and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

243—Kernfork loam, saline-sodic, 0 to 2 percent slopes, occasionally flooded

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,000 to 3,795 feet (610 to 1,158 meters)

Mean annual precipitation: 6 to 8 inches (153 to 203 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Kernfork, saline-sodic, occasionally flooded—85 percent

Minor components—15 percent

Characteristics of Kernfork, saline-sodic, occasionally flooded, and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Salt-tolerant grasses, shrubs, sedges, and willows

Percentage of the surface covered by rock fragments: 5 to 10 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.1 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: Occasional

Surface runoff class: Very high

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 4w-6

Nonirrigated areas: 6w

Typical profile

Ap—0 to 10 inches; loam

Cg—10 to 60 inches; stratified loamy sand to silt loam

Minor components

Inyo and similar soils

Extent: About 5 percent of the map unit

Slope: 1 to 3 percent

Landform: Inset fans and mountain valleys

Kernfork, nonsaline, and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Lower flood plains and mountain valleys

Kelval and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

245—Chollawell gravelly loamy coarse sand, 2 to 5 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 3,195 to 4,195 feet (975 to 1,280 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—80 percent

Minor components—20 percent

Characteristics of Chollawell and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants and mountain valleys (fig. 10)

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 21 inches; gravelly loamy coarse sand



Figure 10.—Chollawell soils on fan remnants in areas of map units 245 and 246. Map units 507, 508, and 509 occur on Nicolls Peak in the middle background. Photo by Blake Sanden, Kern County, University of California Cooperative Extension.

Bt—21 to 46 inches; gravelly coarse sandy loam
C—46 to 60 inches; gravelly coarse sand

Minor components

Inyo and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 6 percent

Landform: Inset fans and mountain valleys

Kelval and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, wet, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 1 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 2 percent of the map unit

Slope: 1 to 3 percent

Landform: Drainageways and mountain valleys

Urban land

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan remnants and mountain valleys

246—Chollawell gravelly loamy coarse sand, 5 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts

Elevation: 3,995 to 4,500 feet (1,219 to 1,372 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—80 percent

Minor components—20 percent

Characteristics of Chollawell and similar soils

Slope: 5 to 15 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Shrubs, perennial grasses, and scattered junipers

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 19 inches; gravelly loamy coarse sand

Bt—19 to 54 inches; gravelly coarse sandy loam

C—54 to 60 inches; gravelly loamy coarse sand

Minor components

Inyo and similar soils

Extent: About 9 percent of the map unit

Slope: 5 to 15 percent

Landform: Inset fans

Riverwash

Extent: About 7 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Cowspring and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 20 percent
Landform: Hillslopes

Kelval and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

247—Inyo-Tips-Rock outcrop complex, 5 to 30 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains and hills
Elevation: 2,995 to 4,995 feet (914 to 1,524 meters)
Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)
Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)
Frost-free period: 190 to 220 days

Map unit composition

Inyo—45 percent
Tips—25 percent
Rock outcrop—15 percent
Minor components—15 percent

Characteristics of Inyo and similar soils

Slope: 5 to 15 percent
Landform: Alluvial fans, fan piedmonts, and mountain valleys
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Shrubs, perennial grasses, and scattered Joshua trees
Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Excessively drained
Hydrologic soil group: A

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 8 inches; loamy coarse sand
C—8 to 60 inches; gravelly loamy coarse sand

Characteristics of Tips and similar soils

Slope: 5 to 30 percent
Landform: Hillslopes, mountain slopes, and mountain valleys

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and shrubs

Percentage of the surface covered by rock fragments: 50 to 80 percent by fine, subangular gravel and 1 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand

Bt—5 to 12 inches; gravelly coarse sandy loam

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 5 to 30 percent

Landform: Hills and mountain valleys

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Cowspring and similar soils

Extent: About 7 percent of the map unit

Slope: 9 to 25 percent

Landform: Hillslopes and mountain slopes

Xyno, moderately deep, and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 35 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 8 percent

Landform: Drainageways and mountain valleys

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Drainageways and mountain valleys

249—Hoffman-Rock outcrop complex, 30 to 50 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Hills and mountains

Elevation: 3,795 to 4,995 feet (1,158 to 1,524 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 180 to 210 days

Map unit composition

Hoffman—65 percent

Rock outcrop—20 percent

Minor components—15 percent

Characteristics of Hoffman and similar soils

Slope: 30 to 50 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Scattered junipers, shrubs, and perennial and annual grasses

Percentage of the surface covered by rock fragments: 5 to 20 percent by subangular cobbles and 5 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 6e

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand

Bw—11 to 22 inches; gravelly loamy coarse sand

Bt—22 to 34 inches; gravelly coarse sandy loam

Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 50 percent

Landform: Hills

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Tips and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 40 percent

Landform: Hillslopes

Xyno and similar soils

Extent: About 5 percent of the map unit

Slope: 20 to 50 percent

Landform: Hillslopes and mountain slopes

Chollawell and similar soils

Extent: About 2 percent of the map unit

Slope: 10 to 30 percent

Landform: Fan remnants

Typic Torriorthents, shallow, and similar soils

Extent: About 2 percent of the map unit

Slope: 20 to 50 percent

Landform: Hills

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

250—Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Hills

Elevation: 3,795 to 4,995 feet (1,158 to 1,524 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 180 to 210 days

Map unit composition

Hoffman—40 percent

Tips—30 percent

Pilotwell—15 percent

Minor components—15 percent

Characteristics of Hoffman and similar soils

Slope and aspect: 15 to 50 percent, southeast to west aspects

Landform: Middle and lower hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Shrubs, annual and perennial grasses, and scattered junipers

Percentage of the surface covered by rock fragments: 5 to 20 percent by subangular cobbles and 5 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.5 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand
BA—11 to 22 inches; gravelly loamy coarse sand
Bt—22 to 34 inches; gravelly coarse sandy loam
Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Tips and similar soils

Slope and aspect: 15 to 50 percent, south to west aspects
Landform: Upper hillslopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Shrubs, perennial grasses, and scattered junipers
Percentage of the surface covered by rock fragments: 25 to 50 percent by fine, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches
Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand
Bt—5 to 10 inches; gravelly coarse sandy loam
Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Pilotwell and similar soils

Slope and aspect: 15 to 50 percent, northeast to southeast aspects
Landform: Hillslopes
Parent material: Colluvium derived from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, and shrubs
Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 2 percent by subangular boulders; and 0 to 1 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 6e

Typical profile
A—0 to 3 inches; gravelly loamy coarse sand
C—3 to 38 inches; gravelly loamy coarse sand
Cr—38 to 48 inches; soft, weathered bedrock

Minor components

Chollawell and similar soils

Extent: About 4 percent of the map unit
Slope: 5 to 15 percent
Landform: Fan piedmonts

Inyo and similar soils

Extent: About 3 percent of the map unit
Slope: 1 to 9 percent
Landform: Inset fans

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 20 to 55 percent
Landform: Hills

Xyno and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 50 percent
Landform: Upper hillslopes

Kelval and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

253—Sorrell-Martee-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 4,500 to 7,700 feet (1,372 to 2,347 meters)
Mean annual precipitation: 10 to 18 inches (254 to 457 millimeters)
Mean annual air temperature: 48 to 54 degrees F (9 to 12 degrees C)

Frost-free period: 80 to 180 days

Map unit composition

Sorrell—40 percent

Martee—25 percent

Rock outcrop—20 percent

Minor components—15 percent

Characteristics of Sorrell and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, and oaks

Percentage of the surface covered by rock fragments: 10 to 20 percent by subangular boulders; 5 to 15 percent by subangular stones; 30 to 50 percent by coarse, subangular gravel; and 3 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.7 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; bouldery loamy coarse sand

Bt—9 to 23 inches; bouldery coarse sandy loam

Cr—23 to 33 inches; soft, weathered bedrock

Characteristics of Martee and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 30 to 40 percent by coarse, subangular gravel; 15 to 20 percent by subangular cobbles; 15 to 25 percent by subangular boulders; and 5 to 10 percent by subangular stones

Depth to a restrictive feature: 10 to 18 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 5 inches; very bouldery loamy coarse sand

A2—5 to 11 inches; very bouldery loamy coarse sand

Cr—11 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Edmundston and similar soils

Extent: About 4 percent of the map unit

Slope: 15 to 45 percent

Landform: Mountain slopes

Hungrygulch and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 40 percent

Landform: Mountain slopes

Kernville and similar soils

Extent: About 2 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 2 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 15 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains in mountain valleys

254—Martee-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 4,500 to 7,700 feet (1,372 to 2,347 meters)

Mean annual precipitation: 10 to 18 inches (254 to 457 millimeters)

Mean annual air temperature: 48 to 54 degrees F (9 to 12 degrees C)

Frost-free period: 80 to 180 days

Map unit composition

Martee—60 percent

Rock outcrop—25 percent

Minor components—15 percent

Characteristics of Martee and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, oaks, and pinyon pine

Percentage of the surface covered by rock fragments: 20 to 30 percent by subangular boulders; 25 to 35 percent by coarse, subangular gravel; and 10 to 20 percent by subangular cobbles

Depth to a restrictive feature: 10 to 18 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 4 inches; very gravelly loamy coarse sand

A2—4 to 12 inches; very gravelly loamy coarse sand

Cr—12 to 15 inches; soft, weathered bedrock

R—15 to 25 inches; bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Edmundston and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 45 percent

Landform: Mountain slopes

Sorrell and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 40 percent

Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 70 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 2 percent of the map unit

Slope: 20 to 50 percent

Landform: Mountain slopes

Walong and similar soils

Extent: About 2 percent of the map unit

Slope: 20 to 40 percent

Landform: Lower mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 15 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions on flood plains in mountain valleys

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Flood plains in narrow mountain valleys

255—Kernfork complex, 0 to 5 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,295 to 4,395 feet (701 to 1,341 meters)

Mean annual precipitation: 7 to 12 inches (178 to 304 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 210 to 240 days

Map unit composition

Kernfork, occasionally flooded—45 percent

Kernfork, frequently flooded—40 percent
Minor components—15 percent

Characteristics of Kernfork, occasionally flooded, and similar soils

Slope: 1 to 5 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, sedges, and scattered foothill pine and oaks

Percentage of the surface covered by rock fragments: 5 to 15 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.1 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: Rare

Surface runoff class: Low

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: D

Land capability classification

Irrigated areas: 2w-2

Nonirrigated areas: 6w

Typical profile

Ap—0 to 10 inches; loam

Cg—10 to 60 inches; stratified loamy sand to silt loam

Characteristics of Kernfork, frequently flooded, and similar soils

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, sedges, and scattered foothill pine trees

Percentage of the surface covered by rock fragments: 5 to 15 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.8 inches (low)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: Occasional

Surface runoff class: Very high

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2w-2

Nonirrigated areas: 6w

Typical profile

A—0 to 8 inches; sandy loam

C—8 to 60 inches; loamy sand

Minor components

Kelval and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, saline-sodic, frequently flooded, and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Deerspring and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions and mountain valleys

Flooded soils and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Depression on flood plains; mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

257—Hoffman-Tips-Rock outcrop association, 20 to 45 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 3,795 to 4,995 feet (1,158 to 1,524 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 175 to 225 days

Map unit composition

Hoffman—50 percent

Tips—20 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Hoffman and similar soils

Slope and aspect: 20 to 45 percent, west to northeast aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 20 percent by subangular cobbles and 5 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.5 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand
BA—11 to 22 inches; gravelly loamy coarse sand
Bt—22 to 34 inches; gravelly coarse sandy loam
Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Tips and similar soils

Slope and aspect: 20 to 45 percent, northeast to south aspects
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Shrubs, annual and perennial grasses, and junipers
Percentage of the surface covered by rock fragments: 60 to 80 percent by fine, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches
Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand
Bt—5 to 10 inches; gravelly coarse sandy loam
Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 20 to 50 percent
Landform: Hills, hillslopes, and mountain slopes
Kind of rock: Granitoid
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Erskine, very steep, and similar soils

Extent: About 6 percent of the map unit

Slope: 30 to 55 percent

Landform: Hillslopes and mountain slopes

Cowspring and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 20 percent

Landform: Hillslopes and mountain slopes

Inyo, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 9 percent

Landform: Drainageways and fan piedmonts

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Sorrell, very steep, and similar soils

Extent: About 1 percent of the map unit

Slope: 30 to 45 percent

Landform: Mountain slopes

Torrissamments, shallow, and similar soils

Extent: About 1 percent of the map unit

Slope: 30 to 50 percent

Landform: Hills and mountain slopes

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

259—Cowspring gravelly loamy coarse sand, 15 to 50 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Hills

Elevation: 3,595 to 4,995 feet (1,097 to 1,524 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Cowspring—80 percent

Minor components—20 percent

Characteristics of Cowspring and similar soils

Slope: 15 to 50 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and scattered junipers

Percentage of the surface covered by rock fragments: 50 to 75 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; gravelly loamy coarse sand

Bt—3 to 27 inches; gravelly coarse sandy loam

Cr—27 to 37 inches; soft, weathered bedrock

Minor components

Chollawell and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 20 percent

Landform: Fan piedmonts

Tips and similar soils

Extent: About 5 percent of the map unit

Slope: 35 to 55 percent

Landform: Hillslopes

Hoffman and similar soils

Extent: About 3 percent of the map unit

Slope: 25 to 50 percent

Landform: Hillslopes

Inyo and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans and fan piedmonts

Riverwash

Extent: About 1 percent of the map unit

Slope: 5 to 20 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 30 to 60 percent

Landform: Hills

Torripsamments, shallow, and similar soils

Extent: About 1 percent of the map unit

Slope: 40 to 60 percent

Landform: Hills

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Drainageways

260—Cowspring-Tips-Rock outcrop complex, 30 to 50 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 2,995 to 4,995 feet (914 to 1,524 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Cowspring—45 percent

Tips—20 percent

Rock outcrop—15 percent

Minor components—20 percent

Characteristics of Cowspring and similar soils

Slope: 30 to 50 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses and shrubs

Percentage of the surface covered by rock fragments: 45 to 75 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; gravelly loamy coarse sand

Bt—3 to 27 inches; gravelly sandy loam

Cr—27 to 37 inches; soft, weathered bedrock

Characteristics of Tips and similar soils

Slope: 30 to 50 percent

Landform: Hillslopes and upper mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses and shrubs

Percentage of the surface covered by rock fragments: 50 to 80 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand

Bt—5 to 12 inches; gravelly coarse sandy loam

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 50 percent

Landform: Hills and mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 7 percent of the map unit

Slope: 9 to 25 percent

Landform: Fan piedmonts

Xyno and similar soils

Extent: About 5 percent of the map unit

Slope: 30 to 60 percent

Landform: Hillslopes and mountain slopes

Torrripsammments, shallow, and similar soils

Extent: About 3 percent of the map unit

Slope: 30 to 60 percent

Landform: Hills and mountain slopes

Inyo and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 9 percent

Landform: Drainageways and fan piedmonts

Pilotwell and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 9 percent

Landform: Drainageways

261—Blasingame-Arujo-Cieneba association, 15 to 45 percent slopes

Map unit setting

General location: The western foothills of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 1,000 to 3,500 feet (305 to 1,067 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 57 to 64 degrees F (14 to 18 degrees C)

Frost-free period: 200 to 260 days

Map unit composition

Blasingame—30 percent

Arujo—25 percent

Cieneba—25 percent

Minor components—20 percent

Characteristics of Blasingame and similar soils

Slope and aspect: 15 to 45 percent, south to west aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 5 percent by subangular stones and 30 to 50 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; sandy loam

Bt—14 to 21 inches; sandy clay loam

Cr—21 to 31 inches; soft, weathered bedrock

Characteristics of Arujo and similar soils

Slope and aspect: 15 to 45 percent, west to north aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 0 to 2 percent by subangular boulders and 25 to 55 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 8.9 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; sandy loam

Bt1—14 to 45 inches; sandy clay loam

Bt2—45 to 58 inches; sandy clay loam

Cr—58 to 68 inches; soft, weathered bedrock

Characteristics of Cieneba and similar soils

Slope and aspect: 15 to 45 percent, northeast to south aspects

Landform: Upper hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 5 percent by subangular stones and 50 to 80 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 16 inches; sandy loam

Cr—16 to 26 inches; soft, weathered bedrock

Minor components

Feethill and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes

Vista and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 5 percent

Landform: Hillslopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 20 to 50 percent

Landform: Hillslopes

Tunis, very steep, and similar soils

Extent: About 2 percent of the map unit

Slope: 25 to 55 percent

Landform: Hillslopes

Stratified soils and similar soils

Extent: About 2 percent of the map unit

Slope: 9 to 15 percent

Landform: Fan piedmonts and fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Unnamed soils and wet, flooded soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 20 percent (unnamed soils); 0 to 2 percent (wet, flooded soils)

Landform: Drainageways

264—Arujo-Walong-Tunis association, 9 to 30 percent slopes

Map unit setting

General location: Foothills on the west side of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 2,495 to 4,995 feet (762 to 1,524 meters)

Mean annual precipitation: 10 to 16 inches (254 to 406 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 170 to 220 days

Map unit composition

Arujo—35 percent

Walong—25 percent

Tunis—20 percent

Minor components—20 percent

Characteristics of Arujo and similar soils

Slope and aspect: 9 to 30 percent, south to northwest aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks and foothill pine

Percentage of the surface covered by rock fragments: 20 to 50 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 9.0 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 14 inches; sandy loam
Bt1—14 to 20 inches; sandy clay loam
Bt2—20 to 58 inches; sandy clay loam
Cr—58 to 68 inches; soft, weathered bedrock

Characteristics of Walong and similar soils

Slope and aspect: 15 to 30 percent, northeast to south aspects
Landform: Hillslopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, and oaks
Percentage of the surface covered by rock fragments: 20 to 50 percent by fine, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.1 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 13 inches; gravelly sandy loam
Bw—13 to 25 inches; gravelly coarse sandy loam
Cr—25 to 35 inches; soft, weathered bedrock

Characteristics of Tunis and similar soils

Slope and aspect: 15 to 30 percent, south to northwest aspects
Landform: Hillslopes
Parent material: Residuum weathered from gneiss and/or from granitoid rocks
Typical vegetation: Annual grasses, forbs, shrubs, and scattered oaks and foothill pine
Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.9 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None

Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 3 inches; sandy loam
Bw—3 to 16 inches; sandy loam
Cr—16 to 26 inches; soft, weathered bedrock

Minor components

Feethill and similar soils

Extent: About 5 percent of the map unit
Slope: 15 to 30 percent
Landform: Hills

Sesame and similar soils

Extent: About 4 percent of the map unit
Slope: 7 to 33 percent
Landform: Hillslopes

Backcanyon and similar soils

Extent: About 2 percent of the map unit
Slope: 10 to 30 percent
Landform: Hillslopes

Havala and similar soils

Extent: About 2 percent of the map unit
Slope: 5 to 15 percent
Landform: Stream terraces

Locobill and similar soils

Extent: About 2 percent of the map unit
Slope: 20 to 35 percent
Landform: Hillslopes

Rock outcrop

Extent: About 2 percent of the map unit
Slope: 15 to 35 percent
Landform: Hills

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Typic Xeropsamments and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 4 percent
Landform: Alluvial fans

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

265—Arujo sandy loam, 9 to 15 percent slopes

Map unit setting

General location: Foothills and mountain valleys in the western part of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 61 to 63 degrees F (16 to 17 degrees C)

Frost-free period: 190 to 240 days

Map unit composition

Arujo—80 percent

Minor components—20 percent

Characteristics of Arujo and similar soils

Slope: 9 to 15 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks and foothill pine

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 9.0 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 4e-1

Typical profile

A—0 to 14 inches; sandy loam

Bt1—14 to 20 inches; sandy clay loam

Bt2—20 to 58 inches; sandy clay loam

Cr—58 to 68 inches; soft, weathered bedrock

Minor components

Feethill and similar soils

Extent: About 6 percent of the map unit

Slope: 9 to 20 percent

Landform: Hills

Havala and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 8 percent

Landform: Stream terraces

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 9 to 20 percent

Landform: Hills

Walong and similar soils

Extent: About 2 percent of the map unit

Slope: 9 to 18 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Unnamed soils and wet, flooded soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 15 percent (unnamed soils); 0 to 2 percent (wet, flooded soils)

Landform: Drainageways

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 3 percent

Landform: Hills

266—Tunis-Rock outcrop complex, 30 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)

Mean annual precipitation: 10 to 15 inches (254 to 381 millimeters)

Mean annual air temperature: 61 to 63 degrees F (16 to 17 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Tunis—50 percent

Rock outcrop—30 percent

Minor components—20 percent

Characteristics of Tunis and similar soils

Slope: 30 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gneiss

Typical vegetation: Annual grasses, forbs, shrubs, and scattered oaks and foothill pine

Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.9 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; sandy loam

Bw—3 to 16 inches; sandy loam

Cr—16 to 26 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 50 percent

Landform: Mountain slopes

Kind of rock: Granitoid rocks and gneiss

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Vista and similar soils

Extent: About 8 percent of the map unit

Slope: 45 to 55 percent

Landform: Mountain slopes

Walong and similar soils

Extent: About 7 percent of the map unit

Slope: 20 to 45 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 30 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

267—Cieneba-Vista-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: The western part of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills and mountains

Elevation: 1,000 to 3,500 feet (305 to 1,067 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 59 to 64 degrees F (15 to 18 degrees C)

Frost-free period: 210 to 270 days

Map unit composition

Cieneba—40 percent

Vista—25 percent

Rock outcrop—15 percent

Minor components—20 percent

Characteristics of Cieneba and similar soils

Slope: 30 to 60 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 15 percent by subangular stones and 25 to 45 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 6 inches; stony sandy loam

C—6 to 16 inches; stony sandy loam

Cr—16 to 26 inches; soft, weathered bedrock

Characteristics of Vista and similar soils

Slope: 30 to 60 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 25 to 55 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.7 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam
Bw—4 to 12 inches; sandy loam
C—12 to 27 inches; sandy loam
Cr—27 to 37 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent
Landform: Hillslopes and mountain slopes
Kind of rock: Granitoid
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Sesame and similar soils

Extent: About 6 percent of the map unit
Slope: 30 to 60 percent
Landform: Hillslopes and mountain slopes

Very shallow soils and similar soils

Extent: About 4 percent of the map unit
Slope: 40 to 100 percent
Landform: Hillslopes and mountain slopes

Arujo and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 60 percent
Landform: Hillslopes and mountain slopes

Hogeye and similar soils

Extent: About 3 percent of the map unit
Slope: 30 to 60 percent
Landform: Hillslopes and mountain slopes

Raggulch and similar soils

Extent: About 1 percent of the map unit
Slope: 15 to 30 percent
Landform: Ancient, dissected fan remnants

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent

Landform: Drainageways

Unnamed soils and wet, flooded soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 15 to 35 percent (unnamed soils); 0 to 2 percent (wet, flooded soils)

Landform: Drainageways

268—Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,500 to 5,495 feet (1,067 to 1,676 meters)

Mean annual precipitation: 10 to 16 inches (254 to 406 millimeters)

Mean annual air temperature: 55 to 61 degrees F (13 to 16 degrees C)

Frost-free period: 150 to 205 days

Map unit composition

Tunis—35 percent

Tollhouse—25 percent

Sorrell—20 percent

Minor components—20 percent

Characteristics of Tunis and similar soils

Slope and aspect: 30 to 75 percent, southeast to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from gneiss and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and scattered junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 3 inches; sandy loam

Bw—3 to 16 inches; sandy loam

Cr—16 to 26 inches; soft, weathered bedrock

Characteristics of Tollhouse and similar soils

Slope and aspect: 30 to 75 percent, southeast to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, shrubs, and live oak

Percentage of the surface covered by rock fragments: 5 to 10 percent by subangular stones; 1 to 5 percent by subangular cobbles; 30 to 50 percent by coarse, subangular gravel; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 13 inches; stony coarse sandy loam

Cr—13 to 23 inches; soft, weathered bedrock

Characteristics of Sorrell and similar soils

Slope and aspect: 30 to 60 percent, southeast to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, shrubs, live oak, and foothill pine

Percentage of the surface covered by rock fragments: 20 to 30 percent by coarse, subangular gravel; 3 to 10 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 10 to 20 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.1 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 11 inches; bouldery coarse sandy loam

Bt—11 to 36 inches; bouldery coarse sandy loam

Cr—36 to 46 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 6 percent of the map unit

Slope: 30 to 75 percent

Landform: Mountain slopes

Rankor and similar soils

Extent: About 5 percent of the map unit

Slope: 20 to 60 percent
Landform: Mountain slopes

Arujo and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 55 percent
Landform: Mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 65 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 5 to 35 percent
Landform: Flood plains

Springs

Extent: About 1 percent of the map unit
Slope: 15 to 35 percent
Landform: Drainageways

269—Tollhouse-Sorrell-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 3,995 to 5,800 feet (1,219 to 1,768 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 52 to 57 degrees F (11 to 14 degrees C)
Frost-free period: 130 to 180 days

Map unit composition

Tollhouse—45 percent
Sorrell—25 percent
Rock outcrop—15 percent
Minor components—15 percent

Characteristics of Tollhouse and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, Jeffrey pine, and foothill pine
Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; and 1 to 5 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; gravelly sandy loam
Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Sorrell and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, scrub oak, and pinyon pine
Percentage of the surface covered by rock fragments: 20 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 2 to 10 percent by subangular stones; and 10 to 20 percent by subangular boulders
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; bouldery loamy coarse sand
Bt—2 to 27 inches; bouldery coarse sandy loam
Cr—27 to 37 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent
Landform: Mountain slopes
Kind of rock: Granite
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Edmundston and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 35 percent

Landform: Mountain slopes

Martee and similar soils

Extent: About 4 percent of the map unit

Slope: 45 to 65 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 25 to 55 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Xerofluvents and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 10 percent

Landform: Drainageways, flood plains, and mountain valleys

270—Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains and hills

Elevation: 3,195 to 4,995 feet (975 to 1,524 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 160 to 220 days

Map unit composition

Locobill—35 percent

Backcanyon—30 percent

Sesame—15 percent

Minor components—20 percent

Characteristics of Locobill and similar soils

Slope: 20 to 60 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from metamorphic rocks

Typical vegetation: Annual and perennial grasses, shrubs, oaks, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.9 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; sandy loam

Bw—3 to 13 inches; sandy loam

Bt1—13 to 28 inches; gravelly sandy loam

Bt2—28 to 35 inches; gravelly sandy clay loam

Cr—35 to 45 inches; soft, weathered bedrock

Characteristics of Backcanyon and similar soils

Slope: 20 to 60 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from metasedimentary rocks

Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 2 percent by subangular stones, 0 to 3 percent by subangular cobbles, and 5 to 15 percent by coarse, subangular gravel

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 11 to 24 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; gravelly sandy loam

Bk—3 to 15 inches; gravelly fine sandy loam

Cr—15 to 23 inches; soft, weathered bedrock

R—23 to 33 inches; bedrock

Characteristics of Sesame and similar soils

Slope: 20 to 60 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A and Bt1—0 to 9 inches; sandy loam

Bt2 and Bt3—9 to 24 inches; sandy clay loam

BCt—24 to 33 inches; sandy loam

Cr—33 to 43 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 7 percent of the map unit

Slope: 20 to 75 percent

Landform: Hills and mountain slopes

Tunis, very steep, and similar soils

Extent: About 3 percent of the map unit

Slope: 45 to 75 percent

Landform: Hillslopes and mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 60 percent

Landform: Hillslopes and mountain slopes

Walong and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 60 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Springs

Extent: About 1 percent of the map unit

Slope: 15 to 35 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 10 percent

Landform: Drainageways

271—Walong-Tunis-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,000 to 4,500 feet (610 to 1,372 meters)

Mean annual precipitation: 10 to 16 inches (254 to 406 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 190 to 230 days

Map unit composition

Walong—35 percent

Tunis—30 percent

Rock outcrop—15 percent

Minor components—20 percent

Characteristics of Walong and similar soils

Slope and aspect: 30 to 50 percent, northeast to south aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and oaks

Percentage of the surface covered by rock fragments: 20 to 30 percent by coarse, subangular gravel; 0 to 2 percent by subangular cobbles; and 0 to 2 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; sandy loam

Bw—9 to 30 inches; sandy loam

Cr—30 to 40 inches; soft, weathered bedrock

Characteristics of Tunis and similar soils

Slope and aspect: 30 to 60 percent, south to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gneiss
Typical vegetation: Annual grasses, forbs, shrubs, oaks, foothill pine, and yucca
Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 18 inches; sandy loam
Cr—18 to 28 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent
Landform: Mountain slopes
Kind of rock: Granite
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Cieneba and similar soils

Extent: About 6 percent of the map unit
Slope: 40 to 80 percent
Landform: Mountain slopes

Feethill and similar soils

Extent: About 4 percent of the map unit
Slope: 15 to 50 percent
Landform: Mountain slopes

Sesame and similar soils

Extent: About 3 percent of the map unit
Slope: 20 to 50 percent
Landform: Mountain slopes

Sandy soils and similar soils

Extent: About 2 percent of the map unit
Slope: 20 to 60 percent
Landform: Mountain slopes

Vista and similar soils

Extent: About 2 percent of the map unit

Slope: 25 to 45 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 5 to 15 percent
Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 3 percent
Landform: Flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 2 to 30 percent
Landform: Drainageways and mountain valleys

272—Tollhouse-Edmundston-Sorrell association, 15 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 5,495 to 7,000 feet (1,676 to 2,134 meters)
Mean annual precipitation: 15 to 22 inches (381 to 559 millimeters)
Mean annual air temperature: 48 to 55 degrees F (9 to 13 degrees C)
Frost-free period: 90 to 170 days

Map unit composition

Tollhouse—35 percent
Edmundston—30 percent
Sorrell—20 percent
Minor components—15 percent

Characteristics of Tollhouse and similar soils

Slope and aspect: 20 to 50 percent, southeast to west aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Perennial and annual grasses, shrubs, oaks, Jeffrey pine, and foothill pine
Surface feature: A layer of undecomposed and partly decomposed pine needles and oak leaves as much as 1 inch thick
Percentage of the surface covered by rock fragments: 1 to 3 percent by subangular boulders, 0 to 5 percent by subangular cobbles, 0 to 4 percent by subangular stones, and 10 to 20 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 14 inches; gravelly coarse sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Edmundston and similar soils

Slope and aspect: 15 to 40 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, oaks, Jeffrey pine, and ponderosa pine

Surface feature: A layer of undecomposed and partly decomposed pine needles and oak leaves as much as 2 inches thick

Percentage of the surface covered by rock fragments: 5 to 15 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 5.1 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 25 inches; coarse sandy loam

Bw—25 to 57 inches; gravelly coarse sandy loam

Cr—57 to 67 inches; soft, weathered bedrock

Characteristics of Sorrell and similar soils

Slope and aspect: 30 to 50 percent, southeast to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, oaks, and Jeffrey pine

Surface feature: A layer of undecomposed and partly decomposed oak leaves as much as 1 inch thick

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel; 2 to 5 percent by subangular cobbles; 2 to 5 percent by subangular stones; and 2 to 5 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.4 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 10 inches; bouldery loamy coarse sand

Bt—10 to 39 inches; bouldery coarse sandy loam

Cr—39 to 49 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 30 to 75 percent

Landform: Mountain slopes

Crouch and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 50 percent

Landform: Mountain slopes

Martee, very steep, and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 70 percent

Landform: Mountain slopes

Rankor and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 35 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils and unnamed soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 1 to 9 percent (flooded soils); 15 to 35 percent (unnamed soils)

Landform: Flood plains and mountain valleys

274—Sesame-Tweedy-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,995 to 4,195 feet (914 to 1,280 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 160 to 220 days

Map unit composition

Sesame—40 percent

Tweedy—20 percent
Rock outcrop—15 percent
Minor components—25 percent

Characteristics of Sesame and similar soils

Slope and aspect: 30 to 60 percent, northeast to southwest aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual grasses, forbs, and oaks
Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.3 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 6e

Typical profile

A—0 to 9 inches; sandy loam
Bt—9 to 19 inches; sandy clay loam
BCt—19 to 24 inches; sandy loam
Cr—24 to 34 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 60 percent, southwest to northeast aspects
Landform: Mountain slopes
Parent material: Residuum weathered from mica schist and/or from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks
Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel; 0 to 2 percent by subangular cobbles; 0 to 2 percent by subangular stones; and 0 to 2 percent by subangular boulders
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.7 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 6e

Typical profile

A—0 to 7 inches; sandy loam
Bt—7 to 24 inches; sandy clay loam
Cr—24 to 34 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 70 percent

Landform: Mountain slopes

Kind of rock: Granite

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Strahle and similar soils

Extent: About 8 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Feethill and similar soils

Extent: About 5 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Tunis and similar soils

Extent: About 4 percent of the map unit

Slope: 30 to 75 percent

Landform: Upper mountain slopes

Arujo and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 30 percent

Landform: Lower mountain slopes

Locobill and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Rankor and similar soils

Extent: About 1 percent of the map unit

Slope: 25 to 65 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 20 percent

Landform: Drainageways and mountain valleys

275—Strahle-Sesame-Tweedy association, 30 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 160 to 210 days

Map unit composition

Strahle—50 percent

Sesame—15 percent

Tweedy—15 percent

Minor components—20 percent

Characteristics of Strahle and similar soils

Slope and aspect: 30 to 70 percent, northeast to southwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from rhyolite and/or from andesite

Typical vegetation: Annual grasses, forbs, shrubs, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature: 10 to 14 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; gravelly sandy loam

Bt—4 to 12 inches; gravelly sandy clay loam

Cr—12 to 14 inches; soft, weathered bedrock

R—14 to 24 inches; bedrock

Characteristics of Sesame and similar soils

Slope and aspect: 30 to 75 percent, northeast to southwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and oaks

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 9 inches; sandy loam
Bt—9 to 24 inches; sandy clay loam
Cr—24 to 34 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 75 percent, southwest to northeast aspects
Landform: Mountain slopes
Parent material: Residuum weathered from mica schist and/or from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and oaks
Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel and 0 to 2 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 4.1 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 3 inches; sandy loam
Bt—3 to 25 inches; sandy clay loam
Cr—25 to 35 inches; soft, weathered bedrock

Minor components

Backcanyon and similar soils

Extent: About 4 percent of the map unit
Slope: 30 to 75 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Arujo and similar soils

Extent: About 2 percent of the map unit
Slope: 15 to 60 percent
Landform: Lower mountain slopes

Feethill and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 60 percent

Landform: Mountain slopes

Tunis and similar soils

Extent: About 2 percent

Slope: 40 to 90 percent

Landform: Mountain slopes

Kelval, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys

Walong and similar soils

Extent: About 1 percent of the map unit

Slope: 30 to 75 percent

Landform: Mountain slopes

Springs

Extent: About 1 percent of the map unit

Slope: 15 to 35 percent

Landform: Drainageways

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 20 percent

Landform: Drainageways and mountain valleys

276—Tips-Hoffman-Cinco association, 30 to 60 percent slopes

Map unit setting

General location: The eastern part of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Tips—35 percent

Hoffman—30 percent

Cinco—15 percent

Minor components—20 percent

Characteristics of Tips and similar soils

Slope and aspect: 30 to 60 percent, northeast to east aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and shrubs

Percentage of the surface covered by rock fragments: 30 to 60 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; gravelly loamy coarse sand

BAt—4 to 7 inches; gravelly loamy coarse sand

Bt—7 to 11 inches; gravelly coarse sandy loam

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Hoffman and similar soils

Slope and aspect: 30 to 60 percent, west to northeast aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, and junipers

Percentage of the surface covered by rock fragments: 10 to 45 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; gravelly loamy coarse sand

Bt1—4 to 10 inches; gravelly loamy coarse sand

Bt2—10 to 39 inches; gravelly coarse sandy loam

Cr—39 to 49 inches; soft, weathered bedrock

Characteristics of Cinco and similar soils

Slope and aspect: 30 to 60 percent, southeast to south aspects

Landform: Mountain slopes

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 20 to 60 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; gravelly loamy coarse sand

C—9 to 60 inches; gravelly loamy coarse sand

Minor components

Cowspring and similar soils

Extent: About 4 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Inyo and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 15 percent

Landform: Fan piedmonts

Pilotwell and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 40 percent

Landform: Mountain slopes

Xyno and similar soils

Extent: About 3 percent of the map unit

Slope: 30 to 75 percent

Landform: Upper mountain slopes

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 25 to 75 percent

Landform: Mountain slopes

Calcareous soils and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils and unnamed soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 1 to 5 percent (flooded soils); 15 to 35 percent (unnamed soils)

Landform: Flood plains and mountain valleys

277—Feethill-Vista-Walong association, 15 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 1,495 to 4,500 feet (457 to 1,372 meters)

Mean annual precipitation: 10 to 16 inches (254 to 406 millimeters)

Mean annual air temperature: 57 to 64 degrees F (14 to 18 degrees C)

Frost-free period: 190 to 260 days

Map unit composition

Feethill—30 percent

Vista—25 percent

Walong—20 percent

Minor components—25 percent

Characteristics of Feethill and similar soils

Slope and aspect: 15 to 60 percent, southwest to northeast aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, buckeyes, and oaks

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.8 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Bt1—4 to 18 inches; sandy loam

Bt2—18 to 24 inches; sandy loam

BC—24 to 30 inches; sandy loam

Cr—30 to 40 inches; soft, weathered bedrock

Characteristics of Vista and similar soils

Slope and aspect: 15 to 60 percent, northeast to southwest aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 21 to 24 inches

Available water capacity to a depth of 60 inches: About 2.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Bw—4 to 21 inches; sandy loam

Cr—21 to 31 inches; soft, weathered bedrock

Characteristics of Walong and similar soils

Slope and aspect: 15 to 60 percent, southwest to northeast aspects

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and oaks

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 2 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 2.7 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 18 inches; sandy loam

Bw—18 to 28 inches; coarse sandy loam

Cr—28 to 38 inches; soft, weathered bedrock

Minor components

Arujo and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 15 to 70 percent

Landform: Hillslopes

Sesame and similar soils

Extent: About 4 percent of the map unit

Slope: 20 to 60 percent

Landform: Hillslopes

Tunis and similar soils

Extent: About 3 percent of the map unit

Slope: 25 to 75 percent

Landform: Hillslopes

Riverwash

Extent: About 2 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Pleito and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 60 percent

Landform: Fan remnants

Raggulch and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 60 percent

Landform: Ancient, dissected fan remnants

Tweedy and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 60 percent

Landform: Hillslopes

Flooded soils and similar soils and unnamed soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 2 percent (flooded soils); 15 to 35 percent (unnamed soils)

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways and flood plains

279—Strahle-Rock outcrop-Sesame association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,995 to 4,995 feet (914 to 1,524 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 58 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 200 to 250 days

Map unit composition

Strahle—50 percent

Rock outcrop—20 percent

Sesame—15 percent

Minor components—15 percent

Characteristics of Strahle and similar soils

Slope and aspect: 30 to 60 percent, southwest to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from andesite

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature: 10 to 18 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.9 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; gravelly sandy loam

Bt—6 to 16 inches; gravelly sandy clay loam

Cr—16 to 18 inches; soft, weathered bedrock

R—18 to 28 inches; bedrock

Characteristics of Rock outcrop

Slope: 25 to 65 percent

Landform: Mountain slopes

Kind of rock: Granitoid rocks and andesite

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Characteristics of Sesame and similar soils

Slope and aspect: 30 to 60 percent, southeast to southwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.7 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; sandy loam
Bt1—9 to 24 inches; sandy clay loam
Bt2—24 to 34 inches; sandy loam
Cr—34 to 44 inches; soft, weathered bedrock

Minor components

Strahle, cobbly surface, and similar soils

Extent: About 4 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Backcanyon and similar soils

Extent: About 2 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 2 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Tunis and similar soils

Extent: About 2 percent of the map unit
Slope: 40 to 70 percent
Landform: Mountain slopes

Tweedy and similar soils

Extent: About 2 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 5 to 20 percent
Landform: Drainageways

280—Tollhouse-Martee-Edmundston association, 30 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 4,500 to 6,000 feet (1,372 to 1,829 meters)

Mean annual precipitation: 14 to 20 inches (356 to 508 millimeters)

Mean annual air temperature: 52 to 54 degrees F (11 to 12 degrees C)

Frost-free period: 150 to 180 days

Map unit composition

Tollhouse—40 percent

Martee—20 percent

Edmundston—15 percent

Minor components—25 percent

Characteristics of Tollhouse and similar soils

Slope and aspect: 30 to 50 percent, south to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, Jeffrey pine, and foothill pine

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel; 0 to 2 percent by subangular cobbles; 0 to 1 percent by subangular stones; and 0 to 1 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; gravelly sandy loam

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Martee and similar soils

Slope and aspect: 30 to 50 percent, south to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, scrub oaks, pinyon pine, and foothill pine

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; 1 to 5 percent by subangular stones; and 20 to 35 percent by subangular boulders

Depth to a restrictive feature: 10 to 18 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 5 inches; very gravelly loamy coarse sand

A2—5 to 11 inches; very gravelly loamy coarse sand

Cr—11 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Characteristics of Edmundston and similar soils

Slope and aspect: 30 to 40 percent, west to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, pinyon pine, and Jeffrey pine

Percentage of the surface covered by rock fragments: 20 to 50 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 4.1 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; sandy loam

Bw—12 to 44 inches; gravelly coarse sandy loam

Cr—44 to 54 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 8 percent of the map unit

Slope: 15 to 90 percent

Landform: Mountain slopes

Tunis, very steep, and similar soils

Extent: About 7 percent of the map unit

Slope: 40 to 65 percent

Landform: Mountain slopes

Hungrygulch and similar soils

Extent: About 3 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Sorrell and similar soils

Extent: About 3 percent of the map unit

Slope: 25 to 55 percent

Landform: Mountain slopes

Xerofluvents, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 10 percent

Landform: Drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 15 to 35 percent

Landform: Drainageways

281—Havala-Walong-Kernfork association, 1 to 20 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,195 to 4,500 feet (975 to 1,372 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Havala—55 percent

Walong—15 percent

Kernfork—15 percent

Minor components—15 percent

Characteristics of Havala and similar soils

Slope and aspect: 2 to 15 percent, southeast to northwest aspects

Landform: Fan remnants, mountain valleys, and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.5 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-2

Typical profile

A—0 to 13 inches; gravelly sandy loam
Bt1—13 to 29 inches; gravelly sandy clay loam
Bt2—29 to 60 inches; gravelly sandy loam

Characteristics of Walong and similar soils

Slope and aspect: 15 to 20 percent, southeast to northwest aspects
Landform: Hills, hillslopes, and mountain valleys
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual grasses, forbs, and oaks
Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.8 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; gravelly sandy loam
Bw—14 to 29 inches; gravelly sandy loam
Cr—29 to 39 inches; soft, weathered bedrock

Characteristics of Kernfork and similar soils

Slope and aspect: 1 to 5 percent, southeast to northwest aspects
Landform: Flood plains and mountain valleys
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Annual grasses, forbs, shrubs, and sedges
Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.6 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: High
Current water table: Present

Natural drainage class: Somewhat poorly drained
Hydrologic soil group: D

Land capability classification
Irrigated and nonirrigated areas: 4w-2

Typical profile
Ap—0 to 10 inches; sandy loam
Cg1—10 to 26 inches; fine sandy loam
Cg2—26 to 60 inches; stratified loamy sand to silt loam

Minor components

Arujo and similar soils

Extent: About 6 percent of the map unit
Slope: 5 to 20 percent
Landform: Hillslopes and mountain valleys

Riverwash

Extent: About 3 percent of the map unit
Slope: 1 to 5 percent
Landform: Drainageways and mountain valleys

Xerofluents, flooded, and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways, flood plains, and mountain valleys

Aquolls, ponded, and similar soils

Extent: About 2 percent of the map unit
Slope: 0 to 1 percent
Landform: Closed depressions, lower flood plains, and mountain valleys

Rock outcrop

Extent: About 1 percent of the map unit
Slope: 9 to 20 percent
Landform: Hillslopes and mountain valleys

282—Tollhouse-Sesame-Friant association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 3,795 to 4,795 feet (1,158 to 1,463 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)
Frost-free period: 160 to 220 days

Map unit composition

Tollhouse—35 percent
Sesame—25 percent
Friant—20 percent
Minor components—20 percent

Characteristics of Tollhouse and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 10 inches; stony sandy loam

Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Sesame and similar soils

Slope and aspect: 30 to 60 percent, southeast to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and oaks

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 15 inches; sandy loam

Bt—15 to 26 inches; sandy clay loam

Cr—26 to 36 inches; soft, weathered bedrock

Characteristics of Friant and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from gneiss and/or from schist

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and junipers
Percentage of the surface covered by rock fragments: 10 to 30 percent by subangular stones, 10 to 25 percent by subangular cobbles, and 25 to 55 percent by coarse, subangular gravel
Depth to a restrictive feature (lithic bedrock): 6 to 20 inches
Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 5 inches; stony sandy loam
A2—5 to 15 inches; stony sandy loam
R—15 to 25 inches; bedrock

Minor components

Tunis and similar soils

Extent: About 8 percent of the map unit
Slope: 30 to 75 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 5 percent of the map unit
Slope: 35 to 75 percent
Landform: Mountain slopes

Tweedy and similar soils

Extent: About 5 percent of the map unit
Slope: 15 to 45 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Xerofluvents, wet, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

283—Tollhouse-Martee-Rock outcrop complex, 30 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 4,500 to 6,000 feet (1,372 to 1,829 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 50 to 54 degrees F (10 to 12 degrees C)

Frost-free period: 150 to 190 days

Map unit composition

Tollhouse—35 percent

Martee—30 percent

Rock outcrop—15 percent

Minor components—20 percent

Characteristics of Tollhouse and similar soils

Slope: 30 to 75 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, Jeffrey pine, and foothill pine

Percentage of the surface covered by rock fragments: 30 to 60 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; gravelly sandy loam

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Martee and similar soils

Slope: 30 to 75 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, pinyon pine, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 20 to 40 percent by subangular boulders, 5 to 25 percent by subangular cobbles, and 30 to 50 percent by coarse, subangular gravel

Depth to a restrictive feature: 10 to 18 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 7e

Typical profile
A1—0 to 5 inches; very gravelly loamy coarse sand
A2—5 to 11 inches; very gravelly loamy coarse sand
Cr—11 to 12 inches; soft, weathered bedrock
R—12 to 22 inches; bedrock

Characteristics of Rock outcrop

Slope: 30 to 80 percent
Landform: Mountain slopes
Kind of rock: Granite
Typical vegetation: Barren
Hydrologic properties
Surface runoff class: Very high
Hydrologic soil group: D
Land capability classification
Nonirrigated areas: 8

Minor components

Sorrell and similar soils

Extent: About 7 percent of the map unit
Slope: 15 to 60 percent
Landform: Mountain slopes

Edmundston and similar soils

Extent: About 5 percent of the map unit
Slope: 9 to 30 percent
Landform: Mountain slopes

Faycreek and similar soils

Extent: About 4 percent of the map unit
Slope: 15 to 75 percent
Landform: Mountain slopes

Tunis and similar soils

Extent: About 2 percent of the map unit
Slope: 40 to 80 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 15 percent
Landform: Drainageways

284—Tollhouse-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,795 to 6,000 feet (1,158 to 1,829 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 52 to 57 degrees F (11 to 14 degrees C)

Frost-free period: 140 to 180 days

Map unit composition

Tollhouse—70 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Tollhouse and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, and live oak

Percentage of the surface covered by rock fragments: 0 to 5 percent by subangular cobbles; 20 to 50 percent by coarse, subangular gravel; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 14 inches; bouldery sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 25 to 65 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Sorrell and similar soils

Extent: About 8 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Faycreek and similar soils

Extent: About 3 percent of the map unit

Slope: 40 to 75 percent

Landform: Mountain slopes

Martee and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 75 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

**285—Inyo-Kelval complex, 0 to 5 percent slopes,
occasionally flooded**

Map unit setting

General location: The eastern part of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 3,700 feet (792 to 1,128 meters)

Mean annual precipitation: 6 to 10 inches (152 to 254 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Inyo—50 percent

Kelval—40 percent

Minor components—10 percent

Characteristics of Inyo and similar soils

Slope: 0 to 5 percent

Landform: Alluvial fans, flood plains, and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Excessively drained
Hydrologic soil group: A

Land capability classification

Irrigated areas: 4w-2
Nonirrigated areas: 6w

Typical profile

A—0 to 12 inches; loamy coarse sand
C—12 to 60 inches; gravelly loamy coarse sand

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent
Landform: Flood plains and mountain valleys
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, and shrubs
Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 5.8 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4w-2
Nonirrigated areas: 6w

Typical profile

A—0 to 7 inches; gravelly loamy sand
C—7 to 60 inches; stratified gravelly sand to sandy loam

Minor components

Chollawell and similar soils

Extent: About 6 percent of the map unit
Slope: 1 to 7 percent
Landform: Mountain valleys and stream terraces

Kernfork and similar soils

Extent: About 2 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Alluvial fans and mountain valleys

286—Tollhouse-Tweedy-Locobill association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,995 to 5,400 feet (1,219 to 1,646 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 52 to 55 degrees F (11 to 13 degrees C)

Frost-free period: 140 to 190 days

Map unit composition

Tollhouse—40 percent

Tweedy—25 percent

Locobill—20 percent

Minor components—15 percent

Characteristics of Tollhouse and similar soils

Slope and aspect: 30 to 60 percent, northwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, and scattered foothill pine and live oak

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; gravelly sandy loam

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 60 percent, northwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and scattered oaks

Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; sandy loam

Bt—11 to 33 inches; sandy clay loam

Cr—33 to 43 inches; soft, weathered bedrock

Characteristics of Locobill and similar soils

Slope and aspect: 30 to 60 percent, northeast to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from metamorphic rocks

Typical vegetation: Annual and perennial grasses, shrubs, and scattered junipers, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 35 to 55 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; sandy loam

Bt1—3 to 28 inches; sandy loam

Bt2—28 to 35 inches; gravelly sandy clay loam

Cr—35 to 45 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 10 percent of the map unit

Slope: 25 to 65 percent

Landform: Mountain slopes

Sorrell and similar soils

Extent: About 4 percent of the map unit

Slope: 9 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 15 to 30 percent

Landform: Drainageways

287—Tweedy-Strahle association, 40 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 160 to 220 days

Map unit composition

Tweedy—40 percent

Strahle—40 percent

Minor components—20 percent

Characteristics of Tweedy and similar soils

Slope and aspect: 40 to 75 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; sandy loam

Bt—11 to 31 inches; sandy clay loam

BCt—31 to 38 inches; sandy loam

Cr—38 to 48 inches; soft, weathered bedrock

Characteristics of Strahle and similar soils

Slope and aspect: 40 to 75 percent, north to east aspects

Landform: Mountain slopes

Parent material: Residuum weathered from rhyolite and/or from andesite

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature: 10 to 12 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; gravelly sandy loam

Bt—5 to 10 inches; gravelly sandy clay loam

Cr—10 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Minor components

Sesame and similar soils

Extent: About 7 percent of the map unit

Slope: 25 to 60 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 40 to 80 percent

Landform: Mountain slopes

Arujo and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 45 percent

Landform: Lower mountain slopes

Tollhouse and similar soils

Extent: About 3 percent of the map unit

Slope: 50 to 80 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

288—Sorrell-Arujo-Rock outcrop association, 9 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,995 to 5,495 feet (1,219 to 1,676 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 160 to 220 days

Map unit composition

Sorrell—45 percent

Arujo—25 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Sorrell and similar soils

Slope and aspect: 30 to 50 percent, northeast to south aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, scrub oak, and pinyon pine

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel; 3 to 10 percent by subangular stones; 3 to 10 percent by subangular cobbles; and 3 to 10 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.7 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; bouldery loamy coarse sand

Bt—9 to 23 inches; bouldery coarse sandy loam

Cr—23 to 33 inches; soft, weathered bedrock

Characteristics of Arujo and similar soils

Slope and aspect: 9 to 50 percent, northwest to east aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 6.7 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 23 inches; sandy loam
Bt1—23 to 41 inches; sandy clay loam
Bt2—41 to 48 inches; sandy clay loam
Cr—48 to 58 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 9 to 50 percent
Landform: Mountain slopes
Kind of rock: Granitoid
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Tollhouse and similar soils

Extent: About 6 percent of the map unit
Slope: 40 to 60 percent
Landform: Mountain slopes

Feethill and similar soils

Extent: About 4 percent of the map unit
Slope: 20 to 40 percent
Landform: Mountain slopes

Tunis and similar soils

Extent: About 3 percent of the map unit
Slope: 40 to 70 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains and mountain valleys

289—Erskine-Hyte-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: The central and western parts of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,500 to 5,495 feet (1,067 to 1,676 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 52 to 60 degrees F (11 to 16 degrees C)

Frost-free period: 150 to 200 days

Map unit composition

Erskine—35 percent

Hyte—30 percent

Rock outcrop—20 percent

Minor components—15 percent

Characteristics of Erskine and similar soils

Slope and aspect: 30 to 60 percent, south to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from igneous rocks and/or from gabbro

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subrounded boulders; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.7 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 8 inches; gravelly loamy coarse sand

Bt—8 to 18 inches; gravelly sandy loam

Cr—18 to 28 inches; soft, weathered bedrock

Characteristics of Hyte and similar soils

Slope and aspect: 30 to 60 percent, south to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gabbro

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 50 to 70 percent by coarse, subangular gravel; 0 to 3 percent by subangular stones; and 0 to 3 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; gravelly sandy loam

Bt—5 to 14 inches; gravelly sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Walong and similar soils

Extent: About 7 percent of the map unit

Slope: 25 to 70 percent

Landform: Mountain slopes

Sorrell and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

294—Edmundston-Tweedy-Walong association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,400 to 5,425 feet (732 to 1,654 meters)

Mean annual precipitation: 10 to 20 inches (254 to 508 millimeters)

Mean annual air temperature: 54 to 63 degrees F (12 to 17 degrees C)

Frost-free period: 150 to 210 days

Map unit composition

Edmundston—45 percent

Tweedy—20 percent

Walong—20 percent

Minor components—15 percent

Characteristics of Edmundston and similar soils

Slope and aspect: 30 to 60 percent, southwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 35 to 55 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 4.8 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 26 inches; sandy loam

Bw—26 to 50 inches; gravelly coarse sandy loam

Cr—50 to 60 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 60 percent, southwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from mica schist and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.8 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 10 inches; sandy loam
Bt—10 to 32 inches; sandy clay loam
Cr—32 to 42 inches; soft, weathered bedrock

Characteristics of Walong and similar soils

Slope and aspect: 30 to 60 percent, southwest to northeast aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks
Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 13 inches; gravelly sandy loam
Bw—13 to 25 inches; gravelly sandy loam
Cr—25 to 35 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit
Slope: 35 to 65 percent
Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 5 percent of the map unit
Slope: 10 to 60 percent
Landform: Mountain slopes

Martee and similar soils

Extent: About 1 percent of the map unit
Slope: 30 to 65 percent
Landform: Mountain slopes

Rankor and similar soils

Extent: About 1 percent of the map unit

Slope: 9 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Drainageways

295—Tweedy-Tunis-Rankor association, 30 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,995 to 6,000 feet (914 to 1,829 meters)

Mean annual precipitation: 10 to 20 inches (254 to 508 millimeters)

Mean annual air temperature: 54 to 63 degrees F (12 to 17 degrees C)

Frost-free period: 130 to 210 days

Map unit composition

Tweedy—30 percent

Tunis—30 percent

Rankor—20 percent

Minor components—20 percent

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 75 percent, south to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from mica schist and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and oaks

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.8 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 10 inches; sandy loam

Bt—10 to 26 inches; sandy clay loam

Cr—26 to 36 inches; soft, weathered bedrock

Characteristics of Tunis and similar soils

Slope and aspect: 30 to 75 percent, south to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gneiss

Typical vegetation: Annual grasses, forbs, shrubs, oaks, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; sandy loam

Bw—5 to 14 inches; loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Rankor and similar soils

Slope and aspect: 30 to 75 percent, south to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from schist and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel and 10 to 20 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 8.0 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A—0 to 5 inches; sandy loam
- Bt—5 to 33 inches; sandy clay loam
- BCt—33 to 58 inches; sandy clay loam
- Cr—58 to 68 inches; soft, weathered bedrock

Minor components

Arujo and similar soils

Extent: About 6 percent of the map unit
Slope: 10 to 50 percent
Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 6 percent of the map unit
Slope: 50 to 80 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 25 to 80 percent
Landform: Mountain slopes

Friant and similar soils

Extent: About 2 percent of the map unit
Slope: 40 to 80 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

296—Arujo-Walong-Tunis association, 30 to 75 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 1,995 to 4,595 feet (609 to 1,402 meters)
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)
Frost-free period: 150 to 200 days

Map unit composition

Arujo—40 percent
Walong—30 percent
Tunis—15 percent
Minor components—15 percent

Characteristics of Arujo and similar soils

Slope and aspect: 30 to 65 percent, east to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 5 to 15 percent coarse by gravel, 0 to 5 percent by cobbles, 0 to 5 percent by stones, and 0 to 2 percent by boulders

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 7.6 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 21 inches; sandy loam

Bt—21 to 52 inches; sandy clay loam

Cr—52 to 62 inches; soft, weathered bedrock

Characteristics of Walong and similar soils

Slope and aspect: 30 to 75 percent, east to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse gravel, 0 to 5 percent by cobbles, 0 to 5 percent by stones, and 0 to 2 percent by boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 17 inches; gravelly sandy loam

Bw—17 to 39 inches; gravelly coarse sandy loam

Cr—39 to 49 inches; soft, weathered bedrock

Characteristics of Tunis and similar soils

Slope and aspect: 30 to 75 percent, east to north aspects

Landform: Summits of mountain slopes

Parent material: Residuum weathered from gneiss and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses and forbs

Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 7 inches; sandy loam

A2—7 to 14 inches; sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Minor components

Feethill and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 65 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 25 to 85 percent

Landform: Summits of mountain slopes

Pleito and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 45 percent

Landform: Fan remnants

Tweedy and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 75 percent

Landform: North-facing summits of mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Steuber and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Flood plains

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains in mountain valleys

297—Walong-Blasingame-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains and hills

Elevation: 1,800 to 3,995 feet (549 to 1,219 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 60 to 65 degrees F (16 to 18 degrees C)

Frost-free period: 180 to 240 days

Map unit composition

Walong—30 percent

Blasingame—25 percent

Rock outcrop—15 percent

Minor components—30 percent

Characteristics of Walong and similar soils

Slope and aspect: 30 to 60 percent, south to northwest aspects

Landform: Hills, hillslopes, and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and oaks

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; gravelly sandy loam

Bw1—11 to 27 inches; gravelly sandy loam

Bw2—27 to 32 inches; gravelly coarse sandy loam

Cr—32 to 42 inches; soft, weathered bedrock

Characteristics of Blasingame and similar soils

Slope and aspect: 30 to 60 percent, southeast to northwest aspects

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs with scattered oak trees

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.8 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; sandy loam
ABt—3 to 10 inches; sandy loam
Bt1—10 to 17 inches; sandy clay loam
Bt2—17 to 27 inches; sandy clay loam
Bt3—27 to 33 inches; sandy clay loam
Cr—33 to 43 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent
Landform: Hills and mountain slopes
Kind of rock: Granitoid
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Arujo and similar soils

Extent: About 9 percent of the map unit
Slope: 15 to 50 percent
Landform: Hillslopes and mountain slopes

Sorrell and similar soils

Extent: About 8 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Cieneba and similar soils

Extent: About 6 percent of the map unit
Slope: 30 to 60 percent
Landform: Hillslopes and mountain slopes

Tunis and similar soils

Extent: About 4 percent of the map unit
Slope: 30 to 75 percent
Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils and wet soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 2 to 5 percent (flooded soils); 0 to 2 percent (wet soils)

Landform: Flood plains

298—Arujo-Feethill-Sesame association, 15 to 45 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills and mountains

Elevation: 2,200 to 4,500 feet (671 to 1,372 meters)

Mean annual precipitation: 12 to 18 inches (305 to 457 millimeters)

Mean annual air temperature: 57 to 64 degrees F (14 to 18 degrees C)

Frost-free period: 180 to 220 days

Map unit composition

Arujo—35 percent

Feethill—25 percent

Sesame—20 percent

Minor components—20 percent

Characteristics of Arujo and similar soils

Slope and aspect: 15 to 35 percent, southwest to north aspects

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel and 0 to 2 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 8.8 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 12 inches; sandy loam

BAt—12 to 24 inches; sandy loam

Bt—24 to 56 inches; sandy clay loam

Cr—56 to 66 inches; soft, weathered bedrock

Characteristics of Feethill and similar soils

Slope and aspect: 15 to 45 percent, southwest to north aspects

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and buckeyes
Percentage of the surface covered by rock fragments: 0 to 25 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 6.2 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Bt1—4 to 14 inches; sandy clay loam

Bt2—14 to 38 inches; sandy clay loam

Cr—38 to 48 inches; soft, weathered bedrock

Characteristics of Sesame and similar soils

Slope and aspect: 15 to 45 percent, east to west aspects

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and oaks

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Bt—4 to 28 inches; sandy clay loam

Cr—28 to 38 inches; soft, weathered bedrock

Minor components

Cieneba and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes and mountain slopes

Walong and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 45 percent

Landform: Hillslopes and mountain slopes

Tunis and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 55 percent

Landform: Hillslopes and mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes and mountain slopes

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 15 to 50 percent

Landform: Hills and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

299—Arujo-Feethill-Sesame association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,200 to 4,500 feet (671 to 1,372 meters)

Mean annual precipitation: 12 to 18 inches (305 to 457 millimeters)

Mean annual air temperature: 57 to 64 degrees F (14 to 18 degrees C)

Frost-free period: 180 to 220 days

Map unit composition

Arujo—40 percent

Feethill—25 percent

Sesame—20 percent

Minor components—15 percent

Characteristics of Arujo and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 8.8 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; sandy loam
BA_t—12 to 24 inches; sandy loam
B_t—24 to 56 inches; sandy clay loam
Cr—56 to 66 inches; soft, weathered bedrock

Characteristics of Feethill and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, oaks, and buckeyes
Percentage of the surface covered by rock fragments: 40 to 55 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 6.2 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam
B_{t1}—4 to 14 inches; sandy clay loam
B_{t2}—14 to 38 inches; sandy clay loam
Cr—38 to 48 inches; soft, weathered bedrock

Characteristics of Sesame and similar soils

Slope and aspect: 30 to 60 percent, southeast to west aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual grasses, forbs, and scattered oaks
Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None

Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 4 inches; sandy loam
Bt—4 to 28 inches; sandy clay loam
Cr—28 to 38 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit
Slope: 20 to 70 percent
Landform: Mountain slopes

Havala and similar soils

Extent: About 3 percent of the map unit
Slope: 5 to 20 percent
Landform: Fan remnants and stream terraces

Walong and similar soils

Extent: About 3 percent of the map unit
Slope: 10 to 60 percent
Landform: Mountain slopes

Tunis and similar soils

Extent: About 2 percent of the map unit
Slope: 25 to 75 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

300—Stineway-Kiscove association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 2,595 to 4,995 feet (792 to 1,524 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 54 to 63 degrees F (12 to 17 degrees C)
Frost-free period: 150 to 200 days

Map unit composition

Stineway—50 percent
Kiscove—30 percent
Minor components—20 percent

Characteristics of Stineway and similar soils

Slope and aspect: 30 to 60 percent, south to north aspects
Landform: Mountain slopes
Parent material: Residuum weathered from metamorphic rocks and/or from schist
Typical vegetation: Annual grasses, forbs, shrubs, and few scattered junipers
Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; and 0 to 5 percent by subangular stones
Depth to a restrictive feature (lithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 4 inches; very gravelly sandy loam
Bt1—4 to 10 inches; very gravelly loam
Bt2—10 to 13 inches; very gravelly loam
R—13 to 23 inches; bedrock

Characteristics of Kiscove and similar soils

Slope and aspect: 30 to 60 percent, north to southeast aspects
Landform: Mountain slopes
Parent material: Residuum weathered from metamorphic rocks
Typical vegetation: Perennial grasses, forbs, shrubs, and scattered junipers
Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles
Depth to a restrictive feature: 5 to 19 inches to paralithic bedrock; 9 to 20 inches to lithic bedrock
Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; gravelly loam

Bt—3 to 9 inches; gravelly clay loam
Cr—9 to 12 inches; soft, weathered bedrock
R—12 to 22 inches; bedrock

Minor components

Backcanyon and similar soils

Extent: About 5 percent of the map unit
Slope: 25 to 55 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 30 to 70 percent
Landform: Mountain slopes

Sesame and similar soils

Extent: About 3 percent of the map unit
Slope: 20 to 60 percent
Landform: Mountain slopes

Southlake and similar soils

Extent: About 3 percent of the map unit
Slope: 5 to 15 percent
Landform: Fan piedmonts

Alberti and similar soils

Extent: About 2 percent of the map unit
Slope: 15 to 45 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 15 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains in mountain valleys

Urban land

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Mountain slopes

301—Feethill-Vista-Rock outcrop complex, 9 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Hills
Elevation: 1,495 to 2,995 feet (457 to 914 meters)
Mean annual precipitation: 10 to 13 inches (254 to 330 millimeters)
Mean annual air temperature: 59 to 64 degrees F (15 to 18 degrees C)
Frost-free period: 210 to 260 days

Map unit composition

Feethill—35 percent
Vista—25 percent
Rock outcrop—15 percent
Minor components—25 percent

Characteristics of Feethill and similar soils

Slope: 9 to 30 percent
Landform: Hillslopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and buckeyes
Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.2 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 8 inches; sandy loam
Bt1—8 to 14 inches; sandy clay loam
Bt2—14 to 22 inches; sandy clay loam
Cr—22 to 32 inches; soft, weathered bedrock

Characteristics of Vista and similar soils

Slope: 9 to 30 percent
Landform: Hillslopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.4 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; sandy loam
Bw—3 to 24 inches; sandy loam

Cr—24 to 34 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 9 to 30 percent

Landform: Hillslopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Arujo and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 30 percent

Landform: Hillslopes

Tunis and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 45 percent

Landform: Hillslopes

Walong and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 30 percent

Landform: Hillslopes

Sesame and similar soils

Extent: About 4 percent of the map unit

Slope: 9 to 30 percent

Landform: Hillslopes

Cibo and similar soils

Extent: About 2 percent of the map unit

Slope: 9 to 30 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Springs in drainageways

302—Feethill-Cibo-Cieneba complex, 15 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 1,495 to 2,995 feet (457 to 914 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 210 to 260 days

Map unit composition

Feethill—30 percent

Cibo—25 percent

Cieneba—20 percent

Minor components—25 percent

Characteristics of Feethill and similar soils

Slope: 15 to 30 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and buckeyes

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; loam

Bt1—3 to 19 inches; sandy clay loam

Bt2—19 to 26 inches; sandy clay loam

Cr—26 to 36 inches; soft, weathered bedrock

Characteristics of Cibo and similar soils

Slope: 15 to 30 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (lithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.7 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 5 inches; clay loam

Bw—5 to 9 inches; clay loam

Bss—9 to 23 inches; clay loam

R—23 to 33 inches; bedrock

Characteristics of Cieneba and similar soils

Slope: 15 to 30 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel and 5 to 15 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 15 inches; sandy loam

Cr—15 to 25 inches; soft, weathered bedrock

Minor components

Arujo and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 25 percent

Landform: Hillslopes

Vista and similar soils

Extent: About 6 percent of the map unit

Slope: 20 to 40 percent

Landform: Hillslopes

Blasingame and similar soils

Extent: About 4 percent of the map unit

Slope: 15 to 30 percent

Landform: Hillslopes

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 15 to 35 percent

Landform: Hillslopes

Tunis and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 40 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

303—Steuber sandy loam, 0 to 5 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 1,695 to 4,195 feet (518 to 1,280 meters)

Mean annual precipitation: 9 to 14 inches (229 to 356 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 180 to 225 days

Map unit composition

Steuber—80 percent

Minor components—20 percent

Characteristics of Steuber and similar soils

Slope: 0 to 5 percent

Landform: Alluvial fans, flood plains, and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and oaks

Percentage of the surface covered by rock fragments: 2 to 5 percent by subangular cobbles and 5 to 20 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.9 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3w-2

Nonirrigated areas: 4w-2

Typical profile

Ap—0 to 12 inches; gravelly sandy loam

C—12 to 60 inches; gravelly sandy loam

Minor components

Riverwash

Extent: About 6 percent of the map unit

Slope: 1 to 5 percent

Landform: Channels, drainageways, and mountain valleys

Steuber, stony, and similar soils

Extent: About 5 percent of the map unit

Slope: 3 to 7 percent

Landform: Alluvial fans, flood plains, and mountain valleys

Kernfork and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Typic Xeropsamments and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, bars and channels, flood plains, and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 3 percent

Landform: Flood plains and mountain valleys

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

304—Cibo clay, 30 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 485 to 2,795 feet (149 to 853 meters)

Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 160 to 280 days

Map unit composition

Cibo—80 percent

Minor components—20 percent

Characteristics of Cibo and similar soils

Slope: 30 to 50 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (lithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 4.7 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 19 inches; clay
Bss—19 to 35 inches; clay
R—35 to 45 inches; bedrock

Minor components

Arujo and similar soils

Extent: About 5 percent of the map unit
Slope: 5 to 45 percent
Landform: Hillslopes

Blasingame and similar soils

Extent: About 4 percent of the map unit
Slope: 30 to 50 percent
Landform: Hillslopes

Feethill and similar soils

Extent: About 4 percent of the map unit
Slope: 40 to 60 percent
Landform: Hillslopes

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 15 to 35 percent
Landform: Hillslopes

Loamy soils and similar soils

Extent: About 2 percent of the map unit
Slope: 15 to 50 percent
Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

305—Chanac-Pleito-Premier association, 20 to 60 percent slopes

Map unit setting

General location: The east side of the southern San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys (fig. 11)



Figure 11.—An area of Chanac-Pleito-Premier association, 20 to 60 percent slopes.

Elevation: 495 to 1,495 feet (152 to 457 meters)

Mean annual precipitation: 7 to 12 inches (178 to 305 millimeters)

Mean annual air temperature: 59 to 64 degrees F (15 to 18 degrees C)

Frost-free period: 240 to 300 days

Map unit composition

Chanac—45 percent

Pleito—20 percent

Premier—15 percent

Minor components—20 percent

Characteristics of Chanac and similar soils

Slope: 20 to 50 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, and a few shrubs

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.2 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

- A—0 to 2 inches; loam
- Bk1—2 to 47 inches; loam
- Bk2—47 to 60 inches; loam

Characteristics of Pleito and similar soils

Slope: 20 to 50 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

- Present annual flooding:* None
- Present annual ponding:* None
- Surface runoff class:* High
- Current water table:* None noted
- Natural drainage class:* Well drained
- Hydrologic soil group:* C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

- A—0 to 24 inches; gravelly sandy clay loam
- Bk—24 to 60 inches; gravelly clay loam

Characteristics of Premier and similar soils

Slope: 20 to 45 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks and/or from sedimentary rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

- Present annual flooding:* None
- Present annual ponding:* None
- Surface runoff class:* Medium
- Current water table:* None noted
- Natural drainage class:* Well drained
- Hydrologic soil group:* B

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A1—0 to 7 inches; sandy loam
- C1—7 to 16 inches; coarse sandy loam
- C2—16 to 51 inches; coarse sandy loam
- C3—51 to 60 inches; coarse sandy loam

Minor components

Arents, loamy, and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Delvar and similar soils

Extent: About 4 percent of the map unit

Slope: 20 to 30 percent

Landform: Fan remnants

Delano and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 15 to 30 percent

Landform: Hillslopes

Oil waste land

Extent: About 2 percent of the map unit

Slope: 0 to 5 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Erosion remnants

306—Xerofluvents, occasionally flooded-Riverwash complex, 0 to 5 percent slopes

Map unit setting

General location: The east side of the southern San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Hills and valleys

Elevation: 550 to 800 feet (168 to 244 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 240 to 300 days

Map unit composition

Xerofluvents, occasionally flooded—60 percent

Riverwash—25 percent

Minor components—15 percent

Characteristics of Xerofluvents, occasionally flooded, and similar soils

Slope: 0 to 5 percent

Landform: Flood plains

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual and perennial grasses, shrubs, cottonwoods, and willows

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.7 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: Present

Natural drainage class: Somewhat poorly drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2w-2

Nonirrigated areas: 4w-2

Typical profile

A—0 to 6 inches; loam

C1—6 to 12 inches; loam

C2—12 to 19 inches; clay loam

C3—19 to 25 inches; loamy sand

C4—25 to 28 inches; sandy clay loam

C5—28 to 50 inches; sand

C6—50 to 60 inches; coarse sand

Characteristics of Riverwash

Slope: 0 to 5 percent

Landform: Channels and drainageways

Kind of material: Alluvium derived from granitoid rocks

Typical vegetation: Barren

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: Very high

Current water table: Present

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chanac and similar soils

Extent: About 6 percent of the map unit

Slope: 0 to 15 percent

Landform: Fan remnants

Pleito and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 15 percent

Landform: Fan remnants

Flooded soils and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

307—Typic Xeropsamments, 0 to 2 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,795 to 3,795 feet (853 to 1,158 meters)

Mean annual precipitation: 12 to 18 inches (305 to 457 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 210 to 250 days

Map unit composition

Typic Xeropsamments—80 percent

Minor components—20 percent

Characteristics of Typic Xeropsamments and similar soils

Slope: 0 to 2 percent

Landform: Alluvial fans, flood plains, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 0 to 10 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.2 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated and nonirrigated areas: 4w-2

Typical profile

A—0 to 6 inches; loamy sand

C1—6 to 20 inches; loamy sand

C2—20 to 60 inches; sand

Minor components

Arujo and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 15 percent

Landform: Hillslopes and mountain slopes

Steuber and similar soils

Extent: About 6 percent of the map unit

Slope: 2 to 5 percent

Landform: Flood plains and mountain valleys

Kernfork and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions, flood plains, and mountain valleys

Riverwash

Extent: About 2 percent of the map unit

Slope: 0 to 5 percent

Landform: Channels, drainageways, and mountain valleys

Typic Xerosamments, overwashed, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels, flood plains, and mountain valleys

Flooded soils and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

308—Rankor-Edmundston-Tweedy complex, 5 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,995 to 4,995 feet (1,219 to 1,524 meters)

Mean annual precipitation: 15 to 20 inches (381 to 508 millimeters)

Mean annual air temperature: 50 to 56 degrees F (10 to 14 degrees C)

Frost-free period: 140 to 180 days

Map unit composition

Rankor—35 percent

Edmundston—25 percent

Tweedy—20 percent

Minor components—20 percent

Characteristics of Rankor and similar soils

Slope: 5 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from schist

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and buckeyes

Percentage of the surface covered by rock fragments: 10 to 20 percent by subangular cobbles and 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 4e-1

Typical profile
A—0 to 4 inches; sandy loam
Bt1—4 to 23 inches; sandy clay loam
Bt2—23 to 31 inches; sandy clay loam
Bt3—31 to 46 inches; sandy clay loam
Cr—46 to 56 inches; soft, weathered bedrock

Characteristics of Edmundston and similar soils

Slope: 15 to 25 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, Jeffrey pine, foothill pine, and oaks
Percentage of the surface covered by rock fragments: 20 to 50 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches
Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 6e-2

Typical profile
A—0 to 23 inches; sandy loam
Bw—23 to 48 inches; gravelly coarse sandy loam
Cr—48 to 58 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope: 9 to 30 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks and/or from mica schist
Typical vegetation: Annual and perennial grasses, shrubs, and oaks
Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 4 inches; sandy loam

Bt—4 to 39 inches; sandy clay loam

Cr—39 to 49 inches; soft, weathered bedrock

Minor components

Tollhouse and similar soils

Extent: About 6 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 9 to 30 percent

Landform: Mountain slopes

Steuber and similar soils

Extent: About 4 percent of the map unit

Slope: 1 to 6 percent

Landform: Flood plains

Tunis and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 30 percent

Landform: Mountain slopes

Arujo and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 30 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

309—Rankor-Edmundston-Tweedy complex, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,395 to 5,495 feet (1,036 to 1,676 meters)

Mean annual precipitation: 15 to 20 inches (381 to 508 millimeters)

Mean annual air temperature: 50 to 56 degrees F (10 to 14 degrees C)

Frost-free period: 140 to 180 days

Map unit composition

Rankor—35 percent
Edmundston—25 percent
Tweedy—20 percent
Minor components—20 percent

Characteristics of Rankor and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from schist and/or from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, oaks, and buckeyes
Percentage of the surface covered by rock fragments: 10 to 20 percent by subangular cobbles and 10 to 20 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches
Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam
Bt1—4 to 23 inches; sandy clay loam
Bt2—23 to 31 inches; sandy clay loam
Bt3—31 to 46 inches; sandy clay loam
Cr—46 to 56 inches; soft, weathered bedrock

Characteristics of Edmundston and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, Jeffrey pine, and oaks
Percentage of the surface covered by rock fragments: 20 to 50 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches
Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 23 inches; sandy loam

Bw—23 to 48 inches; gravelly coarse sandy loam
Cr—48 to 58 inches; soft, weathered bedrock

Characteristics of Tweedy and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from mica schist and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, and oaks

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; sandy loam

Bt—4 to 39 inches; sandy clay loam

Cr—39 to 49 inches; soft, weathered bedrock

Minor components

Sorrell and similar soils

Extent: About 6 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Locobill and similar soils

Extent: About 4 percent of the map unit

Slope: 20 to 50 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 3 percent of the map unit

Slope: 40 to 75 percent

Landform: Mountain slopes

Tunis and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

310—Stineway-Kiscove association, 5 to 30 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains and hills

Elevation: 2,595 to 3,195 feet (792 to 975 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 52 to 62 degrees F (11 to 16 degrees C)

Frost-free period: 170 to 200 days

Map unit composition

Stineway—50 percent

Kiscove—30 percent

Minor components—20 percent

Characteristics of Stineway and similar soils

Slope and aspect: 5 to 30 percent, northwest to northeast aspects

Landform: Hills, hillslopes, and mountain slopes

Parent material: Residuum weathered from metamorphic rocks and/or from schist

Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; very gravelly sandy loam

Bt—4 to 14 inches; very gravelly loam

R—14 to 24 inches; bedrock

Characteristics of Kiscove and similar soils

Slope and aspect: 15 to 30 percent, northeast to southeast aspects

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from metamorphic rocks

Typical vegetation: Perennial grasses, forbs, and junipers

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature: 5 to 19 inches to paralithic bedrock; 9 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; gravelly sandy loam

Bt—2 to 9 inches; gravelly clay loam

Cr—9 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 9 to 40 percent

Landform: Hillslopes and mountain slopes

Southlake and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 20 percent

Landform: Fan piedmonts and mountain valleys

Backcanyon and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 35 percent

Landform: Hillslopes and mountain slopes

Sesame and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Goodale and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 9 percent

Landform: Channels and drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Hillslopes and mountain slopes

311—Xerorthents-Rock outcrop complex, 30 to 75 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains and hills

Elevation: 1,495 to 4,995 feet (457 to 1,524 meters)

Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)

Mean annual air temperature: 61 to 65 degrees F (16 to 18 degrees C)

Frost-free period: 150 to 250 days

Map unit composition

Xerorthents—50 percent

Rock outcrop—30 percent

Minor components—20 percent

Characteristics of Xerorthents and similar soils

Slope: 30 to 75 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Sparse annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 2 to 10 percent by subangular stones; 15 to 25 percent by coarse, subangular gravel; and 3 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 5 to 20 inches

Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 5 inches; gravelly sandy clay loam

Cr—5 to 15 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 75 percent

Landform: Hills and mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Xerorthents, deep, and similar soils

Extent: About 10 percent of the map unit

Slope: 15 to 60 percent

Landform: Hillslopes and mountain slopes

Moist soils and similar soils

Extent: About 8 percent of the map unit

Slope: 30 to 75 percent

Landform: Hillslopes and mountain slopes

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 60 percent

Landform: Drainageways

Wet soils and similar soils

Extent: About 1 percent of the map unit

Slope: 15 to 60 percent

Landform: Drainageways

312—Havala sandy loam, 2 to 5 percent slopes

Map unit setting

General location: Caliente Creek area

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 1,495 to 4,300 feet (457 to 1,311 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 175 to 225 days

Map unit composition

Havala—85 percent

Minor components—15 percent

Characteristics of Havala and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants and stream terraces

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and scattered oaks

Percentage of the surface covered by rock fragments: 0 to 5 percent by subangular cobbles, 0 to 5 percent by subangular stones, and 20 to 50 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 7.2 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 2e-1
Nonirrigated areas: 4e-1

Typical profile

A—0 to 24 inches; gravelly sandy loam
Bt1—24 to 48 inches; gravelly sandy loam
Bt2—48 to 65 inches; gravelly sandy loam

Minor components

Steuber and similar soils

Extent: About 7 percent of the map unit
Slope: 2 to 5 percent
Landform: Alluvial fans and flood plains

Tujunga and similar soils

Extent: About 6 percent of the map unit
Slope: 2 to 5 percent
Landform: Alluvial fans and flood plains

Tehachapi and similar soils

Extent: About 2 percent of the map unit
Slope: 2 to 5 percent
Landform: Fan remnants and stream terraces

313—Dumps

Map unit setting

General location: Throughout the survey area
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Mountains and hills
Elevation: 600 to 2,995 feet (183 to 914 meters)
Mean annual precipitation: 3 to 10 inches (76 to 254 millimeters)
Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)
Frost-free period: 200 to 270 days

Map unit composition

Dumps—80 percent
Minor components—20 percent

Characteristics of Dumps

Slope: 15 to 75 percent
Landform: Dumps and sanitary landfills
Kind of material: Alluvium derived from igneous, metamorphic and sedimentary rocks
and/or residuum weathered from igneous, metamorphic, and sedimentary rocks
Typical vegetation: None assigned
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: Very low

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Minor components

Chanac and similar soils

Extent: About 5 percent of the map unit
Slope: 15 to 45 percent
Landform: Fan remnants

Chollawell and similar soils

Extent: About 4 percent of the map unit
Slope: 5 to 15 percent
Landform: Fan remnants and mountain valleys

Pleito and similar soils

Extent: About 3 percent of the map unit
Slope: 20 to 40 percent
Landform: Fan remnants

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 5 to 20 percent
Landform: Hillslopes and mountain slopes

Xeric Torriorthents and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 55 percent
Landform: Fan remnants

Inyo and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Alluvial fans and mountain valleys

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

314—Premier-Haplodurids complex, 9 to 30 percent slopes

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 750 to 950 feet (229 to 290 meters)
Mean annual precipitation: 7 to 9 inches (178 to 228 millimeters)
Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Premier—45 percent

Haplodurids—35 percent

Minor components—20 percent

Characteristics of Premier and similar soils

Slope: 9 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks and/or from sedimentary rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; sandy loam

C1—14 to 30 inches; sandy loam

C2—30 to 47 inches; sandy loam

C3—47 to 60 inches; sandy loam

Characteristics of Haplodurids and similar soils

Slope: 9 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 0 percent

Depth to a restrictive feature (duripan): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Irrigated areas: 4e-8

Nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; fine sandy loam

Bk—14 to 25 inches; fine sandy loam
Bkqm—25 to 38 inches; cemented material
Bkq1—38 to 50 inches; sandy loam
Bkq2—50 to 60 inches; sandy loam

Minor components

Chanac and similar soils

Extent: About 6 percent of the map unit
Slope: 9 to 40 percent
Landform: Fan remnants

Delano and similar soils

Extent: About 5 percent of the map unit
Slope: 5 to 9 percent
Landform: Fan remnants

Arents, loamy, and similar soils

Extent: About 4 percent of the map unit
Slope: 1 to 9 percent
Landform: Fan remnants and flood plains

Oil waste land

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit
Slope: 9 to 30 percent
Landform: Hillslopes

Urban land

Extent: About 1 percent of the map unit
Slope: 0 to 1 percent
Landform: Fan remnants

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways and flood plains

315—Premier-Haplodurids complex, 2 to 9 percent slopes

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 750 to 950 feet (229 to 290 meters)
Mean annual precipitation: 7 to 9 inches (178 to 228 millimeters)
Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)
Frost-free period: 250 to 300 days

Map unit composition

Premier—45 percent
Haplodurids—40 percent
Minor components—15 percent

Characteristics of Premier and similar soils

Slope: 2 to 9 percent
Landform: Fan remnants
Parent material: Alluvium derived from granitoid rocks and/or from sedimentary rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; sandy loam
C1—14 to 30 inches; sandy loam
C2—30 to 47 inches; sandy loam
C3—47 to 60 inches; sandy loam

Characteristics of Haplodurids and similar soils

Slope: 2 to 9 percent
Landform: Fan remnants
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual grasses and forbs
Percentage of the surface covered by rock fragments: 0 percent
Depth to a restrictive feature (duripan): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Irrigated areas: 4e-8
Nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; fine sandy loam
Bk—14 to 25 inches; fine sandy loam

Bkqm—25 to 38 inches; cemented material

Bkq1—38 to 50 inches; sandy loam

Bkq2—50 to 60 inches; sandy loam

Minor components

Chanac and similar soils

Extent: About 6 percent of the map unit

Slope: 2 to 15 percent

Landform: Fan remnants

Delano and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 9 percent

Landform: Fan remnants and stream terraces

Cuyama and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 3 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

316—Premier coarse sandy loam, 5 to 9 percent slopes

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 1,000 feet (152 to 305 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Premier—85 percent

Minor components—15 percent

Characteristics of Premier and similar soils

Slope: 5 to 9 percent

Landform: Alluvial fans

Parent material: Alluvium derived from granitoid rocks and/or from sedimentary rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 12 inches; coarse sandy loam
C—12 to 60 inches; sandy loam

Minor components

Chanac and similar soils

Extent: About 6 percent of the map unit
Slope: 5 to 15 percent
Landform: Fan remnants

Delano and similar soils

Extent: About 4 percent of the map unit
Slope: 5 to 9 percent
Landform: Fan remnants

Cuyama and similar soils

Extent: About 2 percent of the map unit
Slope: 2 to 8 percent
Landform: Stream terraces

Exeter and similar soils

Extent: About 1 percent of the map unit
Slope: 2 to 5 percent
Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Depressions and flood plains

317—Premier coarse sandy loam, 2 to 5 percent slopes

Map unit setting

General location: The east edge of the southern part of the San Joaquin Valley
MLRA: 17—Sacramento and San Joaquin Valleys
Landscape: Valleys
Elevation: 495 to 1,000 feet (152 to 305 meters)
Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)
Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)
Frost-free period: 250 to 300 days

Map unit composition

Premier—85 percent
Minor components—15 percent

Characteristics of Premier and similar soils

Slope: 2 to 5 percent
Landform: Alluvial fans and stream terraces
Parent material: Alluvium derived from sedimentary rocks and/or from granitoid rocks
Typical vegetation: Annual grasses, forbs, and shrubs
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 12 inches; coarse sandy loam
C—12 to 60 inches; sandy loam

Minor components

Delano and similar soils

Extent: About 6 percent of the map unit
Slope: 2 to 5 percent
Landform: Fan remnants

Chanac and similar soils

Extent: About 4 percent of the map unit
Slope: 2 to 9 percent
Landform: Erosion remnants

Calicreek and similar soils

Extent: About 2 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Cuyama and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Stream terraces

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 3 percent
Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent

Landform: Flood plains

320—Southlake gravelly sandy loam, 2 to 15 percent slopes

Map unit setting

General location: Isabella Lake area

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,700 to 3,500 feet (823 to 1,067 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Southlake—80 percent

Minor components—20 percent

Characteristics of Southlake and similar soils

Slope: 2 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs, scattered shrubs, a few junipers, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.1 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 3e-7

Nonirrigated areas: 4e-7

Typical profile

A—0 to 4 inches; gravelly sandy loam

Bt1—4 to 19 inches; very gravelly sandy loam

Bt2—19 to 42 inches; very gravelly sandy clay loam

Bt3—42 to 60 inches; very gravelly sandy loam

Minor components

Chollawell and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 20 percent

Landform: Fan piedmonts and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Inyo and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 5 percent

Landform: Inset fans and mountain valleys

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 5 to 15 percent

Landform: Mountain valleys and rock pediments

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels and mountain valleys

Kelval and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Channels, drainageways, and mountain valleys

Unnamed soils

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Channels, drainageways, and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan piedmonts and mountain valleys

325—Walong sandy loam, 15 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 1,000 to 2,590 feet (305 to 790 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 200 to 250 days

Map unit composition

Walong—75 percent

Minor components—25 percent

Characteristics of Walong and similar soils

Slope: 15 to 30 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oaks

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.8 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 14 inches; gravelly sandy loam

Bw—14 to 27 inches; gravelly sandy loam

Cr—27 to 37 inches; soft, weathered bedrock

Minor components

Edmundston, deep, and similar soils

Extent: About 7 percent of the map unit

Slope: 15 to 30 percent

Landform: Hillslopes

Arujo and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 30 percent

Landform: Hillslopes

Feethill and similar soils

Extent: About 3 percent of the map unit

Slope: 9 to 40 percent

Landform: Hillslopes

Tunis and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 40 percent

Landform: Hillslopes

Rankor and similar soils

Extent: About 2 percent of the map unit

Slope: 9 to 15 percent

Landform: Hillslopes

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 20 to 40 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

326—Walong sandy loam, 30 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills

Elevation: 1,345 to 2,985 feet (410 to 910 meters)

Mean annual precipitation: 9 to 13 inches (228 to 330 millimeters)

Mean annual air temperature: 58 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 200 to 250 days

Map unit composition

Walong—80 percent

Minor components—20 percent

Characteristics of Walong and similar soils

Slope: 30 to 50 percent

Landform: Hillslopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered oak trees

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.8 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 14 inches; gravelly sandy loam

Bw—14 to 27 inches; gravelly sandy loam

Cr—27 to 37 inches; soft, weathered bedrock

Minor components

Arujo and similar soils

Extent: About 9 percent of the map unit

Slope: 15 to 50 percent

Landform: Hillslopes

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 25 to 55 percent

Landform: Hillslopes

Edmundston and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 50 percent

Landform: Hillslopes

Tunis and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 75 percent

Landform: Hillslopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Steuber, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 6 percent

Landform: Drainageways and flood plains

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

330—Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes

Map unit setting

General location: Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,595 to 4,995 feet (792 to 1,524 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 52 to 61 degrees F (11 to 16 degrees C)

Frost-free period: 130 to 210 days

Map unit composition

Kernville—35 percent

Faycreek—25 percent

Rock outcrop—20 percent

Minor components—20 percent

Characteristics of Kernville and similar soils

Slope: 30 to 75 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Percentage of the surface covered by rock fragments: 0 to 15 percent by subrounded cobbles, 0 to 15 percent by subrounded stones, and 0 to 10 percent by coarse, subrounded gravel

Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 5 inches; gravelly loamy coarse sand

A2—5 to 16 inches; gravelly loamy coarse sand

Cr—16 to 19 inches; soft, weathered bedrock

R—19 to 29 inches; bedrock

Characteristics of Faycreek and similar soils

Slope: 30 to 75 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 5 inches; gravelly loamy coarse sand

A2—5 to 12 inches; gravelly loamy coarse sand

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 25 to 75 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Hungrygulch and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 55 percent

Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 4 percent of the map unit

Slope: 30 to 80 percent

Landform: Mountain slopes

Hogeye and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 60 percent

Landform: Mountain slopes

Xyno and similar soils

Extent: About 3 percent of the map unit

Slope: 30 to 80 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 2 percent of the map unit

Slope: 10 to 55 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

350—Southlake-Goodale complex, 5 to 15 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 2,995 feet (792 to 914 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Southlake, stony—55 percent

Goodale—20 percent

Minor components—25 percent

Characteristics of Southlake, stony, and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts, fan remnants, and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, and foothill pine

Percentage of the surface covered by rock fragments: 15 to 30 percent by coarse, subangular gravel; 3 to 7 percent by subangular cobbles; and 4 to 8 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-7

Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam

Bt—6 to 60 inches; stony sandy clay loam

Characteristics of Goodale and similar soils

Slope: 5 to 15 percent

Landform: Channels, inset fans, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 30 to 40 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; and 20 to 30 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7s

Typical profile

- A—0 to 3 inches; very cobbly loamy coarse sand
- C—3 to 60 inches; very cobbly loamy coarse sand

Minor components

Chollawell and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 9 percent

Landform: Fan piedmonts, fan remnants, and mountain valleys

Southlake and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan piedmonts, fan remnants, and mountain valleys

Kernville and similar soils

Extent: About 4 percent of the map unit

Slope: 10 to 20 percent

Landform: Hillslopes and mountain valleys

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 9 to 20 percent

Landform: Hillslopes, mountain valleys, and rock pediments

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan piedmonts and mountain valleys

Xerofluvents, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

352—Goodale-Riverwash complex, 0 to 5 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Goodale—65 percent

Riverwash—20 percent

Minor components—15 percent

Characteristics of Goodale and similar soils

Slope: 1 to 5 percent

Landform: Channels, inset fans, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel; 5 to 25 percent by subangular cobbles; and 20 to 40 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7s

Typical profile

A—0 to 3 inches; very cobbly loamy coarse sand

C—3 to 60 inches; extremely cobbly loamy coarse sand

Characteristics of Riverwash

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Kind of material: Alluvium derived from granitoid rocks

Typical vegetation: Barren

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: High

Current water table: Present

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7w

Minor components

Inyo and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 5 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Chollawell and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 5 percent

Landform: Fan piedmonts and mountain valleys

Southlake, gravelly, and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 5 percent

Landform: Fan piedmonts and mountain valleys

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

360—Kernville-Hogeye-Southlake complex, 5 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills and mountains

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 210 days

Map unit composition

Kernville, bouldery—40 percent

Hogeye—30 percent

Southlake—15 percent

Minor components—15 percent

Characteristics of Kernville, bouldery, and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 2 to 5 percent by subrounded boulders; 0 to 10 percent by coarse, subrounded gravel; 0 to 15 percent by subrounded stones; and 0 to 15 percent by subrounded cobbles

Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 16 inches; gravelly loamy coarse sand

Cr—16 to 20 inches; soft, weathered bedrock

R—20 to 30 inches; bedrock

Characteristics of Hogeye and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature: 20 to 40 inches to paralithic bedrock; 40 to 60 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A1—0 to 2 inches; gravelly coarse sandy loam

A2—2 to 29 inches; gravelly coarse sandy loam

Cr—29 to 40 inches; soft, weathered bedrock

R—40 to 50 inches; bedrock

Characteristics of Southlake and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, foothill pine, and junipers

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam

Bt—6 to 60 inches; stony sandy clay loam

Minor components

Hyte and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 40 percent

Landform: Hillslopes and mountain slopes

Chollawell and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan piedmonts and mountain valleys

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 9 to 30 percent

Landform: Hillslopes and mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Channels and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Fan piedmonts, hills, and mountain valleys

380—Delvar-Pleito complex, 9 to 30 percent slopes

Map unit setting

General location: The east edge of the south San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 495 to 800 feet (152 to 244 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 61 to 64 degrees F (16 to 18 degrees C)

Frost-free period: 250 to 280 days

Map unit composition

Delvar—40 percent

Pleito—40 percent

Minor components—20 percent

Characteristics of Delvar and similar soils

Slope: 9 to 30 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses and forbs

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.4 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Moderately well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-3

Typical profile

A—0 to 20 inches; clay loam
Btk1—20 to 51 inches; clay
Btk2—51 to 60 inches; sandy clay loam

Characteristics of Pleito and similar soils

Slope: 9 to 30 percent
Landform: Fan remnants
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual and perennial grasses and forbs
Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 9.4 inches (high)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 30 inches; gravelly clay loam
C—30 to 60 inches; gravelly clay loam

Minor components

Chanac and similar soils

Extent: About 8 percent of the map unit
Slope: 9 to 30 percent
Landform: Fan remnants

Centerville and similar soils

Extent: About 5 percent of the map unit
Slope: 2 to 15 percent
Landform: Fan remnants

Premier and similar soils

Extent: About 2 percent of the map unit
Slope: 1 to 9 percent
Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 5 to 20 percent

Landform: Hillslopes

Trigo and similar soils

Extent: About 1 percent of the map unit

Slope: 10 to 40 percent

Landform: Hillslopes

Flooded soils and similar soils

Extent: About 1 percent

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

407—Centerville clay, 2 to 5 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 295 to 600 feet (91 to 183 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 59 to 64 degrees F (15 to 18 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Centerville—90 percent

Minor components—10 percent

Characteristics of Centerville and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 5 to 25 percent by fine, subangular gravel

Depth to a restrictive feature (dense material): 48 to 60 inches

Available water capacity to a depth of 60 inches: About 6.7 inches (moderate)

Hydrologic properties

Present annual flooding: Very rare

Present annual ponding: None

Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-3
Nonirrigated areas: 4e-3

Typical profile

A—0 to 7 inches; clay
Bss—7 to 48 inches; sandy clay
Btdkss—48 to 60 inches; gravelly sandy clay loam

Minor components

Exeter and similar soils

Extent: About 7 percent of the map unit
Slope: 2 to 5 percent
Landform: Fan remnants

San Joaquin and similar soils

Extent: About 2 percent of the map unit
Slope: 2 to 5 percent
Landform: Fan remnants

Ponded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 2 to 5 percent
Landform: Depressions

410—Stineway-Kiscove-Urban land complex, 0 to 30 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains and hills
Elevation: 2,595 to 3,195 feet (792 to 975 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 52 to 62 degrees F (11 to 16 degrees C)
Frost-free period: 170 to 210 days

Map unit composition

Stineway—40 percent
Kiscove—25 percent
Urban land—15 percent
Minor components—20 percent

Characteristics of Stineway and similar soils

Slope: 5 to 30 percent
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from schist and/or from metamorphic rocks
Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; very gravelly sandy loam

Bt—4 to 14 inches; very gravelly loam

R—14 to 24 inches; bedrock

Characteristics of Kiscove and similar soils

Slope: 15 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from metamorphic rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel and 0 to 10 percent by subangular cobbles

Depth to a restrictive feature: 5 to 19 inches to paralithic bedrock; 9 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; gravelly sandy loam

Bt—2 to 9 inches; gravelly clay loam

Cr—9 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Hillslopes and mountain slopes

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 9 to 40 percent

Landform: Hillslopes and mountain slopes

Sesame and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Southlake and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 20 percent

Landform: Fan piedmonts and mountain valleys

Backcanyon and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 35 percent

Landform: Hillslopes and mountain slopes

Goodale and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 9 percent

Landform: Channels and drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

411—Delvar clay loam, 2 to 9 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 17—Sacramento and San Joaquin Valleys

Landscape: Valleys

Elevation: 400 to 590 feet (122 to 180 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 63 to 64 degrees F (17 to 18 degrees C)

Frost-free period: 250 to 300 days

Map unit composition

Delvar—85 percent

Minor components—15 percent

Characteristics of Delvar and similar soils

Slope: 2 to 9 percent

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Irrigated crops and, in a few nonirrigated areas, annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.0 inches (high)

Hydrologic properties

Present annual flooding: Very rare

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated areas: 2e-3

Nonirrigated areas: 4e-3

Typical profile

Ap—0 to 12 inches; clay loam

Bt—12 to 19 inches; clay

Btk1—19 to 28 inches; clay

Btk2—28 to 42 inches; clay

2Btkn—42 to 60 inches; sandy clay loam

Minor components

San Joaquin and similar soils

Extent: About 5 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Exeter and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Centerville and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Colpien and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Ponded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 3 percent

Landform: Depressions

412—Chollawell-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,500 feet (762 to 1,372 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Chollawell and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.4 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 22 inches; gravelly sandy loam

Bt—22 to 40 inches; cobbly coarse sandy loam

C—40 to 60 inches; cobbly loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, fan piedmonts, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Inyo and similar soils

Extent: About 6 percent of the map unit

Slope: 2 to 8 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Chollawell, gravelly, and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan piedmonts and mountain valleys

Southlake and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Inyo, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 3 percent

Landform: Alluvial fans, flood plains, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels, drainageways, and mountain valleys

417—Southlake-Southlake, gravelly-Goodale-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Southlake—40 percent

Southlake, gravelly—20 percent

Goodale—15 percent

Urban land—15 percent

Minor components—10 percent

Characteristics of Southlake and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.3 inches (moderate)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-7
Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam
Bt1—6 to 15 inches; stony sandy loam
Bt2—15 to 40 inches; stony sandy clay loam
Bt3—40 to 60 inches; stony sandy clay loam

Characteristics of Southlake, gravelly, and similar soils

Slope: 5 to 15 percent
Landform: Fan piedmonts and mountain valleys
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 5.2 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-7
Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; gravelly sandy loam
Bt1—6 to 19 inches; very gravelly sandy loam
Bt2—19 to 42 inches; very gravelly sandy clay loam
Bt3—42 to 60 inches; very gravelly sandy loam

Characteristics of Goodale and similar soils

Slope: 5 to 15 percent
Landform: Drainageways, inset fans, and mountain valleys
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Annual and perennial grasses and shrubs
Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel; 5 to 25 percent by subangular cobbles; and 20 to 40 percent by subangular stones
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 1.9 inches (very low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated and nonirrigated areas: 7s

Typical profile

A—0 to 8 inches; very cobbly loamy coarse sand

C—8 to 60 inches; very stony loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, fan piedmonts, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 20 percent

Landform: Fan piedmonts and mountain valleys

Cowspring and similar soils

Extent: About 2 percent of the map unit

Slope: 10 to 25 percent

Landform: Hillslopes and mountain valleys

Inyo, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Channels, drainageways, and mountain valleys

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 9 to 20 percent

Landform: Hillslopes, mountain valleys, and rock pediments

Xerofluvents and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Narrow flood plains and mountain valleys

420—Southlake-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: Isabella Lake area

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,700 to 3,500 feet (823 to 1,067 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 225 days

Map unit composition

Southlake—65 percent

Urban land—15 percent

Minor components—20 percent

Characteristics of Southlake and similar soils

Slope: 2 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.1 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 4e-7

Typical profile

A—0 to 4 inches; gravelly sandy loam

Bt1—4 to 19 inches; very gravelly sandy loam

Bt2—19 to 42 inches; very gravelly sandy clay loam

Bt3—42 to 60 inches; very gravelly sandy loam

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, fan piedmonts, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 7 percent of the map unit

Slope: 1 to 20 percent

Landform: Fan piedmonts and mountain valleys

Inyo and similar soils

Extent: About 6 percent of the map unit

Slope: 0 to 5 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Rock outcrop

Extent: About 2 percent of the map unit

Slope: 5 to 15 percent

Landform: Hillslopes and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways, narrow flood plains, and mountain valleys

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels and mountain valleys

Kelval and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Channels, drainageways, and mountain valleys

422—Kelval-Urban land complex, 0 to 2 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 200 to 230 days

Map unit composition

Kelval—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs
Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: Very low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 2w-2
Nonirrigated areas: 6w

Typical profile

A—0 to 13 inches; fine sandy loam
C—13 to 60 inches; stratified gravelly sand to fine sandy loam

Characteristics of Urban land

Slope: 0 to 2 percent
Landform: Alluvial fans, flood plains, and mountain valleys
Typical vegetation: None assigned
Hydrologic properties
Surface runoff class: Very high
Hydrologic soil group: D
Land capability classification
Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 5 percent of the map unit
Slope: 1 to 3 percent
Landform: Fan remnants and mountain valleys

Inyo and similar soils

Extent: About 4 percent of the map unit
Slope: 0 to 3 percent
Landform: Alluvial fans, inset fans, and mountain valleys

Kernfork and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 1 percent
Landform: Depressions, flood plains, and mountain valleys

Riverwash

Extent: About 2 percent of the map unit
Slope: 0 to 2 percent
Landform: Channels, drainageways, and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Depressions, drainageways, flood plains, and mountain valleys

423—Auberry-Crouch-Rock outcrop complex, 15 to 50 percent slopes

Map unit setting

General location: Telephone Ridge area

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,795 to 5,075 feet (1,158 to 1,548 meters)

Mean annual precipitation: 20 to 25 inches (508 to 635 millimeters)

Mean annual air temperature: 54 to 63 degrees F (12 to 17 degrees C)

Frost-free period: 135 to 225 days

Map unit composition

Auberry—45 percent

Crouch—15 percent

Rock outcrop—15 percent

Minor components—25 percent

Characteristics of Auberry and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 0 percent

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 7.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 16 inches; sandy loam

Bt1—16 to 22 inches; loam

Bt2—22 to 43 inches; sandy clay loam

BC—43 to 56 inches; sandy loam

Cr—56 to 66 inches; soft, weathered bedrock

Characteristics of Crouch and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, foothill pine, and Jeffrey pine

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 60 to 70 inches

Available water capacity to a depth of 60 inches: About 6.3 inches (moderate)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 22 inches; coarse sandy loam
B—22 to 43 inches; coarse sandy loam
C—43 to 70 inches; loamy sand
Cr—70 to 80 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 15 to 50 percent
Landform: Mountain slopes
Kind of rock: Granitoid
Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Tunis and similar soils

Extent: About 8 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Blasingame and similar soils

Extent: About 6 percent of the map unit
Slope: 15 to 55 percent
Landform: Mountain slopes

Tollhouse and similar soils

Extent: About 5 percent of the map unit
Slope: 30 to 60 percent
Landform: Mountain slopes

Arujo and similar soils

Extent: About 4 percent of the map unit
Slope: 9 to 40 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 5 to 25 percent

Landform: Drainageways

424—Inyo-Urban land complex, 0 to 9 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,100 feet (762 to 1,250 meters)

Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Inyo and similar soils

Slope: 5 to 9 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Shrubs and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 7e

Typical profile

A—0 to 12 inches; loamy coarse sand

C—12 to 60 inches; gravelly loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Kelval and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, wet, flooded, and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Lower flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels, drainageways, and mountain valleys

430—Friant-Rock outcrop complex, 15 to 75 percent slopes

Map unit setting

General location: The east side of the southern part of the San Joaquin Valley

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,795 to 4,795 feet (1,158 to 1,463 meters)

Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)

Mean annual air temperature: 55 to 63 degrees F (13 to 17 degrees C)

Frost-free period: 160 to 220 days

Map unit composition

Friant—70 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Friant and similar soils

Slope: 15 to 75 percent

Landform: Mountain slopes

Parent material: Residuum weathered from gneiss and/or from schist

Typical vegetation: Annual grasses, forbs, and few scattered oaks

Percentage of the surface covered by rock fragments: 25 to 55 percent by coarse, subangular gravel; 10 to 25 percent by subangular cobbles; and 10 to 30 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 6 to 20 inches

Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A1—0 to 5 inches; stony sandy loam
- A2—5 to 15 inches; stony sandy loam
- R—15 to 25 inches; bedrock

Characteristics of Rock outcrop

- Slope:* 35 to 75 percent
- Landform:* Mountain slopes
- Kind of rock:* Gneiss and schist
- Typical vegetation:* Barren

Hydrologic properties

- Surface runoff class:* Very high
- Hydrologic soil group:* D

Land capability classification

- Nonirrigated areas:* 8

Minor components

Tunis and similar soils

- Extent:* About 5 percent of the map unit
- Slope:* 30 to 75 percent
- Landform:* Mountain slopes

Walong and similar soils

- Extent:* About 5 percent of the map unit
- Slope:* 15 to 45 percent
- Landform:* Mountain slopes

Sesame and similar soils

- Extent:* About 2 percent of the map unit
- Slope:* 30 to 60 percent
- Landform:* Mountain slopes

Blasingame and similar soils

- Extent:* About 1 percent of the map unit
- Slope:* 5 to 45 percent
- Landform:* Mountain slopes

Riverwash

- Extent:* About 1 percent of the map unit
- Slope:* 1 to 9 percent
- Landform:* Drainageways

Flooded soils and similar soils

- Extent:* About 1 percent of the map unit
- Slope:* 0 to 2 percent
- Landform:* Flood plains

432—Alberti-Urban land complex, 0 to 30 percent slopes

Map unit setting

- General location:* Southern Sierra Nevada Mountains
- MLRA:* 18—Sierra Nevada Foothills
- Landscape:* Hills and mountains

Elevation: 2,595 to 2,995 feet (792 to 914 meters)

Mean annual precipitation: 6 to 12 inches (152 to 305 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 215 days

Map unit composition

Alberti, gravelly—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Alberti, gravelly, and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, yucca, junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 20 to 35 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; and 1 to 5 percent by subangular stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 26 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 1 inch; gravelly loam

Bt—1 to 17 inches; cobbly clay

Cr—17 to 22 inches; soft, weathered bedrock

R—22 to 32 inches; bedrock

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Hillslopes and mountain slopes

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Alberti, cobbly, and similar soils

Extent: About 5 percent of the map unit

Slope: 10 to 40 percent
Landform: Hillslopes and mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 10 to 40 percent
Landform: Hillslopes and mountain slopes

Tweedy and similar soils

Extent: About 2 percent of the map unit
Slope: 20 to 30 percent
Landform: Hillslopes and mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Channels and drainageways

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Southlake and similar soils

Extent: About 1 percent of the map unit
Slope: 2 to 9 percent
Landform: Fan piedmonts and interior valleys

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

441—Inyo-Urban land complex, 0 to 5 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 2,495 to 3,995 feet (762 to 1,219 meters)
Mean annual precipitation: 6 to 8 inches (153 to 203 millimeters)
Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)
Frost-free period: 190 to 225 days

Map unit composition

Inyo—65 percent
Urban land—15 percent
Minor components—20 percent

Characteristics of Inyo and similar soils

Slope: 0 to 5 percent
Landform: Alluvial fans, inset fans, and mountain valleys
Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, shrubs, and Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 7e

Typical profile

A—0 to 8 inches; loamy coarse sand

C—8 to 60 inches; gravelly loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 9 percent of the map unit

Slope: 2 to 6 percent

Landform: Fan remnants and mountain valleys

Kelval and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 3 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and mountain valleys

Southlake and similar soils

Extent: About 2 percent of the map unit

Slope: 3 to 7 percent

Landform: Fan remnants and mountain valleys

Kernfork and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Lower flood plains and mountain valleys

442—Inyo-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,195 feet (762 to 1,280 meters)

Mean annual precipitation: 6 to 8 inches (153 to 203 millimeters)

Mean annual air temperature: 59 to 61 degrees F (15 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Inyo—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Inyo and similar soils

Slope: 9 to 15 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, shrubs, and Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 7e

Typical profile

A—0 to 6 inches; loamy coarse sand

C—6 to 60 inches; gravelly loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 7 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan remnants and mountain valleys

Riverwash

Extent: About 6 percent of the map unit

Slope: 2 to 8 percent

Landform: Alluvial fans, drainageways, and mountain valleys

Kelval and similar soils

Extent: About 2 percent of the map unit

Slope: 1 to 2 percent

Landform: Flood plains and mountain valleys

445—Chollawell-Urban land complex, 0 to 5 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 3,195 to 4,195 feet (975 to 1,280 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—70 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Chollawell and similar soils

Slope: 2 to 5 percent

Landform: Fan remnants and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 3e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 21 inches; gravelly loamy coarse sand

Bt—21 to 46 inches; gravelly coarse sandy loam

C—46 to 60 inches; gravelly coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Fan remnants and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Inyo and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 6 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Kelval and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Kernfork, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 1 percent

Landform: Depressions, flood plains, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Channels, drainageways, and mountain valleys

450—Southlake-Goodale-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,595 to 2,995 feet (792 to 914 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 200 to 220 days

Map unit composition

Southlake, stony—45 percent

Goodale—15 percent

Urban land—15 percent

Minor components—25 percent

Characteristics of Southlake, stony, and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, foothill pine, and junipers

Percentage of the surface covered by rock fragments: 15 to 30 percent by coarse, subangular gravel; 3 to 7 percent by subangular cobbles; and 4 to 8 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-7

Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam

Bt—6 to 60 inches; stony sandy clay loam

Characteristics of Goodale and similar soils

Slope: 5 to 15 percent

Landform: Channels, inset fans, and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel; 5 to 25 percent by subangular cobbles; and 20 to 40 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7s

Typical profile

A—0 to 3 inches; very cobbly loamy coarse sand

C—3 to 60 inches; very cobbly loamy coarse sand

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Fan piedmonts and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 9 percent of the map unit

Slope: 1 to 9 percent

Landform: Fan piedmonts and mountain valleys

Southlake, gravelly, and similar soils

Extent: About 7 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Kernville and similar soils

Extent: About 4 percent of the map unit

Slope: 10 to 20 percent

Landform: Hillslopes and mountain valleys

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 9 to 20 percent

Landform: Hillslopes, mountain valleys, and rock pediments

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels, drainageways, and mountain valleys

Xerofluents, wet, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

460—Kernville-Hogeye-Southlake-Urban land complex, 0 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Hills and mountains

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Kernville, bouldery—30 percent

Hogeye—25 percent

Southlake—15 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Kernville, bouldery, and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 2 to 5 percent by subrounded boulders, 0 to 15 percent by subrounded cobbles, 0 to 15 percent by subrounded stones, and 0 to 10 percent by coarse, subrounded gravel

Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 16 inches; gravelly loamy coarse sand

Cr—16 to 20 inches; soft, weathered bedrock

R—20 to 30 inches; bedrock

Characteristics of Hogeye and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature: 20 to 40 inches to paralithic bedrock; 40 to 60 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A1—0 to 2 inches; gravelly coarse sandy loam

A2—2 to 29 inches; gravelly coarse sandy loam

Cr—29 to 40 inches; soft, weathered bedrock

R—40 to 50 inches; bedrock

Characteristics of Southlake and similar soils

Slope: 5 to 15 percent

Landform: Fan piedmonts and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, junipers, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.4 inches (moderate)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam

Bt—6 to 60 inches; stony sandy clay loam

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Fan piedmonts, hills, and mountain slopes

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Hyte and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 40 percent

Landform: Hillslopes and mountain slopes

Chollawell and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan piedmonts and mountain valleys

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 9 to 30 percent

Landform: Hillslopes and mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Channels and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and interior valleys

465—Arujo-Urban land complex, 0 to 15 percent slopes

Map unit setting

General location: Foothills and mountain valleys in the western part of the southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains and hills

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 8 to 14 inches (203 to 356 millimeters)

Mean annual air temperature: 57 to 63 degrees F (14 to 17 degrees C)

Frost-free period: 190 to 240 days

Map unit composition

Arujo—65 percent

Urban land—15 percent

Minor components—20 percent

Characteristics of Arujo and similar soils

Slope: 5 to 15 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: None assigned

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 40 to 60 inches

Available water capacity to a depth of 60 inches: About 9.0 inches (high)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 4e-1

Typical profile

A—0 to 14 inches; sandy loam

Bt1—14 to 20 inches; sandy clay loam

Bt2—20 to 58 inches; sandy clay loam

Cr—58 to 68 inches; soft, weathered bedrock

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Hillslopes

Typical vegetation: None assigned
Hydrologic properties
Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 8

Minor components

Feethill and similar soils

Extent: About 7 percent of the map unit
Slope: 9 to 20 percent
Landform: Hillslopes and mountain slopes

Havala and similar soils

Extent: About 5 percent of the map unit
Slope: 2 to 8 percent
Landform: Interior valleys and stream terraces

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 9 to 20 percent
Landform: Hillslopes and mountain slopes

Walong and similar soils

Extent: About 3 percent of the map unit
Slope: 9 to 18 percent
Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

485—Inyo-Kelval-Urban land complex, 0 to 5 percent slopes

Map unit setting

General location: The eastern part of the southern Sierra Nevada Mountains
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 2,595 to 3,700 feet (792 to 1,128 meters)
Mean annual precipitation: 6 to 10 inches (152 to 254 millimeters)
Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)
Frost-free period: 200 to 220 days

Map unit composition

Inyo—45 percent
Kelval—30 percent
Urban land—15 percent
Minor components—10 percent

Characteristics of Inyo and similar soils

Slope: 0 to 5 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.5 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated areas: 4w-2

Nonirrigated areas: 6w

Typical profile

A—0 to 12 inches; loamy coarse sand

C—12 to 60 inches; gravelly loamy coarse sand

Characteristics of Kelval and similar soils

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 40 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 5.8 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4w-2

Nonirrigated areas: 6w

Typical profile

A—0 to 7 inches; gravelly loamy sand

C—7 to 60 inches; stratified gravelly sand to sandy loam

Characteristics of Urban land

Slope: 0 to 2 percent

Landform: Alluvial fans and mountain valleys

Typical vegetation: None assigned

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Chollawell and similar soils

Extent: About 7 percent of the map unit

Slope: 1 to 7 percent

Landform: Fan remnants, mountain valleys, and stream terraces

Kernfork and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Channels, drainageways, and mountain valleys

488—Tweedy-Tollhouse-Locobill-Urban land complex, 0 to 30 percent slopes

Map unit setting

General location: West and central parts of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 3,400 to 5,500 feet (1,037 to 1,677 meters)

Mean annual precipitation: 10 to 20 inches (254 to 508 millimeters)

Mean annual air temperature: 52 to 55 degrees F (11 to 13 degrees C)

Frost-free period: 150 to 175 days

Map unit composition

Tweedy—35 percent

Tollhouse—20 percent

Locobill—15 percent

Urban land—15 percent

Minor components—15 percent

Characteristics of Tweedy and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and oaks

Percentage of the surface covered by rock fragments: 50 to 70 percent by coarse, subangular gravel and 1 to 10 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.4 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification
Irrigated and nonirrigated areas: 4e-1

Typical profile
A—0 to 11 inches; sandy loam
Bt1—11 to 31 inches; sandy clay loam
Bt2—31 to 38 inches; sandy loam
Cr—38 to 48 inches; soft, weathered bedrock

Characteristics of Tollhouse and similar soils

Slope: 9 to 30 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Perennial grasses, shrubs, oaks, and foothill pine
Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel; 1 to 10 percent by subangular cobbles; and 0 to 3 percent by subangular boulders
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 7e

Typical profile
A1—0 to 5 inches; sandy loam
A2—5 to 14 inches; gravelly coarse sandy loam
Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Locobill and similar soils

Slope: 9 to 30 percent
Landform: Mountain slopes
Parent material: Residuum weathered from metamorphic rocks and/or from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine
Percentage of the surface covered by rock fragments: 50 to 80 percent by coarse, subangular gravel; 0 to 5 percent by subangular stones; and 0 to 10 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 4.3 inches (low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium

Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 4e-1

Typical profile
A—0 to 3 inches; sandy loam
Bt1—3 to 28 inches; sandy loam
Bt2—28 to 35 inches; gravelly sandy clay loam
Cr—35 to 45 inches; soft, weathered bedrock

Characteristics of Urban land

Slope: 0 to 2 percent
Landform: Mountain slopes
Typical vegetation: None assigned
Hydrologic properties
Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 8

Minor components

Kernville and similar soils

Extent: About 5 percent of the map unit
Slope: 15 to 35 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 15 to 35 percent
Landform: Mountain slopes

Sesame and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 25 percent
Landform: Mountain slopes

Feethill and similar soils

Extent: About 2 percent of the map unit
Slope: 5 to 25 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

501—Hyte-Erskine-Sorrell association, 30 to 60 percent slopes

Map unit setting

General location: Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,995 to 4,995 feet (914 to 1,524 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 150 to 215 days

Map unit composition

Hyte—35 percent

Erskine—25 percent

Sorrell—25 percent

Minor components—15 percent

Characteristics of Hyte and similar soils

Slope and aspect: 30 to 60 percent, south to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel; 0 to 3 percent by subangular cobbles; and 0 to 3 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; gravelly coarse sandy loam

Bt—4 to 17 inches; gravelly sandy loam

Cr—17 to 27 inches; soft, weathered bedrock

Characteristics of Erskine and similar soils

Slope and aspect: 30 to 60 percent, northeast to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from gabbro and/or from igneous rocks

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.5 inches (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 4 inches; gravelly sandy loam
Bt—4 to 13 inches; gravelly sandy loam
Cr—13 to 23 inches; soft, weathered bedrock

Characteristics of Sorrell and similar soils

Slope and aspect: 30 to 60 percent, south to northwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, oaks, and pinyon pine

Percentage of the surface covered by rock fragments: 25 to 45 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.1 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 11 inches; bouldery loamy coarse sand
Bt—11 to 36 inches; bouldery coarse sandy loam
Cr—36 to 46 inches; soft, weathered bedrock

Minor components

Tweedy and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 50 percent

Landform: Mountain slopes

Walong and similar soils

Extent: About 4 percent of the map unit

Slope: 40 to 70 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

503—Tips-Erskine-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,700 to 4,300 feet (823 to 1,311 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 160 to 200 days

Map unit composition

Tips—40 percent

Erskine—30 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Tips and similar soils

Slope and aspect: 30 to 60 percent, east to south aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and scattered junipers

Percentage of the surface covered by rock fragments: 30 to 60 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 5 inches; gravelly loamy coarse sand
Bt—5 to 14 inches; gravelly coarse sandy loam
Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Erskine and similar soils

Slope and aspect: 30 to 60 percent, west to east aspects
Landform: Mountain slopes
Parent material: Residuum weathered from gabbro and/or from igneous rocks
Typical vegetation: Annual and perennial grasses, shrubs, and scattered junipers
Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subrounded boulders
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 8 inches; gravelly coarse sandy loam
Bt—8 to 18 inches; gravelly sandy loam
Cr—18 to 28 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 25 to 65 percent
Landform: Mountain slopes
Kind of rock: Igneous
Typical vegetation: Barren

Hydrologic properties
Surface runoff class: Very high
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 8

Minor components

Pilotwell and similar soils

Extent: About 6 percent of the map unit
Slope: 20 to 50 percent
Landform: Mountain slopes

Faycreek and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 50 percent

Landform: Upper mountain slopes

Hoffman and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 40 percent

Landform: Mountain slopes

Xyno and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 70 percent

Landform: Mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains in mountain valleys

505—Chollawell gravelly loamy coarse sand, 5 to 20 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts

Elevation: 2,495 to 4,300 feet (762 to 1,311 meters)

Mean annual precipitation: 6 to 9 inches (152 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—85 percent

Minor components—15 percent

Characteristics of Chollawell and similar soils

Slope: 5 to 20 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, and a few scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 19 inches; gravelly loamy coarse sand
Bt—19 to 54 inches; gravelly coarse sandy loam
C—54 to 60 inches; gravelly loamy coarse sand

Minor components

Inyo and similar soils

Extent: About 7 percent of the map unit
Slope: 2 to 10 percent
Landform: Alluvial fans and inset fans

Cowspring and similar soils

Extent: About 3 percent
Slope: 9 to 25 percent
Landform: Hillslopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 4 percent
Landform: Drainageways and inset fans

Kelval, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 5 percent
Landform: Channels, drainageways, and mountain valleys

Rock outcrop

Extent: About 1 percent of the map unit
Slope: 10 to 20 percent
Landform: Hillslopes and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 10 percent
Landform: Drainageways

507—Xyno-Canebrake-Pilotwell association, dry, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,795 to 5,245 feet (853 to 1,600 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 150 to 215 days

Map unit composition

Xyno—40 percent

Canebrake—30 percent

Pilotwell—15 percent

Minor components—15 percent

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, southeast to southwest aspects

Landform: Upper and middle mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 2 to 10 percent by subangular cobbles; and 0 to 3 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly loamy coarse sand

C—2 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope and aspect: 30 to 60 percent, west to east aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 8

Typical profile
A—0 to 7 inches; gravelly loamy coarse sand
C—7 to 17 inches; gravelly loamy coarse sand
Cr—17 to 27 inches; soft, weathered bedrock

Characteristics of Pilotwell and similar soils

Slope and aspect: 30 to 60 percent, southeast to southwest aspects
Landform: Mountain slopes
Parent material: Colluvium derived from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, and shrubs
Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 2 percent by subangular boulders; and 0 to 1 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.3 inches (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: B

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 3 inches; gravelly loamy coarse sand
C—3 to 38 inches; gravelly loamy coarse sand
Cr—38 to 48 inches; soft, weathered bedrock

Minor components

Chollawell and similar soils

Extent: About 4 percent of the map unit
Slope: 2 to 15 percent
Landform: Fan piedmonts and mountain valleys

Hungrygulch and similar soils

Extent: About 3 percent of the map unit
Slope: 15 to 35 percent
Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit
Slope: 25 to 65 percent
Landform: Mountain slopes

Faycreek and similar soils

Extent: About 2 percent of the map unit

Slope: 25 to 55 percent

Landform: Mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and flood plains

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 30 percent

Landform: Drainageways

508—Pilotwell-Xyno-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 4,995 feet (792 to 1,524 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 210 days

Map unit composition

Pilotwell—45 percent

Xyno—25 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Pilotwell and similar soils

Slope and aspect: 30 to 60 percent, northwest to south aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 2 percent by subangular boulders; and 0 to 1 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand

C—5 to 25 inches; gravelly loamy coarse sand

Cr—25 to 35 inches; soft, weathered bedrock

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, northwest to south aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 50 to 80 percent by fine, subangular gravel and 0 to 3 percent by subangular cobbles

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Canebrake and similar soils

Extent: About 4 percent of the map unit

Slope: 45 to 65 percent

Landform: Upper mountain slopes

Chollawell and similar soils

Extent: About 4 percent of the map unit

Slope: 2 to 20 percent

Landform: Fan piedmonts

Faycreek and similar soils

Extent: About 3 percent of the map unit

Slope: 40 to 70 percent

Landform: Upper mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Channels

Inyo, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 15 percent

Landform: Alluvial fans and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 30 percent

Landform: Drainageways

509—Xyno-Faycreek-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 5,200 feet (792 to 1,585 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 50 to 61 degrees F (10 to 16 degrees C)

Frost-free period: 130 to 210 days

Map unit composition

Xyno—40 percent

Faycreek—20 percent

Rock outcrop—15 percent

Minor components—25 percent

Characteristics of Xyno and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 1 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand

C—11 to 15 inches; gravelly loamy coarse sand

Cr—15 to 25 inches; soft, weathered bedrock

Characteristics of Faycreek and similar soils

Slope: 30 to 60 percent

Landform: Upper mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and scattered foothill pine trees

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 2 inches; gravelly loamy coarse sand

A2—2 to 10 inches; gravelly loamy coarse sand

Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Canebrake and similar soils

Extent: About 8 percent of the map unit

Slope: 35 to 65 percent

Landform: Upper mountain slopes

Pilotwell and similar soils

Extent: About 6 percent of the map unit

Slope: 10 to 50 percent

Landform: Mountain slopes

Scodie and similar soils

Extent: About 4 percent of the map unit

Slope: 40 to 70 percent

Landform: Upper mountain slopes

Goodale, flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans and channels

Inyo and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Drainageways

Rubble land

Extent: About 1 percent of the map unit

Slope: 30 to 70 percent

Landform: Mountain slopes

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 30 percent

Landform: Drainageways

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Mountain slopes

510—Xyno-Canebrake-Pilotwell association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,995 to 5,200 feet (914 to 1,585 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 130 to 210 days

Map unit composition

Xyno—35 percent
Canebrake—30 percent
Pilotwell, bouldery—15 percent
Minor components—20 percent

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, east to southwest aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 2 to 10 percent by subangular cobbles; and 0 to 3 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly loamy coarse sand

C—2 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope and aspect: 30 to 60 percent, east to southwest aspects

Landform: Upper mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 1 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

- A—0 to 7 inches; gravelly loamy coarse sand
- C—7 to 17 inches; gravelly loamy coarse sand
- Cr—17 to 27 inches; soft, weathered bedrock

Characteristics of Pilotwell, bouldery, and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and scattered shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 2 percent by subangular boulders; and 0 to 1 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A—0 to 5 inches; gravelly loamy coarse sand
- C—5 to 25 inches; gravelly loamy coarse sand
- Cr—25 to 35 inches; soft, weathered bedrock

Minor components

Canebrake, bouldery, and similar soils

Extent: About 5 percent of the map unit

Slope: 25 to 65 percent

Landform: Upper mountain slopes

Xyno and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 65 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 25 to 70 percent

Landform: Mountain slopes

Scodie and similar soils

Extent: About 2 percent of the map unit

Slope: 35 to 65 percent

Landform: Upper mountain slopes

Southlake and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 15 percent

Landform: Fan piedmonts

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Alluvial fans, channels, and fan piedmonts

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

512—Chollawell, cobbly substratum-Chollawell, gravelly, complex, 2 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,495 to 4,500 feet (762 to 1,372 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell, cobbly substratum—60 percent

Chollawell, gravelly—15 percent

Minor components—25 percent

Characteristics of Chollawell, cobbly substratum, and similar soils

Slope: 5 to 15 percent

Landform: Fan remnants and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.4 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

- A—0 to 22 inches; gravelly sandy loam
- Bt—22 to 40 inches; cobbly coarse sandy loam
- C—40 to 60 inches; cobbly loamy coarse sand

Characteristics of Chollawell, gravelly, and similar soils

Slope: 2 to 8 percent

Landform: Fan remnants and mountain valleys

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

- A—0 to 19 inches; gravelly loamy coarse sand
- Bt—19 to 54 inches; gravelly coarse sandy loam
- C—54 to 60 inches; gravelly loamy coarse sand

Minor components

Inyo and similar soils

Extent: About 10 percent of the map unit

Slope: 2 to 8 percent

Landform: Alluvial fans and mountain valleys

Inyo, flooded, and similar soils

Extent: About 7 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Southlake and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 15 percent

Landform: Fan remnants and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 3 percent

Landform: Drainageways and mountain valleys

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, fan remnants, and mountain valleys

514—Chollawell-Inyo complex, 5 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Fan piedmonts and mountains

Elevation: 2,495 to 4,500 feet (762 to 1,372 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Chollawell—50 percent

Inyo—35 percent

Minor components—15 percent

Characteristics of Chollawell and similar soils

Slope: 5 to 15 percent

Landform: Fan remnants

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and a few scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 70 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 4.6 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1

Nonirrigated areas: 6e

Typical profile

A—0 to 19 inches; gravelly loamy coarse sand

Bt—19 to 54 inches; gravelly coarse sandy loam

C—54 to 60 inches; gravelly loamy coarse sand

Characteristics of Inyo and similar soils

Slope: 5 to 15 percent

Landform: Alluvial fans, fan aprons, and inset fans

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Perennial grasses, shrubs, and scattered Joshua trees

Percentage of the surface covered by rock fragments: 40 to 80 percent by fine, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low
Current water table: None noted
Natural drainage class: Excessively drained
Hydrologic soil group: A

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 1 inch; loamy coarse sand
C—1 to 60 inches; gravelly loamy coarse sand

Minor components

Southlake and similar soils

Extent: About 8 percent of the map unit
Slope: 5 to 10 percent
Landform: Fan remnants

Cowspring and similar soils

Extent: About 3 percent of the map unit
Slope: 10 to 20 percent
Landform: Hillslopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways and inset fans

Inyo, frequently flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 2 to 9 percent
Landform: Alluvial fans and inset fans

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 7 percent
Landform: Channels and drainageways

Rock outcrop

Extent: About 1 percent of the map unit
Slope: 9 to 20 percent
Landform: Hillslopes

515—Scodie-Canebrake-Xyno association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 4,395 to 6,000 feet (1,341 to 1,829 meters)
Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)
Mean annual air temperature: 50 to 61 degrees F (10 to 16 degrees C)
Frost-free period: 130 to 210 days

Map unit composition

Scodie—35 percent
Canebrake—30 percent
Xyno—20 percent
Minor components—15 percent

Characteristics of Scodie and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects
Landform: Upper mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine
Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular boulders
Depth to a restrictive feature (paralithic bedrock): 5 to 10 inches
Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 8 inches; gravelly loamy coarse sand
Cr—8 to 18 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope and aspect: 30 to 60 percent, southeast to west aspects
Landform: Mountain slopes
Parent material: Colluvium derived from granitoid rocks
Typical vegetation: Perennial grasses, forbs, shrubs, pinyon pine, and foothill pine
Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 3 inches; gravelly loamy coarse sand

A2—3 to 13 inches; gravelly loamy coarse sand
Cr—13 to 23 inches; soft, weathered bedrock

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, southeast to west aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly loamy coarse sand

C—2 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Minor components

Pilotwell and similar soils

Extent: About 8 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 20 to 65 percent

Landform: Mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Alluvial fans, fan piedmonts, and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow flood plains

516—Xyno-Rock outcrop-Canebrake association, 30 to 60 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains (fig. 12)

Elevation: 2,795 to 5,200 feet (853 to 1,585 meters)

Mean annual precipitation: 6 to 8 inches (152 to 203 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 140 to 210 days

Map unit composition

Xyno—45 percent

Rock outcrop—20 percent

Canebrake—20 percent

Minor components—15 percent

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, east to southwest aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine,



Figure 12.—An area of Xyno-Rock outcrop-Canebrake association, 30 to 60 percent slopes.

subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly loamy coarse sand

C—2 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Characteristics of Canebrake and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Upper mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 2 to 10 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 4 inches; stony loamy coarse sand

A2—4 to 12 inches; stony loamy coarse sand

Cr—12 to 22 inches; soft, weathered bedrock

Minor components

Pilotwell and similar soils

Extent: About 8 percent of the map unit

Slope: 9 to 50 percent

Landform: Mountain slopes

Faycreek and similar soils

Extent: About 4 percent of the map unit

Slope: 30 to 50 percent

Landform: Upper mountain slopes

Inyo, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Alluvial fans and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

517—Southlake-Southlake, gravelly-Goodale complex, 5 to 15 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 3,995 feet (792 to 1,219 meters)

Mean annual precipitation: 7 to 9 inches (178 to 229 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 220 days

Map unit composition

Southlake—55 percent

Southlake, gravelly—20 percent

Goodale—15 percent

Minor components—10 percent

Characteristics of Southlake and similar soils

Slope: 5 to 15 percent

Landform: Fan remnants and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.3 inches (moderate)

Hydrologic properties

Present annual flooding: Rare
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-7
Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; stony sandy loam
Bt1—6 to 15 inches; stony sandy loam
Bt2—15 to 40 inches; stony sandy clay loam
Bt3—40 to 60 inches; stony sandy clay loam

Characteristics of Southlake, gravelly, and similar soils

Slope: 5 to 15 percent
Landform: Fan remnants and mountain valleys
Parent material: Alluvium derived from mixed rocks
Typical vegetation: Annual grasses, forbs, shrubs, and junipers
Percentage of the surface covered by rock fragments: 0 percent
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 5.2 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated areas: 4e-1
Nonirrigated areas: 6e

Typical profile

A—0 to 6 inches; gravelly sandy loam
Bt1—6 to 19 inches; very gravelly sandy loam
Bt2—19 to 42 inches; very gravelly sandy clay loam
Bt3—42 to 60 inches; very gravelly sandy loam

Characteristics of Goodale and similar soils

Slope: 5 to 15 percent
Landform: Drainageways, inset fans, and mountain valleys
Parent material: Alluvium derived from granitoid rocks
Typical vegetation: Annual and perennial grasses and shrubs
Percentage of the surface covered by rock fragments: 30 to 50 percent by coarse, subangular gravel; 5 to 25 percent by subangular cobbles; and 20 to 40 percent by subangular stones
Restrictive feature: None noted
Available water capacity to a depth of 60 inches: About 1.9 inches (very low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7s

Typical profile

A—0 to 8 inches; very cobbly loamy coarse sand

C—8 to 60 inches; extremely cobbly loamy coarse sand

Minor components

Chollawell and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 20 percent

Landform: Fan remnants and mountain valleys

Cowspring and similar soils

Extent: About 2 percent of the map unit

Slope: 10 to 25 percent

Landform: Hillslopes

Inyo, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Alluvial fans, inset fans, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Channels, drainageways, and mountain valleys

Rock outcrop

Extent: About 1 percent of the map unit

Slope: 9 to 20 percent

Landform: Hillslopes and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 10 percent

Landform: Drainageways

Xerofluvents and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Narrow flood plains and mountain valleys

518—Backcanyon-Rock outcrop complex, 15 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 4,500 feet (792 to 1,372 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 59 to 63 degrees F (15 to 17 degrees C)

Frost-free period: 190 to 250 days

Map unit composition

Backcanyon—50 percent

Rock outcrop—30 percent

Minor components—20 percent

Characteristics of Backcanyon and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from metasedimentary rocks and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel; 0 to 3 percent by subangular cobbles; and 0 to 2 percent by subangular stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 11 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.9 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly coarse sandy loam

Bk—2 to 11 inches; gravelly sandy loam

Cr—11 to 15 inches; soft, weathered bedrock

R—15 to 25 inches; bedrock

Characteristics of Rock outcrop

Slope: 15 to 50 percent

Landform: Mountain slopes

Kind of rock: Granitoid and metasedimentary

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Backcanyon, stony, and similar soils

Extent: About 8 percent of the map unit

Slope: 20 to 55 percent
Landform: Mountain slopes

Pilotwell and similar soils

Extent: About 4 percent of the map unit
Slope: 9 to 20 percent
Landform: Mountain slopes

Chollawell and similar soils

Extent: About 2 percent of the map unit
Slope: 5 to 15 percent
Landform: Fan piedmonts

Stineway and similar soils

Extent: About 2 percent of the map unit
Slope: 30 to 50 percent
Landform: Mountain slopes

Haplodurids, shallow, and similar soils

Extent: About 1 percent of the map unit
Slope: 5 to 45 percent
Landform: Fan remnants

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

520—Kernville-Hogeye-Rock outcrop complex, 15 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains
MLRA: 18—Sierra Nevada Foothills
Landscape: Mountains
Elevation: 2,595 to 2,995 feet (792 to 914 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)
Frost-free period: 180 to 200 days

Map unit composition

Kernville—50 percent
Hogeye—20 percent
Rock outcrop—15 percent
Minor components—15 percent

Characteristics of Kernville and similar soils

Slope: 15 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 15 percent by subrounded cobbles, 0 to 15 percent by subrounded stones, and 0 to 10 percent by coarse, subrounded gravel

Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 5 inches; gravelly loamy coarse sand

A2—5 to 16 inches; gravelly loamy coarse sand

Cr—16 to 19 inches; soft, weathered bedrock

R—19 to 29 inches; bedrock

Characteristics of Hogeye and similar soils

Slope: 15 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel; 0 to 3 percent by subangular boulders; 5 to 15 percent by subangular cobbles; and 5 to 15 percent by subangular stones

Depth to a restrictive feature: 20 to 40 inches to paralithic bedrock; 40 to 60 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 20 inches; gravelly coarse sandy loam

C—20 to 29 inches; gravelly coarse sandy loam

Cr—29 to 40 inches; soft, weathered bedrock

R—40 to 50 inches; bedrock

Characteristics of Rock outcrop

Slope: 15 to 30 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Kernville, bouldery, and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 35 percent

Landform: Mountain slopes

Hungrygulch and similar soils

Extent: About 4 percent of the map unit

Slope: 10 to 25 percent

Landform: Mountain slopes

Canebrake and similar soils

Extent: About 2 percent of the map unit

Slope: 20 to 40 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils and wet, flooded soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 2 percent (flooded soils); 0 to 10 percent (wet, flooded soils)

Landform: Drainageways and narrow flood plains

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow drainageways and mountain valleys

523—Kernville-Faycreek-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,700 to 4,595 feet (823 to 1,402 meters)

Mean annual precipitation: 9 to 12 inches (229 to 305 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 140 to 200 days

Map unit composition

Kernville, bouldery—45 percent
Faycreek—20 percent
Rock outcrop—15 percent
Minor components—20 percent

Characteristics of Kernville, bouldery, and similar soils

Slope and aspect: 30 to 60 percent, east to southwest aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine
Percentage of the surface covered by rock fragments: 2 to 5 percent by subrounded boulders, 0 to 15 percent by subrounded cobbles, 0 to 15 percent by subrounded stones, and 0 to 10 percent by coarse, subrounded gravel
Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock
Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: D

Land capability classification
Nonirrigated areas: 7e

Typical profile
A—0 to 16 inches; gravelly loamy coarse sand
Cr—16 to 20 inches; soft, weathered bedrock
R—20 to 30 inches; bedrock

Characteristics of Faycreek and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, shrubs, oaks, and foothill pine
Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 8

Typical profile

- A1—0 to 6 inches; gravelly loamy coarse sand
- A2—6 to 12 inches; gravelly loamy coarse sand
- Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Rock outcrop

- Slope:* 30 to 60 percent
- Landform:* Mountain slopes
- Kind of rock:* Granitoid
- Typical vegetation:* Barren

Hydrologic properties

- Surface runoff class:* Very high
- Hydrologic soil group:* D

Land capability classification

- Nonirrigated areas:* 8

Minor components

Hogeye and similar soils

- Extent:* About 6 percent of the map unit
- Slope:* 35 to 65 percent
- Landform:* Mountain slopes

Hungrygulch and similar soils

- Extent:* About 5 percent of the map unit
- Slope:* 10 to 50 percent
- Landform:* Mountain slopes

Soils that are shallow to hard bedrock and similar soils

- Extent:* About 4 percent of the map unit
- Slope:* 40 to 70 percent
- Landform:* Mountain slopes

Xerofluvents, flooded, and similar soils

- Extent:* About 2 percent of the map unit
- Slope:* 0 to 4 percent
- Landform:* Drainageways and flood plains

Riverwash

- Extent:* About 1 percent of the map unit
- Slope:* 1 to 15 percent
- Landform:* Drainageways

Flooded soils and similar soils and wet, flooded soils and similar soils

- Extent:* For each of the two components, about 1 percent of the map unit
- Slope:* 0 to 2 percent (flooded soils); 0 to 10 percent (wet, flooded soils)
- Landform:* Drainageways and flood plains

525—Hungrygulch-Kernville-Hogeye association, 30 to 60 percent slopes

Map unit setting

- General location:* Southern Sierra Nevada Mountains
- MLRA:* 18—Sierra Nevada Foothills
- Landscape:* Mountains

Elevation: 2,795 to 4,595 feet (853 to 1,402 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 55 to 57 degrees F (13 to 14 degrees C)

Frost-free period: 160 to 210 days

Map unit composition

Hungrygulch—35 percent

Kernville—30 percent

Hogeye—20 percent

Minor components—15 percent

Characteristics of Hungrygulch and similar soils

Slope and aspect: 30 to 60 percent, north to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granite

Typical vegetation: Annual and perennial grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 5 percent by subangular stones, 0 to 5 percent by subangular cobbles, and 5 to 15 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 60 inches

Available water capacity to a depth of 60 inches: About 2.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 19 inches; coarse sandy loam

C—19 to 26 inches; gravelly coarse sandy loam

Cr—26 to 36 inches; soft, weathered bedrock

Characteristics of Kernville and similar soils

Slope and aspect: 30 to 60 percent, north to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 0 to 15 percent by subrounded cobbles, 0 to 15 percent by subrounded stones, and 0 to 10 percent by coarse, subrounded gravel

Depth to a restrictive feature: 7 to 19 inches to paralithic bedrock; 10 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 5 inches; gravelly loamy coarse sand

A2—5 to 16 inches; gravelly loamy coarse sand

Cr—16 to 20 inches; soft, weathered bedrock

R—20 to 30 inches; bedrock

Characteristics of Hogeye and similar soils

Slope and aspect: 30 to 60 percent, north to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature: 20 to 40 inches to paralithic bedrock; 40 to 60 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 2 inches; gravelly coarse sandy loam

A2—2 to 29 inches; gravelly coarse sandy loam

Cr—29 to 40 inches; soft, weathered bedrock

R—40 to 50 inches; bedrock

Minor components

Faycreek and similar soils

Extent: About 5 percent of the map unit

Slope: 25 to 65 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow flood plains and mountain valleys

530—Alberti complex, 15 to 50 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,595 to 5,200 feet (792 to 1,585 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 170 to 210 days

Map unit composition

Alberti, cobbly—45 percent

Alberti, gravelly—40 percent

Minor components—15 percent

Characteristics of Alberti, cobbly, and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel; 10 to 25 percent by subangular cobbles; and 1 to 5 percent by subangular stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 26 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 4 inches; cobbly clay loam

Bt—4 to 16 inches; cobbly clay
Cr—16 to 22 inches; soft, weathered bedrock
R—22 to 32 inches; bedrock

Characteristics of Alberti, gravelly, and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, junipers, oaks, and foothill pine

Percentage of the surface covered by rock fragments: 1 to 5 percent by subangular stones, 5 to 10 percent by subangular cobbles, and 20 to 35 percent by coarse, subangular gravel

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 26 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.0 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 5 inches; gravelly clay loam

Bt—5 to 15 inches; cobbly clay

Cr—15 to 23 inches; soft, weathered bedrock

R—23 to 33 inches; bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 25 to 55 percent

Landform: Mountain slopes

Alberti, stony, and similar soils

Extent: About 3 percent of the map unit

Slope: 9 to 30 percent

Landform: Mountain slopes

Cibo and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Erskine and similar soils

Extent: About 2 percent of the map unit

Slope: 9 to 40 percent

Landform: Mountain slopes

Hyte and similar soils

Extent: About 1 percent of the map unit

Slope: 20 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow flood plains

531—Tweedy-Erskine-Alberti association, 30 to 60 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 3,995 to 4,995 feet (1,219 to 1,524 meters)

Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)

Mean annual air temperature: 52 to 59 degrees F (11 to 15 degrees C)

Frost-free period: 150 to 200 days

Map unit composition

Tweedy—40 percent

Erskine—25 percent

Alberti, gravelly—20 percent

Minor components—15 percent

Characteristics of Tweedy and similar soils

Slope and aspect: 30 to 60 percent, northwest to northeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from mica schist

Typical vegetation: Annual and perennial grasses, shrubs, cypress, pinyon pine, and junipers

Percentage of the surface covered by rock fragments: 40 to 60 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 5.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 11 inches; sandy loam

Bt—11 to 36 inches; sandy clay loam

Cr—36 to 46 inches; soft, weathered bedrock

Characteristics of Erskine and similar soils

Slope and aspect: 30 to 60 percent, south to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from igneous rocks and/or from gabbro

Typical vegetation: Annual and perennial grasses, shrubs, cypress, and pinyon pine

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.7 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 7 inches; gravelly sandy loam

Bt—7 to 19 inches; gravelly sandy loam

Cr—19 to 29 inches; soft, weathered bedrock

Characteristics of Alberti, gravelly, and similar soils

Slope and aspect: 30 to 60 percent, south to west aspects

Landform: Mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, junipers, and scattered foothill pine trees

Percentage of the surface covered by rock fragments: 20 to 35 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; and 1 to 5 percent by subangular stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 26 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 5 inches; gravelly clay loam

Bt—5 to 17 inches; cobbly clay

Cr—17 to 20 inches; soft, weathered bedrock

R—20 to 30 inches; bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 25 to 65 percent

Landform: Mountain slopes

Edmundston and similar soils

Extent: About 4 percent of the map unit

Slope: 20 to 60 percent

Landform: Mountain slopes

Cibo and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Very stony soils and similar soils

Extent: About 2 percent of the map unit

Slope: 40 to 60 percent

Landform: Mountain slopes

Rankor and similar soils

Extent: About 1 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

532—Alberti gravelly loam, 5 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 18—Sierra Nevada Foothills

Landscape: Mountains

Elevation: 2,595 to 2,995 feet (792 to 914 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 57 to 61 degrees F (14 to 16 degrees C)

Frost-free period: 190 to 215 days

Map unit composition

Alberti, gravelly—80 percent

Minor components—20 percent

Characteristics of Alberti, gravelly, and similar soils

Slope: 5 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gabbro

Typical vegetation: Annual grasses, forbs, shrubs, junipers, oaks, and scattered foothill pine trees

Percentage of the surface covered by rock fragments: 20 to 35 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; and 1 to 5 percent by subangular stones

Depth to a restrictive feature: 10 to 20 inches to paralithic bedrock; 20 to 26 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 2.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 1 inch; gravelly loam

Bt—1 to 17 inches; cobbly clay

Cr—17 to 22 inches; soft, weathered bedrock

R—22 to 32 inches; bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Alberti, cobbly, and similar soils

Extent: About 4 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Cibo and similar soils

Extent: About 4 percent of the map unit

Slope: 9 to 35 percent

Landform: Mountain slopes

Tweedy and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 30 percent

Landform: Mountain slopes

Goodale, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Channels and drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Southlake and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan remnants

Urban land

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent
Landform: Fan remnants

540—Canebrake-Lachim complex, 30 to 60 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County to Walker Pass
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 5,200 to 6,400 feet (1,585 to 1,951 meters)
Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)
Mean annual air temperature: 48 to 52 degrees F (9 to 11 degrees C)
Frost-free period: 130 to 160 days

Map unit composition

Canebrake—60 percent
Lachim—20 percent
Minor components—20 percent

Characteristics of Canebrake and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Colluvium derived from granitoid rocks
Typical vegetation: Perennial grasses, shrubs, and pinyon pine
Percentage of the surface covered by rock fragments: 10 to 20 percent by fine, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 0.8 inch (very low)
Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 8

Typical profile
A1—0 to 10 inches; gravelly loamy coarse sand
A2—10 to 16 inches; gravelly loamy coarse sand
Cr—16 to 26 inches; soft, weathered bedrock

Characteristics of Lachim and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine
Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel and 5 to 15 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; gravelly loamy coarse sand

C1—3 to 13 inches; gravelly loamy coarse sand

C2—13 to 26 inches; gravelly loamy coarse sand

Cr—26 to 36 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Stony and bouldery soils and similar soils

Extent: About 4 percent of the map unit

Slope: 35 to 75 percent

Landform: Mountain slopes

Scodie and similar soils

Extent: About 3 percent of the map unit

Slope: 40 to 70 percent

Landform: Mountain slopes

Sacatar and similar soils

Extent: About 2 percent of the map unit

Slope: 15 to 30 percent

Landform: Mountain slopes

Soils that are shallow to hard bedrock and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Toll and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans and mountain valleys

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

541—Canebrake-Lachim-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 5,200 to 6,400 feet (1,585 to 1,951 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 48 to 52 degrees F (9 to 11 degrees C)

Frost-free period: 130 to 160 days

Map unit composition

Canebrake—45 percent

Lachim—20 percent

Rock outcrop—15 percent

Minor components—20 percent

Characteristics of Canebrake and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by fine, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 9 inches; gravelly loamy coarse sand

A2—9 to 12 inches; gravelly loamy coarse sand

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Lachim and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel and 5 to 15 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 6 inches; loamy sand

A2—6 to 16 inches; loamy sand

AC—16 to 26 inches; loamy coarse sand

Cr—26 to 36 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 25 to 65 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Lachim, stony, and similar soils

Extent: About 6 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Bouldery soils and similar soils

Extent: About 6 percent of the map unit

Slope: 30 to 70 percent

Landform: Mountain slopes

Sacatar and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 30 percent

Landform: Mountain slopes

Flooded soils and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Toll and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans and mountain valleys

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and flood plains

543—Wortley-Indiano-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 5,200 to 6,795 feet (1,585 to 2,072 meters)

Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)

Mean annual air temperature: 48 to 52 degrees F (9 to 11 degrees C)

Frost-free period: 90 to 120 days

Map unit composition

Wortley—45 percent

Indiano—25 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Wortley and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks and/or from gabbro

Typical vegetation: Perennial and annual grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 5 to 10 percent by coarse, subangular gravel and 0 to 20 percent by subangular cobbles

Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 5 inches; cobbly coarse sandy loam

A2—5 to 10 inches; cobbly coarse sandy loam

Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Indiano and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from metavolcanic rocks and/or from gabbro

Typical vegetation: Perennial and annual grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 10 to 20 percent by subangular cobbles and 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.7 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 6 inches; cobbly sandy loam

Bt1—6 to 12 inches; gravelly sandy clay loam

Bt2—12 to 28 inches; gravelly sandy clay loam

Cr—28 to 38 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Scodie and similar soils

Extent: About 7 percent of the map unit

Slope: 60 to 75 percent

Landform: Mountain slopes

Toll and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 15 percent

Landform: Alluvial fans and mountain valleys

Stony soils and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and flood plains

544—Xeric Haplargids-Lithic Xeric Haplargids complex, mesic, 5 to 30 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 5,600 to 6,695 feet (1,707 to 2,042 meters)

Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)

Mean annual air temperature: 45 to 52 degrees F (7 to 11 degrees C)

Frost-free period: 75 to 150 days

Map unit composition

Xeric Haplargids—60 percent

Lithic Xeric Haplargids—20 percent

Minor components—20 percent

Characteristics of Xeric Haplargids and similar soils

Slope: 5 to 30 percent

Landform: Alluvial fans and mountain valleys

Parent material: Alluvium derived from metasedimentary rocks over residuum weathered from metasedimentary rocks

Typical vegetation: Perennial grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 10 to 35 percent by coarse, subangular gravel; 5 to 10 percent by subangular cobbles; and 5 to 10 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.4 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

- A—0 to 24 inches; cobbly loamy sand
- Bt1—24 to 38 inches; cobbly sandy loam
- Bt2—38 to 40 inches; very stony sandy clay loam
- R—40 to 50 inches; bedrock

Characteristics of Lithic Xeric Haplargids and similar soils

Slope: 5 to 30 percent

Landform: Alluvial fans, mountain valleys, and strath terraces

Parent material: Alluvium derived from metasedimentary rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 20 to 50 percent by coarse, subangular gravel and 0 to 5 percent by subangular cobbles

Depth to a restrictive feature (lithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 9 inches; very gravelly sandy loam

Bt—9 to 18 inches; very cobbly sandy loam

R—18 to 28 inches; bedrock

Minor components

Kenypeak and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 40 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 6 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Stony soils and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 35 percent

Landform: Mountain slopes

Sacatar and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 8 percent

Landform: Lower mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Narrow flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and narrow flood plains

545—Sacatar-Canebrake complex, 5 to 30 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 4,395 to 4,995 feet (1,341 to 1,524 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 52 to 55 degrees F (11 to 13 degrees C)

Frost-free period: 140 to 180 days

Map unit composition

Sacatar—50 percent

Canebrake—30 percent

Minor components—20 percent

Characteristics of Sacatar and similar soils

Slope: 5 to 30 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, pinyon pine, and scattered foothill pine trees

Percentage of the surface covered by rock fragments: 0 percent

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.2 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 10 inches; loamy coarse sand

Bt—10 to 34 inches; coarse sandy loam

Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 4 inches; gravelly loamy coarse sand

A2—4 to 14 inches; gravelly loamy coarse sand

Cr—14 to 24 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 6 percent of the map unit

Slope: 5 to 40 percent

Landform: Mountain slopes

Xyno and similar soils

Extent: About 6 percent of the map unit

Slope: 10 to 30 percent

Landform: Mountain slopes

Chollawell and similar soils

Extent: About 3 percent of the map unit

Slope: 5 to 30 percent

Landform: Fan piedmonts

Inyo and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 5 percent

Landform: Fan piedmonts and inset fans

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

549—Tunawee-Rock outcrop complex, 15 to 40 percent slopes

Map unit setting

General location: High mountains in eastern Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 7,345 to 8,395 feet (2,240 to 2,560 meters)

Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)

Mean annual air temperature: 39 to 46 degrees F (4 to 8 degrees C)

Frost-free period: 50 to 100 days

Map unit composition

Tunawee—60 percent

Rock outcrop—25 percent

Minor components—15 percent

Characteristics of Tunawee and similar soils

Slope: 15 to 40 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses forbs, shrubs, junipers, pinyon pine, and Jeffrey pine

Percentage of the surface covered by rock fragments: 1 to 20 percent by subangular boulders, 1 to 10 percent by subangular stones, 1 to 5 percent by subangular cobbles, and 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 10 inches; gravelly loamy coarse sand

A2—10 to 12 inches; gravelly loamy coarse sand

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 15 to 40 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Kenypeak and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 45 percent

Landform: Mountain slopes

Tibbcreek and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 25 percent

Landform: Plateaus

Shallow soils and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 50 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Drainageways and flood plains

550—Kenypeak-Rubble land-Rock outcrop complex, 60 to 100 percent slopes

Map unit setting

General location: High mountains in eastern Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 7,495 to 7,665 feet (2,286 to 2,337 meters)

Mean annual precipitation: 10 to 15 inches (254 to 381 millimeters)

Mean annual air temperature: 39 to 45 degrees F (4 to 7 degrees C)

Frost-free period: 50 to 100 days

Map unit composition

Kenypeak—40 percent

Rubble land—20 percent

Rock outcrop—20 percent

Minor components—20 percent

Characteristics of Kenypeak and similar soils

Slope: 60 to 80 percent

Landform: Mountain slopes

Parent material: Residuum weathered from metasedimentary rocks and/or from schist

Typical vegetation: Perennial grasses, shrubs, pinyon pine, and junipers

Percentage of the surface covered by rock fragments: 5 to 40 percent by coarse, subangular gravel; 1 to 30 percent by subangular cobbles; and 0 to 10 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 5 to 10 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 8 inches; very gravelly sandy loam

R—8 to 18 inches; bedrock

Characteristics of Rubble land

Slope: 60 to 100 percent

Landform: Mountain slopes

Kind of material: Residuum weathered from metasedimentary rocks and/or from metaquartzite

Typical vegetation: Very sparse vegetation

Percentage of the surface covered by rock fragments: 25 to 30 percent by subangular boulders, 20 to 25 percent by subangular stones, 30 to 35 percent by subangular cobbles, and 15 to 20 percent by coarse, subangular gravel

Restrictive feature: None noted

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 8

Characteristics of Rock outcrop

Slope: 60 to 100 percent

Landform: Mountain slopes

Kind of rock: Metasedimentary rocks and schist

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Deadfoot and similar soils

Extent: About 10 percent of the map unit

Slope: 20 to 70 percent

Landform: Mountain slopes

Tunawee and similar soils

Extent: About 9 percent of the map unit

Slope: 50 to 75 percent

Landform: Upper mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 5 to 25 percent

Landform: Drainageways

551—Tunawee bouldery loamy coarse sand, 15 to 50 percent slopes

Map unit setting

General location: High mountains in eastern Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 6,895 to 8,395 feet (2,103 to 2,560 meters)

Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)

Mean annual air temperature: 39 to 46 degrees F (4 to 8 degrees C)

Frost-free period: 50 to 100 days

Map unit composition

Tunawee—70 percent

Minor components—30 percent

Characteristics of Tunawee and similar soils

Slope: 15 to 50 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, pinyon pine, junipers, and Jeffrey pine

Percentage of the surface covered by rock fragments: 1 to 20 percent by subangular boulders, 1 to 10 percent by subangular stones, 1 to 5 percent by subangular cobbles, and 10 to 20 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.2 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A1—0 to 11 inches; bouldery loamy coarse sand
- A2—11 to 18 inches; bouldery loamy coarse sand
- Cr—18 to 28 inches; soft, weathered bedrock

Minor components

Rock outcrop

Extent: About 9 percent of the map unit

Slope: 15 to 65 percent

Landform: Mountain slopes

Very bouldery soils and similar soils

Extent: About 6 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Tibbcreek and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 25 percent

Landform: Plateaus

Moderately deep soils and similar soils

Extent: About 4 percent of the map unit

Slope: 15 to 50 percent

Landform: Mountain slopes

Very shallow soils and similar soils

Extent: About 3 percent of the map unit

Slope: 50 to 100 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 5 percent

Landform: Drainageways, flood plains, and mountain valleys

**552—Kenypeak-Torriorthentic Haploxerolls association,
skeletal, 30 to 60 percent slopes**

Map unit setting

General location: Chimney Peak area in Tulare County to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 6,200 to 8,195 feet (1,890 to 2,499 meters)

Mean annual precipitation: 9 to 14 inches (225 to 356 millimeters)

Mean annual air temperature: 43 to 52 degrees F (6 to 11 degrees C)
Frost-free period: 50 to 130 days

Map unit composition

Kenypeak—60 percent
Torriorthentic Haploxerolls—25 percent
Minor components—15 percent

Characteristics of Kenypeak and similar soils

Slope: 30 to 60 percent
Landform: Upper and middle mountain slopes
Parent material: Residuum weathered from metasedimentary rocks and/or from schist
Typical vegetation: Perennial grasses, shrubs, pinyon pine, and junipers
Percentage of the surface covered by rock fragments: 10 to 60 percent by coarse, subangular gravel; 1 to 30 percent by subangular cobbles; and 0 to 5 percent by subangular stones
Depth to a restrictive feature (lithic bedrock): 5 to 20 inches
Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 3 inches; gravelly fine sandy loam
A2—3 to 12 inches; very cobbly fine sandy loam
R—12 to 22 inches; bedrock

Characteristics of Torriorthentic Haploxerolls and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from metasedimentary rocks
Typical vegetation: Annual and perennial grasses, shrubs, pinyon pine, and junipers
Percentage of the surface covered by rock fragments: 1 to 5 percent by subangular cobbles; 30 to 60 percent by coarse, subangular gravel; and 1 to 5 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 2.7 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Very high
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

- A—0 to 10 inches; very gravelly sandy loam
- C—10 to 34 inches; very gravelly loam
- Cr—34 to 44 inches; soft, weathered bedrock

Minor components

Tunawee and similar soils

- Extent:* About 7 percent of the map unit
- Slope:* 25 to 50 percent
- Landform:* Mountain slopes

Rock outcrop

- Extent:* About 6 percent of the map unit
- Slope:* 25 to 65 percent
- Landform:* Mountain slopes

Riverwash

- Extent:* About 1 percent of the map unit
- Slope:* 1 to 9 percent
- Landform:* Drainageways

Flooded soils and similar soils

- Extent:* About 1 percent of the map unit
- Slope:* 0 to 2 percent
- Landform:* Narrow flood plains and mountain valleys

553—Tibbcreek gravelly loam, 5 to 30 percent slopes

Map unit setting

- General location:* Chimney Peak area in Tulare County
- MLRA:* 29—Southern Nevada Basin and Range
- Landscape:* Mountains
- Elevation:* 7,495 to 8,595 feet (2,286 to 2,621 meters)
- Mean annual precipitation:* 12 to 14 inches (305 to 356 millimeters)
- Mean annual air temperature:* 39 to 46 degrees F (4 to 8 degrees C)
- Frost-free period:* 60 to 100 days

Map unit composition

- Tibbcreek—75 percent
- Minor components—25 percent

Characteristics of Tibbcreek and similar soils

- Slope:* 5 to 30 percent
 - Landform:* Broad ridges
 - Parent material:* Residuum weathered from metasedimentary rocks
 - Typical vegetation:* Pinyon pine, junipers, and shrubs
 - Percentage of the surface covered by rock fragments:* 15 to 35 percent by coarse, subangular gravel and 0 to 5 percent by subangular cobbles
 - Depth to a restrictive feature:* 10 to 20 inches to paralithic bedrock; 20 to 40 inches to lithic bedrock
 - Available water capacity to a depth of 60 inches:* About 2.4 inches (very low)
- Hydrologic properties*
- Present annual flooding:* None
 - Present annual ponding:* None

Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification
Irrigated and nonirrigated areas: 6e

Typical profile
A—0 to 8 inches; gravelly loam
Bt—8 to 18 inches; gravelly clay loam
Cr—18 to 35 inches; soft, weathered bedrock
R—35 to 45 inches; bedrock

Minor components

Kenypeak and similar soils

Extent: About 7 percent of the map unit
Slope: 10 to 35 percent
Landform: Mountain slopes

Torriorthentic Haploxerolls and similar soils

Extent: About 6 percent of the map unit
Slope: 10 to 45 percent
Landform: Hillslopes

Rock outcrop

Extent: About 5 percent of the map unit
Slope: 10 to 40 percent
Landform: Hills

Toll and similar soils

Extent: About 4 percent
Slope: 5 to 20 percent
Landform: Alluvial fans

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways and flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains

554—Deerspring fine sandy loam, 0 to 5 percent slopes

Map unit setting

General location: Mountain valleys in eastern Tulare County
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 5,200 to 7,795 feet (1,585 to 2,377 meters)

Mean annual precipitation: 8 to 14 inches (203 to 356 millimeters)

Mean annual air temperature: 45 to 55 degrees F (7 to 13 degrees C)

Frost-free period: 85 to 150 days

Map unit composition

Deerspring—85 percent

Minor components—15 percent

Characteristics of Deerspring and similar soils

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys (fig. 13)

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual and perennial grasses, sedges, and shrubs

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.3 inches (moderate)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: Present

Natural drainage class: Moderately well drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6e



Figure 13.—An area of Deerspring fine sandy loam, 0 to 5 percent slopes, in Landers Meadow.

Typical profile

- A—0 to 11 inches; fine sandy loam
- C1—11 to 24 inches; fine sandy loam
- C2—24 to 80 inches; loam

Minor components

Cumulic Endoaquolls, frigid, and similar soils

- Extent:* About 8 percent of the map unit
- Slope:* 0 to 5 percent
- Landform:* Flood plains and mountain valleys

Toll and similar soils

- Extent:* About 4 percent of the map unit
- Slope:* 1 to 6 percent
- Landform:* Alluvial fans, mountain valleys, and stream terraces

Slickspots

- Extent:* About 2 percent of the map unit
- Slope:* 0 to 2 percent
- Landform:* Flood plains and mountain valleys

Riverwash

- Extent:* About 1 percent of the map unit
- Slope:* 0 to 4 percent
- Landform:* Channels, drainageways, and mountain valleys

555—Cumulic Endoaquolls, frigid, 0 to 5 percent slopes

Map unit setting

- General location:* Mountain valleys in eastern Tulare County
- MLRA:* 29—Southern Nevada Basin and Range
- Landscape:* Mountains
- Elevation:* 5,195 to 7,795 feet (1,584 to 2,377 meters)
- Mean annual precipitation:* 8 to 14 inches (203 to 356 millimeters)
- Mean annual air temperature:* 45 to 48 degrees F (7 to 9 degrees C)
- Frost-free period:* 75 to 90 days

Map unit composition

- Cumulic Endoaquolls, frigid—75 percent
- Minor components—25 percent

Characteristics of Cumulic Endoaquolls, frigid, and similar soils

- Slope:* 0 to 5 percent
- Landform:* Channels, depressions, flood plains, and mountain valleys
- Parent material:* Alluvium derived from granitoid rocks
- Typical vegetation:* Annual and perennial grasses, forbs, sedges, and willows
- Percentage of the surface covered by rock fragments:* 0 percent
- Restrictive feature:* None noted
- Available water capacity to a depth of 60 inches:* About 10.9 inches (very high)

Hydrologic properties

- Present annual flooding:* Frequent
- Present annual ponding:* None
- Surface runoff class:* Very high
- Current water table:* Present

Natural drainage class: Poorly drained

Hydrologic soil group: C

Land capability classification

Irrigated and nonirrigated areas: 6w

Typical profile

A—0 to 28 inches; sandy loam

Cg1—28 to 52 inches; sandy loam

Cg2—52 to 65 inches; coarse sandy loam

Minor components

Deerspring and similar soils

Extent: About 9 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys

Toll and similar soils

Extent: About 8 percent of the map unit

Slope: 1 to 9 percent

Landform: Alluvial fans, mountain valleys, and stream terraces

Dry soils and similar soils

Extent: About 6 percent of the map unit

Slope: 1 to 5 percent

Landform: Alluvial fans, mountain valleys, and stream terraces

Riverwash

Extent: About 2 percent of the map unit

Slope: 1 to 4 percent

Landform: Channels, drainageways, and mountain valleys

556—Toll loamy coarse sand, 2 to 9 percent slopes

Map unit setting

General location: Mountain valleys in eastern Tulare County

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 4,995 to 6,995 feet (1,524 to 2,133 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 46 to 55 degrees F (8 to 13 degrees C)

Frost-free period: 85 to 120 days

Map unit composition

Toll—80 percent

Minor components—20 percent

Characteristics of Toll and similar soils

Slope: 2 to 9 percent

Landform: Alluvial fans, mountain valleys, and stream terraces (fig. 14)

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Perennial and annual grasses, forbs, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 10 to 80 percent by coarse, subangular gravel



Figure 14.—An area of Toll loamy coarse sand, 2 to 9 percent slopes.

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.4 inches (low)

Hydrologic properties

Present annual flooding: Rare

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Irrigated and nonirrigated areas: 6s

Typical profile

A—0 to 6 inches; loamy coarse sand

C1—6 to 24 inches; coarse sand

C2—24 to 60 inches; gravelly loamy coarse sand

Minor components

Deerspring and similar soils

Extent: About 5 percent of the map unit

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys

Canebrake and similar soils

Extent: About 4 percent of the map unit

Slope: 5 to 12 percent

Landform: Hillslopes and mountain valleys

Cumulic Endoaquolls, frigid, and similar soils

Extent: About 3 percent of the map unit

Slope: 0 to 3 percent

Landform: Flood plains and mountain valleys

Deadfoot and similar soils

Extent: About 3 percent of the map unit

Slope: 9 to 15 percent

Landform: Hillslopes and mountain valleys

Riverwash

Extent: About 3 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels, drainageways, and mountain valleys

Deep, loamy soils and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 4 percent

Landform: Alluvial fans and mountain valleys

557—Scodie-Canebrake-Deadfoot complex, 30 to 60 percent slopes

Map unit setting

General location: From the Kennedy Meadows area in Tulare County south to Walker Pass

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 5,895 to 7,800 feet (1,798 to 2,378 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 46 to 54 degrees F (8 to 12 degrees C)

Frost-free period: 80 to 160 days

Map unit composition

Scodie—35 percent

Canebrake—25 percent

Deadfoot—20 percent

Minor components—20 percent

Characteristics of Scodie and similar soils

Slope: 30 to 60 percent

Landform: Upper mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, pinyon pine, and junipers

Percentage of the surface covered by rock fragments: 10 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 5 to 10 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 3 inches; gravelly loamy coarse sand

A2—3 to 10 inches; gravelly loamy coarse sand

Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 5 to 25 percent by coarse, subangular gravel; 0 to 3 percent by subangular cobbles; 0 to 3 percent by subangular stones; and 0 to 3 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.5 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 3 inches; gravelly coarse sand

A2—3 to 12 inches; gravelly loamy coarse sand

Cr—12 to 22 inches; soft, weathered bedrock

Characteristics of Deadfoot and similar soils

Slope: 30 to 60 percent

Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 0 to 10 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.5 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 10 inches; very bouldery loamy coarse sand

C—10 to 29 inches; very stony loamy coarse sand

Cr—29 to 39 inches; soft, weathered bedrock

Minor components

Wortley and similar soils

Extent: About 7 percent of the map unit

Slope: 20 to 40 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 6 percent of the map unit

Slope: 20 to 70 percent

Landform: Mountain slopes

Kenypeak and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Upper mountain slopes

Sacatar and similar soils

Extent: About 2 percent of the map unit

Slope: 5 to 30 percent

Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Toll and similar soils

Extent: About 1 percent of the map unit

Slope: 2 to 15 percent

Landform: Alluvial fans, mountain valleys, and stream terraces

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

558—Indiano-Wortley complex, 30 to 60 percent slopes

Map unit setting

General location: Chimney Peak area in Tulare County

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 5,995 to 7,995 feet (1,828 to 2,438 meters)

Mean annual precipitation: 10 to 13 inches (254 to 330 millimeters)

Mean annual air temperature: 45 to 48 degrees F (7 to 9 degrees C)

Frost-free period: 80 to 110 days

Map unit composition

Indiano—60 percent
Wortley—20 percent
Minor components—20 percent

Characteristics of Indiano and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from gabbro and/or from metavolcanic rocks
Typical vegetation: Perennial grasses, shrubs, and pinyon pine
Percentage of the surface covered by rock fragments: 10 to 20 percent by coarse, subangular gravel and 10 to 20 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.7 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 6 inches; cobbly sandy loam
Bt1—6 to 12 inches; gravelly sandy clay loam
Bt2—12 to 28 inches; gravelly sandy clay loam
Cr—28 to 38 inches; soft, weathered bedrock

Characteristics of Wortley and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes
Parent material: Residuum weathered from gabbro and/or from granitoid rocks
Typical vegetation: Perennial and annual grasses, shrubs, and pinyon pine
Percentage of the surface covered by rock fragments: 0 to 20 percent by subangular cobbles and 5 to 10 percent by coarse, subangular gravel
Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches
Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: High
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A1—0 to 2 inches; cobbly coarse sandy loam

A2—2 to 9 inches; cobbly coarse sandy loam
Cr—9 to 19 inches; soft, weathered bedrock

Minor components

Scodie and similar soils

Extent: About 6 percent of the map unit
Slope: 40 to 60 percent
Landform: Upper mountain slopes

Rock outcrop

Extent: About 5 percent of the map unit
Slope: 30 to 70 percent
Landform: Mountain slopes

Toll and similar soils

Extent: About 4 percent of the map unit
Slope: 2 to 25 percent
Landform: Alluvial fans and mountain valleys

Very stony soils and similar soils

Extent: About 2 percent of the map unit
Slope: 35 to 65 percent
Landform: Mountain slopes

Riverwash

Extent: About 1 percent of the map unit
Slope: 1 to 9 percent
Landform: Drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Flood plains and mountain valleys

Xerofluents, flooded, and similar soils

Extent: About 1 percent of the map unit
Slope: 0 to 2 percent
Landform: Drainageways, flood plains, and mountain valleys

560—Sacatar-Wortley-Calpine complex, 5 to 30 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains and hills
Elevation: 5,595 to 7,595 feet (1,706 to 2,316 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 50 degrees F (7 to 10 degrees C)
Frost-free period: 80 to 140 days

Map unit composition

Sacatar—30 percent
Wortley—30 percent

Calpine—20 percent
Minor components—20 percent

Characteristics of Sacatar and similar soils

Slope: 5 to 30 percent
Landform: Hills, hillslopes, and mountain slopes
Parent material: Residuum weathered from granitoid rocks
Typical vegetation: Annual and perennial grasses, forbs, shrubs, and pinyon pine
Surface feature: A 1-inch layer of pine needles and twigs under pinyon pine canopies
Percentage of the surface covered by rock fragments: 0 percent
Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches
Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 2 inches; loamy coarse sand
AB—2 to 10 inches; coarse sandy loam
Bt—10 to 34 inches; coarse sandy loam
Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Wortley and similar soils

Slope: 5 to 30 percent
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from granitoid rocks and/or from gabbro
Typical vegetation: Annual and perennial grasses, shrubs, and pinyon pine
Surface feature: A 1-inch layer of pine needles and twigs under pinyon pine canopies
Percentage of the surface covered by rock fragments: 5 to 10 percent by coarse, subangular gravel and 0 to 20 percent by subangular cobbles
Depth to a restrictive feature (paralithic bedrock): 8 to 20 inches
Available water capacity to a depth of 60 inches: About 1.0 inch (very low)

Hydrologic properties

Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A1—0 to 2 inches; coarse sandy loam
A2—2 to 8 inches; coarse sandy loam
Cr—8 to 18 inches; soft, weathered bedrock

Characteristics of Calpine and similar soils

Slope: 5 to 30 percent

Landform: Alluvial fans and low pediments

Parent material: Alluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, and pinyon pine

Surface feature: A 1-inch layer of pine needles and twigs under pinyon pine canopies

Percentage of the surface covered by rock fragments: 0 to 10 percent by subangular cobbles and 0 to 15 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.5 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 10 inches; loamy coarse sand

Bw—10 to 68 inches; coarse sandy loam

Minor components

Canebrake and similar soils

Extent: About 6 percent of the map unit

Slope: 10 to 35 percent

Landform: Hillslopes and mountain slopes

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 15 to 40 percent

Landform: Hillslopes and mountain slopes

Toll and similar soils

Extent: About 3 percent of the map unit

Slope: 1 to 15 percent

Landform: Alluvial fans and stream terraces

Xyno, stony, and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 40 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 2 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Drainageways and flood plains

561—Scodie-Sacatar-Canebrake complex, 5 to 30 percent slopes

Map unit setting

General location: Kennedy Meadows area in Tulare County

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 3,795 to 7,495 feet (1,158 to 2,286 meters)

Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)

Mean annual air temperature: 46 to 55 degrees F (8 to 13 degrees C)

Frost-free period: 80 to 180 days

Map unit composition

Scodie—30 percent

Sacatar—25 percent

Canebrake—20 percent

Minor components—25 percent

Characteristics of Scodie and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, pinyon pine, and foothill pine

Percentage of the surface covered by rock fragments: 10 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 5 to 10 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 10 inches; gravelly loamy coarse sand

Cr—10 to 20 inches; soft, weathered bedrock

Characteristics of Sacatar and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, pinyon pine, and foothill pine

Percentage of the surface covered by rock fragments: 0 percent

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None
Surface runoff class: Low
Current water table: None noted
Natural drainage class: Well drained
Hydrologic soil group: B

Land capability classification
Irrigated and nonirrigated areas: 6e

Typical profile
A—0 to 2 inches; loamy coarse sand
Bt—2 to 34 inches; coarse sandy loam
Cr—34 to 44 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope: 9 to 30 percent
Landform: Hillslopes and mountain slopes
Parent material: Colluvium derived from granitoid rocks
Typical vegetation: Perennial grasses, shrubs, pinyon pine, and foothill pine
Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones
Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches
Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties
Present annual flooding: None
Present annual ponding: None
Surface runoff class: Medium
Current water table: None noted
Natural drainage class: Somewhat excessively drained
Hydrologic soil group: C

Land capability classification
Nonirrigated areas: 8

Typical profile
A—0 to 6 inches; gravelly loamy sand
C—6 to 16 inches; gravelly loamy coarse sand
Cr—16 to 26 inches; soft, weathered bedrock

Minor components

Faycreek and similar soils

Extent: About 7 percent of the map unit
Slope: 20 to 45 percent
Landform: Hillslopes and mountain slopes

Wortley and similar soils

Extent: About 6 percent of the map unit
Slope: 5 to 30 percent
Landform: Hillslopes and mountain slopes

Rock outcrop

Extent: About 4 percent of the map unit
Slope: 10 to 40 percent
Landform: Hillslopes and mountain slopes

Xyno and similar soils

Extent: About 3 percent of the map unit

Slope: 15 to 35 percent

Landform: Hillslopes and mountain slopes

Toll and similar soils

Extent: About 2 percent of the map unit

Slope: 0 to 7 percent

Landform: Alluvial fans, mountain valleys, and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

562—Deerspring loam, partially drained, 0 to 5 percent slopes

Map unit setting

General location: From the Kennedy Meadows area in Tulare County south to Walker Pass, in mountain valleys of eastern Tulare County

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 6,200 to 6,800 feet (1,890 to 2,073 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 45 to 55 degrees F (7 to 13 degrees C)

Frost-free period: 85 to 150 days

Map unit composition

Deerspring, partially drained—85 percent

Minor components—15 percent

Characteristics of Deerspring, partially drained, and similar soils

Slope: 0 to 5 percent

Landform: Flood plains and mountain valleys

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Annual grasses, forbs, and sedges

Percentage of the surface covered by rock fragments: 5 to 15 percent by coarse, subangular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 8.1 inches (high)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: Low
Current water table: Present
Natural drainage class: Moderately well drained
Hydrologic soil group: C

Land capability classification
Irrigated and nonirrigated areas: 6w

Typical profile
A—0 to 21 inches; loam
C—21 to 60 inches; fine sandy loam

Minor components

Toll and similar soils

Extent: About 6 percent of the map unit
Slope: 1 to 9 percent
Landform: Alluvial fans, mountain valleys, and stream terraces

Deerspring and similar soils

Extent: About 5 percent of the map unit
Slope: 0 to 5 percent
Landform: Depressions, flood plains, and mountain valleys

Cumulic Endoaquolls, frigid, and similar soils

Extent: About 3 percent of the map unit
Slope: 0 to 5 percent
Landform: Channels, depressions, flood plains, and mountain valleys

Riverwash

Extent: About 1 percent of the map unit
Slope: 0 to 4 percent
Landform: Channels, drainageways, and mountain valleys

570—Deadfoot-Scodie-Rock outcrop complex, 30 to 60 percent slopes

Map unit setting

General location: From the Kennedy Meadows area in Tulare County south to Walker Pass
MLRA: 29—Southern Nevada Basin and Range
Landscape: Mountains
Elevation: 6,000 to 7,795 feet (1,829 to 2,377 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 50 degrees F (7 to 10 degrees C)
Frost-free period: 75 to 140 days

Map unit composition

Deadfoot—40 percent
Scodie—20 percent
Rock outcrop—20 percent
Minor components—20 percent

Characteristics of Deadfoot and similar soils

Slope: 30 to 60 percent
Landform: Mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; 5 to 15 percent by subangular stones; and 0 to 10 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.1 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 10 inches; very bouldery loamy coarse sand

C—10 to 23 inches; very stony loamy coarse sand

Cr—23 to 33 inches; soft, weathered bedrock

Characteristics of Scodie and similar soils

Slope: 30 to 60 percent

Landform: Upper mountain slopes

Parent material: Residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and pinyon pine

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; 1 to 15 percent by subangular stones; and 0 to 10 percent by subangular boulders

Depth to a restrictive feature (paralithic bedrock): 5 to 10 inches

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 9 inches; bouldery loamy coarse sand

Cr—9 to 19 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Sacatar and similar soils

Extent: About 6 percent of the map unit

Slope: 5 to 30 percent

Landform: Mountain slopes

Wortley and similar soils

Extent: About 6 percent of the map unit

Slope: 30 to 60 percent

Landform: Mountain slopes

Canebrake and similar soils

Extent: About 2 percent of the map unit

Slope: 35 to 65 percent

Landform: Upper mountain slopes

Kenypeak and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent slopes

Landform: Upper mountain slopes

Toll and similar soils

Extent: About 2 percent of the map unit

Slope: 1 to 9 percent

Landform: Alluvial fans and stream terraces

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

590—Xyno-Canebrake-Pilotwell complex, 5 to 30 percent slopes

Map unit setting

General location: Isabella Lake area

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,995 to 4,195 feet (914 to 1,280 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 54 to 63 degrees F (12 to 17 degrees C)

Frost-free period: 150 to 210 days

Map unit composition

Xyno—35 percent

Canebrake—25 percent

Pilotwell—20 percent

Minor components—20 percent

Characteristics of Xyno and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Perennial grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope: 9 to 30 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, shrubs, foothill pine, and live oak

Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.8 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 7 inches; gravelly loamy coarse sand

C—7 to 17 inches; gravelly loamy coarse sand

Cr—17 to 27 inches; soft, weathered bedrock

Characteristics of Pilotwell and similar soils

Slope: 5 to 30 percent

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by coarse, subangular gravel; 2 to 10 percent by subangular cobbles; 0 to 2 percent by subangular boulders; and 0 to 1 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 20 to 40 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; gravelly loamy coarse sand

C—5 to 26 inches; gravelly loamy coarse sand

Cr—26 to 36 inches; soft, weathered bedrock

Minor components

Backcanyon and similar soils

Extent: About 5 percent of the map unit

Slope: 20 to 40 percent

Landform: Mountain slopes

Rock outcrop

Extent: About 5 percent of the map unit

Slope: 10 to 40 percent

Landform: Mountain slopes

Faycreek and similar soils

Extent: About 4 percent of the map unit

Slope: 15 to 35 percent

Landform: Upper mountain slopes

Inyo and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 9 percent

Landform: Fan piedmonts

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Flooded soils and similar soils and wet soils and similar soils

Extent: For each of the two components, about 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

591—Xyno-Canebrake-Rock outcrop association, 30 to 60 percent slopes

Map unit setting

General location: Isabella Lake area

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,795 to 5,200 feet (853 to 1,585 meters)

Mean annual precipitation: 6 to 10 inches (152 to 254 millimeters)

Mean annual air temperature: 54 to 61 degrees F (12 to 16 degrees C)

Frost-free period: 160 to 210 days

Map unit composition

Xyno—50 percent

Canebrake—20 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Xyno and similar soils

Slope and aspect: 30 to 60 percent, north to southwest aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: Annual grasses, forbs, and shrubs

Percentage of the surface covered by rock fragments: 10 to 30 percent by fine, subangular gravel; 0 to 5 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 8 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 11 inches; gravelly loamy coarse sand

Cr—11 to 21 inches; soft, weathered bedrock

Characteristics of Canebrake and similar soils

Slope and aspect: 30 to 60 percent, southwest to north aspects

Landform: Mountain slopes

Parent material: Colluvium derived from granitoid rocks

Typical vegetation: Annual and perennial grasses, forbs, shrubs, foothill pine, and a few scattered pinyon pine trees

Percentage of the surface covered by rock fragments: 0 to 15 percent by coarse, subangular gravel; 0 to 10 percent by subangular cobbles; and 0 to 10 percent by subangular stones

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 0.7 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 6 inches; gravelly loamy coarse sand

C—6 to 15 inches; gravelly loamy coarse sand

Cr—15 to 25 inches; soft, weathered bedrock

Characteristics of Rock outcrop

Slope: 30 to 60 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Hungrygulch and similar soils

Extent: About 5 percent of the map unit

Slope: 9 to 35 percent

Landform: Mountain slopes

Pilotwell and similar soils

Extent: About 4 percent of the map unit

Slope: 20 to 45 percent

Landform: Mountain slopes

Faycreek and similar soils

Extent: About 3 percent of the map unit

Slope: 35 to 65 percent

Landform: Mountain slopes

Goodale and similar soils

Extent: About 1 percent of the map unit

Slope: 1 to 5 percent

Landform: Drainageways

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent
Landform: Flood plains

599—Rock outcrop

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains and east Tulare County

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 6,000 to 7,795 feet (1,829 to 2,377 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 40 to 50 degrees F (7 to 10 degrees C)

Frost-free period: 75 to 140 days

Map unit composition

Rock outcrop—80 percent
Minor components—20 percent

Characteristics of Rock outcrop

Slope: 30 to 100 percent

Landform: Mountain slopes

Kind of rock: Granitoid

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Canebrake and similar soils

Extent: About 6 percent of the map unit

Slope: 20 to 60 percent

Landform: Lower mountain slopes

Lachim and similar soils

Extent: About 5 percent of the map unit

Slope: 30 to 60 percent

Landform: Lower mountain slopes

Sacatar and similar soils

Extent: About 4 percent of the map unit

Slope: 15 to 45 percent

Landform: Mountain slopes

Scodie and similar soils

Extent: About 4 percent of the map unit

Slope: 40 to 70 percent

Landform: Lower mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

610—Hyte-Erskine complex, 5 to 30 percent slopes

Map unit setting

General location: Southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Hills and mountains

Elevation: 2,995 to 3,995 feet (914 to 1,219 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 55 to 61 degrees F (13 to 16 degrees C)

Frost-free period: 160 to 200 days

Map unit composition

Hyte—40 percent

Erskine—35 percent

Minor components—25 percent

Characteristics of Hyte and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from gabbro and/or from granitoid rocks

Typical vegetation: Annual grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 0 to 3 percent by subangular cobbles, 0 to 3 percent by subangular stones, and 30 to 50 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.4 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 5 inches; gravelly sandy loam

Bt—5 to 14 inches; gravelly sandy loam

Cr—14 to 24 inches; soft, weathered bedrock

Characteristics of Erskine and similar soils

Slope: 5 to 30 percent

Landform: Hillslopes and mountain slopes

Parent material: Residuum weathered from igneous rocks and/or from gabbro

Typical vegetation: Annual and perennial grasses, shrubs, and junipers

Percentage of the surface covered by rock fragments: 5 to 20 percent by coarse, subangular gravel; 0 to 5 percent by subangular cobbles; 0 to 5 percent by subangular stones; and 0 to 5 percent by subrounded boulders

Depth to a restrictive feature (paralithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.7 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: C

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 7 inches; gravelly sandy loam

Bt—7 to 19 inches; gravelly sandy loam

Cr—19 to 29 inches; soft, weathered bedrock

Minor components

Cowspring and similar soils

Extent: About 5 percent of the map unit

Slope: 15 to 35 percent

Landform: Hillslopes and mountain slopes

Pilotwell and similar soils

Extent: About 5 percent of the map unit

Slope: 5 to 25 percent

Landform: Hillslopes and mountain slopes

Wet, flooded soils and similar soils

Extent: About 4 percent of the map unit

Slope: 0 to 2 percent

Landform: Depressions and flood plains

Rock outcrop

Extent: About 3 percent of the map unit

Slope: 10 to 40 percent

Landform: Hillslopes and mountain slopes

Stineway and similar soils

Extent: About 3 percent of the map unit

Slope: 10 to 30 percent

Landform: Hillslopes and mountain slopes

Xyno and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 40 percent

Landform: Hillslopes and mountain slopes

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Channels and drainageways

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

650—Stineway-Kiscove-Rock outcrop association, 30 to 75 percent slopes

Map unit setting

General location: The east side of the southern Sierra Nevada Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 2,595 to 4,395 feet (792 to 1,341 meters)

Mean annual precipitation: 8 to 10 inches (203 to 254 millimeters)

Mean annual air temperature: 55 to 61 degrees F (13 to 16 degrees C)

Frost-free period: 150 to 200 days

Map unit composition

Stineway—40 percent

Kiscove—30 percent

Rock outcrop—15 percent

Minor components—15 percent

Characteristics of Stineway and similar soils

Slope and aspect: 30 to 75 percent, north to southwest aspects

Landform: Mountain slopes

Parent material: Residuum weathered from metamorphic rocks and/or from schist

Typical vegetation: Annual grasses, forbs, shrubs, and junipers

Percentage of the surface covered by rock fragments: 15 to 35 percent by coarse, subangular gravel; 5 to 15 percent by subangular cobbles; and 0 to 5 percent by subangular stones

Depth to a restrictive feature (lithic bedrock): 10 to 20 inches

Available water capacity to a depth of 60 inches: About 1.6 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 3 inches; very gravelly loam

Bt1—3 to 6 inches; very gravelly loam

Bt2—6 to 16 inches; very cobbly loam

R—16 to 26 inches; bedrock

Characteristics of Kiscove and similar soils

Slope and aspect: 30 to 60 percent, west to southeast aspects

Landform: Mountain slopes

Parent material: Residuum weathered from metamorphic rocks

Typical vegetation: Perennial grasses, forbs, shrubs, and scattered junipers

Percentage of the surface covered by rock fragments: 15 to 25 percent by coarse, subangular gravel and 0 to 10 percent by cobbles

Depth to a restrictive feature: 5 to 19 inches to paralithic bedrock; 9 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 1.3 inches (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; gravelly loam

Bt—2 to 9 inches; gravelly clay loam

Cr—9 to 12 inches; soft, weathered bedrock

R—12 to 22 inches; bedrock

Characteristics of Rock outcrop

Slope: 30 to 75 percent

Landform: Mountain slopes

Kind of rock: Metamorphic

Typical vegetation: Barren

Hydrologic properties

Surface runoff class: Very high

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Minor components

Backcanyon and similar soils

Extent: About 5 percent of the map unit

Slope: 20 to 70 percent

Landform: Mountain slopes

Stineway, stony, and similar soils

Extent: About 3 percent of the map unit

Slope: 20 to 50 percent

Landform: Mountain slopes

Xyno and similar soils

Extent: About 3 percent of the map unit

Slope: 55 to 75 percent

Landform: Mountain slopes

Chollawell and similar soils

Extent: About 1 percent of the map unit

Slope: 5 to 20 percent

Landform: Fan piedmonts

Riverwash

Extent: About 1 percent of the map unit

Slope: 1 to 9 percent

Landform: Drainageways

Wet, flooded soils and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains and mountain valleys

Xerofluvents, flooded, and similar soils

Extent: About 1 percent of the map unit

Slope: 0 to 2 percent

Landform: Flood plains

3250—Jawbone association, 30 to 60 percent slopes

Map unit setting

General location: Granitoid hills and mountains on the western slope of the Sierra Nevada Range, west of Kelso Peak

MLRA: 30—Mojave Desert

Landscape: Mountains and hills

Elevation: 2,390 to 4,000 feet (730 to 1,220 meters)

Mean annual precipitation: 4 to 7 inches (100 to 175 millimeters)

Mean annual air temperature: 63 to 68 degrees F (17 to 20 degrees C)

Frost-free period: 210 to 270 days

Map unit composition

Jawbone—50 percent

Jawbone, moderately deep—40 percent

Minor components—10 percent

Characteristics of Jawbone and similar soils

Slope: 30 to 60 percent

Landform: Hills

Parent material: Colluvium derived from granite and/or residuum weathered from granite

Typical vegetation: White bursage, creosotebush, and desert needlegrass

Percentage of the surface covered by rock fragments: 3 to 25 percent by fine, subangular gravel and 2 to 30 percent by coarse, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 4 to 12 inches

Available water capacity to a depth of 60 inches: About 0.3 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; loamy sand

Bw—2 to 6 inches; loamy sand

Cr—6 to 59 inches; soft bedrock

Characteristics of Jawbone, moderately deep, and similar soils

Slope: 30 to 60 percent

Landform: Mountains

Parent material: Colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks

Typical vegetation: White bursage, creosotebush, and desert needlegrass

Percentage of the surface covered by rock fragments: 3 to 25 percent by fine, subangular gravel and 2 to 30 percent by coarse, subangular gravel

Depth to a restrictive feature (lithic bedrock): 30 to 39 inches

Available water capacity to a depth of 60 inches: About 1.8 inches (very low)

Hydrologic properties moderately deep

Present annual flooding: None

Present annual ponding: None

Surface runoff class: High

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 1 inch; loamy sand

Bw—1 to 7 inches; loamy sand

C—7 to 34 inches; gravelly coarse sand

R—34 to 44 inches; bedrock

Minor components

Jawbone, cool, and similar soils

Extent: About 4 percent of the map unit

Slope: 30 to 60 percent

Landform: Upper elevation mountains

Koehn, frequently flooded, and similar soils

Extent: About 3 percent of the map unit

Slope: 4 to 15 percent

Landform: Drainageways

Rock outcrop

Extent: About 2 percent of the map unit

Landform: Hills

Jawbone, high elevation, and similar soils

Extent: About 1 percent of the map unit

Slope: 30 to 60 percent

Landform: North-facing, upper elevation mountains

4432—Koehn association, 2 to 4 percent slopes

Map unit setting

General location: Northwest Mojave Desert, Jawbone Wash area

MLRA: 30—Mojave Desert

Landscape: Fan piedmonts

Elevation: 2,355 to 2,755 feet (719 to 840 meters)

Mean annual precipitation: 5 to 7 inches (125 to 175 millimeters)

Mean annual air temperature: 61 to 68 degrees F (16 to 20 degrees C)

Frost-free period: 200 to 270 days

Map unit composition

Koehn, occasionally flooded—70 percent

Koehn, frequently flooded—15 percent

Minor components—15 percent

Characteristics of Koehn, occasionally flooded, and similar soils

Slope: 2 to 4 percent

Landform: Inset fans

Parent material: Alluvium derived from granite

Typical vegetation: Grasses and shrubs

Percentage of the surface covered by rock fragments: 5 to 30 percent by fine, subrounded gravel; 2 to 5 percent by coarse, subrounded gravel; and 0 to 1 percent by subrounded cobbles

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: Occasional

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 1 inch; sand

C—1 to 63 inches; sand

Characteristics of Koehn, frequently flooded, and similar soils

Slope: 2 to 4 percent

Landform: Drainageways

Parent material: Alluvium derived from mixed rocks

Typical vegetation: Shrubs

Percentage of the surface covered by rock fragments: 0 percent

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.6 inches (low)

Hydrologic properties

Present annual flooding: Frequent

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 1 inch; sand

C—1 to 63 inches; sand

Minor components

Koehn, very rarely flooded, and similar soils

Extent: About 10 percent of the map unit

Slope: 2 to 4 percent

Landform: Inset fans

Typic Torripsamments and similar soils

Extent: About 3 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan aprons

Riverwash

Extent: About 2 percent of the map unit

Slope: 2 to 4 percent

Landform: Active drainageways

5201—Wingap-Pinyonpeak association, 8 to 30 percent slopes

Map unit setting

General location: Northwest Mojave Desert

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 3,690 to 5,575 feet (1,125 to 1,700 meters)

Mean annual precipitation: 7 to 9 inches (180 to 230 millimeters)

Mean annual air temperature: 55 to 61 degrees F (13 to 16 degrees C)

Frost-free period: 165 to 220 days

Map unit composition

Wingap—55 percent

Pinyonpeak—30 percent

Minor components—15 percent

Characteristics of Wingap and similar soils

Slope: 8 to 30 percent

Landform: Lower backslopes and mountains

Parent material: Colluvium over residuum weathered from granite

Typical vegetation: Blackbrush, pine bluegrass, and narrowleaf goldenbush

Percentage of the surface covered by rock fragments: 45 to 65 percent by medium, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 39 to 59 inches

Available water capacity to a depth of 60 inches: About 4.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Nonirrigated areas: 6e

Typical profile

- A—0 to 3 inches; loamy coarse sand
- Bt1—3 to 14 inches; loamy sand
- Bt2—14 to 41 inches; gravelly coarse sandy loam
- C—41 to 54 inches; gravelly loamy coarse sand
- Cr—54 to 64 inches; soft bedrock

Characteristics of Pinyonpeak and similar soils

Slope: 8 to 30 percent

Landform: Hills

Parent material: Colluvium and/or residuum weathered from granite

Typical vegetation: Blackbrush, Sandberg bluegrass, California buckwheat, Nevada
ephedra, Cooper's goldenbush, needleleaf rabbitbrush, and white burrobush

Percentage of the surface covered by rock fragments: 60 to 90 percent by fine,
angular gravel

Depth to a restrictive feature (paralithic bedrock): 6 to 14 inches; lithic bedrock—12 to
20 inches

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

- A—0 to 2 inches; gravelly sandy loam
- Bt—2 to 6 inches; gravelly coarse sandy loam
- Ct—6 to 8 inches; gravel
- Crt—8 to 16 inches; bedrock
- R—16 to 26 inches; bedrock

Minor components

Grandora, warm, and similar soils

Extent: About 7 percent of the map unit

Slope: 30 to 60 percent

Landform: Upper elevation, south-facing mountains

Dovecanyon and similar soils

Extent: About 4 percent of the map unit

Slope: 4 to 15 percent

Landform: South-facing fan remnants

Goldpeak and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 8 percent

Landform: Fan remnants

Rock outcrop

Extent: About 2 percent of the map unit

Landform: Hills

5210—Grandora-Pinyonpeak association, 8 to 60 percent slopes

Map unit setting

General location: The southern tip of the Sierra Nevada Mountains and the northwestern part of the Mojave Desert in the Kiavah Mountains

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains

Elevation: 3,690 to 6,000 feet (1,125 to 1,830 meters)

Mean annual precipitation: 7 to 12 inches (180 to 300 millimeters)

Mean annual air temperature: 48 to 61 degrees F (9 to 16 degrees C)

Frost-free period: 140 to 220 days

Map unit composition

Grandora—30 percent

Grandora, warm—30 percent

Pinyonpeak—30 percent

Minor components—10 percent

Characteristics of Grandora and similar soils

Slope: 30 to 60 percent

Landform: North-facing mountains

Parent material: Colluvium and/or residuum weathered from granite

Typical vegetation: Perennial grasses and shrubs

Percentage of the surface covered by rock fragments: 40 to 60 percent by fine, angular gravel and 0 to 20 percent by medium, angular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 3 inches; coarse sand

Bt—3 to 60 inches; sand

Characteristics of Grandora, warm, and similar soils

Slope: 15 to 50 percent

Landform: South-facing mountains

Parent material: Colluvium and/or residuum weathered from granite

Typical vegetation: Perennial grasses and shrubs

Percentage of the surface covered by rock fragments: 50 to 60 percent by fine, angular gravel and 5 to 15 percent by medium, angular gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 3.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Medium

Current water table: None noted

Natural drainage class: Somewhat excessively drained

Hydrologic soil group: A

Land capability classification

Nonirrigated areas: 7e

Typical profile

A—0 to 2 inches; coarse sand

Bt—2 to 60 inches; loamy sand

Characteristics of Pinyonpeak and similar soils

Slope: 8 to 30 percent

Landform: Mountains

Parent material: Colluvium and/or residuum weathered from granite

Typical vegetation: Blackbrush, Sandberg bluegrass, California buckwheat, Nevada
ephedra, Cooper's goldenbush, needleleaf rabbitbrush, and white burrobush

Percentage of the surface covered by rock fragments: 60 to 90 percent by fine,
angular gravel

Depth to a restrictive feature: 6 to 14 inches to paralithic bedrock; 12 to 20 inches to
lithic bedrock

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly sandy loam

Bt—2 to 6 inches; gravelly coarse sandy loam

Ct—6 to 8 inches; gravel

Crt—8 to 16 inches; bedrock

R—16 to 26 inches; bedrock

Minor components

Inyo and similar soils

Extent: About 5 percent of the map unit

Slope: 4 to 15 percent

Landform: Inset fans

Rock outcrop

Extent: About 3 percent of the map unit

Landform: Mountains

Scodie and similar soils

Extent: About 2 percent of the map unit

Slope: 30 to 60 percent

Landform: Upper elevation, north-facing mountains

6001—Goldpeak-Pinyonpeak-Wingap complex, 2 to 30 percent slopes

Map unit setting

General location: Northwest part of the Mojave Desert

MLRA: 29—Southern Nevada Basin and Range

Landscape: Mountains and hills

Elevation: 3,690 to 5,575 feet (1,125 to 1,700 meters)

Mean annual precipitation: 7 to 9 inches (180 to 230 millimeters)

Mean annual air temperature: 55 to 61 degrees F (13 to 16 degrees C)

Frost-free period: 165 to 220 days

Map unit composition

Goldpeak—55 percent

Pinyonpeak—15 percent

Wingap—15 percent

Minor components—15 percent

Characteristics of Goldpeak and similar soils

Slope: 2 to 8 percent

Landform: Fan remnants

Parent material: Alluvium derived from granite

Typical vegetation: Blackbrush, Sandberg bluegrass, and narrowleaf goldenbush

Percentage of the surface covered by rock fragments: 0 to 15 percent by medium, subrounded gravel and 30 to 50 percent by fine, subrounded gravel

Restrictive feature: None noted

Available water capacity to a depth of 60 inches: About 6.9 inches (moderate)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 2 inches; gravelly loamy sand

Bt—2 to 94 inches; gravelly coarse sandy loam

Characteristics of Pinyonpeak and similar soils

Slope: 8 to 30 percent

Landform: Hills and rock pediments

Parent material: Colluvium and/or residuum weathered from granite

Typical vegetation: Blackbrush, Sandberg bluegrass, California buckwheat, Nevada ephedra, Cooper's goldenbush, needleleaf rabbitbrush, and white burrobush

Percentage of the surface covered by rock fragments: 60 to 90 percent by fine, angular gravel

Depth to a restrictive feature: 6 to 14 inches to paralithic bedrock; 12 to 20 inches to lithic bedrock

Available water capacity to a depth of 60 inches: About 0.6 inch (very low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Very high

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: D

Land capability classification

Nonirrigated areas: 8

Typical profile

A—0 to 2 inches; gravelly sandy loam

Bt—2 to 6 inches; gravelly coarse sandy loam

Ct—6 to 8 inches; gravel

Crt—8 to 16 inches; bedrock

R—16 to 26 inches; bedrock

Characteristics of Wingap and similar soils

Slope: 4 to 15 percent

Landform: Hills

Parent material: Colluvium over residuum weathered from granite

Typical vegetation: Blackbrush, pine bluegrass, and narrowleaf goldenbush

Percentage of the surface covered by rock fragments: 45 to 65 percent by medium, subangular gravel

Depth to a restrictive feature (paralithic bedrock): 39 to 59 inches

Available water capacity to a depth of 60 inches: About 4.0 inches (low)

Hydrologic properties

Present annual flooding: None

Present annual ponding: None

Surface runoff class: Low

Current water table: None noted

Natural drainage class: Well drained

Hydrologic soil group: B

Land capability classification

Irrigated and nonirrigated areas: 6e

Typical profile

A—0 to 3 inches; loamy coarse sand

Bt1—3 to 14 inches; loamy sand

Bt2—14 to 41 inches; gravelly coarse sandy loam

C—41 to 54 inches; gravelly loamy coarse sand

Cr—54 to 60 inches; soft bedrock

Minor components

Typic Torriorthents and similar soils

Extent: About 7 percent of the map unit

Slope: 8 to 30 percent

Landform: Eroded rock pediments

Goldpeak, moist, and similar soils

Extent: About 5 percent of the map unit

Slope: 4 to 15 percent

Landform: Hills

Inyo, occasionally flooded, and similar soils

Extent: About 2 percent of the map unit

Slope: 2 to 8 percent

Landform: Inset fans

Rock outcrop

Extent: About 1 percent of the map unit

Landform: Hills

W—Water

Map unit setting

General location: Primarily Isabella Lake

MLRA: 29—Southern Nevada Basin and Range

Map unit composition

Water—100 percent

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, reclamation material, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the potential of the soils for the use. Terms for the limitation classes are *no limitations* or *limitations*, or they are *not limited*, *somewhat limited*, or *very limited*. Terms indicating potential are *good*, *fair*, and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Irrigated Crops and Pasture

General management needed for irrigated crops and pasture is suggested in this section. The system of land capability classification used by the Natural Resources Conservation Service is explained, kinds of important farmland are described, and the California Storie index is explained.

Planners of management systems for individual fields or farms should consider the information about soil properties given in the description of each soil under the heading "Detailed Soil Map Units." General management factors and considerations are described in the paragraphs that follow. Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Soils strongly influence the kind of crop and pasture plants that can be grown in this survey area. The climate in parts of the survey area favors a wide variety of crops.

Irrigated field crops are grown on a variety of soils in the part of the survey area in the San Joaquin Valley. Cotton and wheat are grown on very deep soils that have few limitations, such as Hesperia sandy loam and Delano sandy loam. The conservation practices necessary for sustained productivity on some flood plains include surface and subsurface water removal systems and toxic salt reduction.

Alfalfa grows best on very deep, well drained soils, such as Havalala, Kelval, and Chollawell soils in Kern Valley, Kelso Valley, and Walker Basin and Delano, Hesperia and Pleito in the San Joaquin Valley. Alfalfa also grows well on Calicreek, Kernfork, and other soils in areas where the water table is carefully managed and protection from flooding is provided.

Vegetable crops can be grown on very deep soils, such as Calicreek, Delano, Hesperia, Kelval, and Pleito soils. In some areas removal of subsurface water is required. Chiseling is a common practice used to break up compacted layers. Rotation with field crops helps to maintain tilth and reduces the likelihood of disease problems. Portable sprinkler systems that are used to germinate processing tomatoes are commonly replaced by furrow irrigation as the crop develops.

Fruit and nut crops are best suited to the very deep, medium textured soils in the survey area, such as Chanac, Delano and Pleito soils. The most common irrigation systems in areas of these crops are microsprinkler and drip systems. Orchard cover crops can be grown to improve water infiltration, reduce the risk of erosion, control dust, and improve access between irrigation runs.

Pasture species can grow well on a wide variety of soils in the survey area. They are commonly grown on very deep soils that have a high water table, such as Aquents, Aquolls, and Kernfork soils. The pastures in the area are increasingly converted to silage crops for the dairy industry. They are commonly irrigated by graded border systems. Water management, applications of fertilizer, and rotation grazing are key management practices. For additional information, refer to the NRCS "MLRA 17, 18 and 29 Vegetative Guide," available at the local NRCS Service Center.

The management practices needed in the survey area include, but are not limited to, chiseling and subsoiling, a conservation cropping rotation, conservation tillage, cover crops, crop residue management, hayland management, irrigation land leveling, irrigation water management, prescribed grazing, surface water control, and toxic salt reduction. Technical terms used in this section are defined in the Glossary.

Chiseling and subsoiling increase the effective rooting depth in soils that have a plowpan. Chiseling the plowpan enhances permeability and internal drainage, helps to prevent a perched water table, and allows deeper root penetration. Chiseling is temporarily beneficial on clayey soils, such as Centerville and Delvar soils, but these soils may rapidly return to their original condition. Applying a system of conservation tillage can significantly reduce the need for this practice.

A *conservation cropping rotation* consists of an established sequence of crops in combination with certain cultural and management practices. A successful cropping system is achieved if the crops and practices provide benefits that more than offset the effects of soil-depleting crops and deteriorating practices. A crop rotation is recommended on all tilled soils in the survey area and is a key pest management tool.

On irrigated cropland, conservation practices include the rotation of various row and field crops and the return of crop residue to the soil. It may include cover crops of grasses and legumes, an adequate fertilization program, and weed and pest control. Examples of crop rotations are corn and small grain in rotation and vegetable crops and alfalfa in rotation.

Conservation tillage involves keeping to a minimum the number of operations necessary to prepare a seedbed, plant the crop, and control weeds. Excessive tillage tends to break down soil structure, causes compaction, reduces the amount of organic matter in the soil, and creates a plowpan below the tilled layer. These conditions increase particle and tailpipe emission, increase the hazards of wind and water erosion, decrease the rate of water intake and content of organic matter in the soil, and restrict root penetration. Combining tillage operations and thus reducing the number of trips over a field and delaying tillage while the soils are wet help to maintain soil tilth, prevent excessive compaction, and conserve energy. This type of tillage is particularly beneficial on Cuyama, Delano, and Pleito soils.

Cover crops are beneficial in orchards and vineyards and on soils that are left fallow during the rainy season. They help to maintain or increase the rate of water infiltration, improve winter access for cultural operations, and help to control erosion on sloping land. Growing cover crops reduces the amount of dust in the air and thus improves working conditions and helps to control spider mites. Mowing the cover crop to a height of 2 to 4 inches in late winter or early spring reduces the likelihood that frost will damage a cold-sensitive crop. The cover crop should be allowed to produce seed.

Crop residue management consists of returning crop residue to the soil or allowing it to remain on the surface. The residue returned to the soil helps to maintain soil tilth, the supply of organic matter, and fertility and reduces the hazard of erosion. On soils with slopes of more than 2 percent, such as Hesperia sandy loam, 2 to 9 percent slopes, and on soils that are subject to wind erosion, such as Delano loamy sand, 0 to 2 percent slopes, crop residue on or near the surface helps to control erosion during critical erosion periods. Organic matter influences the development and stabilization of soil structure and the general physical environment of the soil, increasing the rate of water infiltration and the available water capacity.

Crop residue should seldom be burned or removed. Amendments high in content of organic matter generally are beneficial. Care should be taken to maintain a ratio of carbon to nitrogen that is low enough for nitrogen to remain available to the crop. Nitrogen applied with amendments in the fertilizer program should be accounted for.

High-residue crops, such as corn, barley, and wheat, can make up for the effects of low-residue crops, such as tomatoes, in a cropping system. Other excellent sources of organic matter are prunings from orchards and vineyards, animal manure, and grasses and legumes.

Hayland management is needed to protect irrigated hayland, achieve maximum production, maintain a desirable plant community, and extend the life of the planting. The practices needed in a hayland management program include irrigation water management, applications of fertilizer, and proper timing of mowing and baling activities, which should be carried out when the soils are firm and dry enough to support the load.

When irrigated hay crops are established, seed should be planted in a firm seedbed early in fall or in spring. The first mowing should be delayed until the plants are well established. The spacing of borders on flood-irrigated hayland should be in multiples of the cutting width of the mower to be used.

Irrigation land leveling is necessary to conserve irrigation water. It helps to ensure that irrigation water is applied uniformly to the entire field and that the field does not have any wet swales or dry ridges. It permits better field arrangements that conserve labor, time, and energy. Following the initial leveling of a field, the first crop to be planted should be an annual crop. Growing an annual crop will give the filled areas a chance to settle. The field can be smoothed before a longer living crop is planted. Accurate land leveling is important. Laser-guided equipment can be used to produce a uniform grade. Significant benefits can be realized by re-leveling periodically and by re-leveling fields that were leveled without the aid of laser equipment.

Irrigation water management is achieved by controlling the rate and timing of irrigation water application and the amount of water applied so that the needs of the crop for water are met in a planned and efficient manner. This management ensures efficient use of the available water in the soil, minimizes erosion, helps to prevent costly water losses, and protects water quality. The irrigation methods used in this survey area are furrow, border, basin, sprinkler, microsprinkler, and trickle systems. Furrow and sprinkler systems are the most common irrigation methods in the area. Their use is limited to nearly level slopes. Microsprinkler and trickle irrigation systems are common in orchards. Vegetables, such as peppers and fresh market tomatoes, are being subirrigated with drip systems with increasing frequency.

Prescribed grazing is needed to prevent soil deterioration, allow maximum production, maintain a desirable plant community, and extend the life of pastures. The practices used in an irrigated pasture management program include irrigation water management, rotation grazing, applications of fertilizer, harrowing or dragging in order to scatter animal droppings, mowing as necessary to maintain uniform growth, and weed control. Grazing during irrigation runs or when the soil is wet is not recommended.

When a pasture is to be established, selection of a suitable plant mixture is important. On most of the soils in the survey area, mixtures that include a perennial grass and trefoil or clover can produce an abundance of high-quality forage. To maintain plant density, annual pastures should be managed so that the plants produce enough seed to maintain a good stand.

Surface water control is needed where water from rainfall or irrigation is a problem in low areas and in areas adjacent to levees or at the lower end of irrigated fields. Excess surface water reduces crop production. It can be controlled by land shaping and grading, open drainage ditches, maintenance of the existing natural drainageways, irrigation land leveling, irrigation tailwater recovery systems, and irrigation water management. Surface water control is needed on Kelval, Kernfork, and other soils.

Protection from flooding is needed on all soils on the flood plains and alluvial fans in Kern Valley, Kelso Valley, and Walker Basin, including Chollawell, Inyo, Kelval, Kernfork, and Steuber soils. Along Poso and Caliente Creeks in the San Joaquin Valley, protection from flooding may be needed on Calicreek and Whitewolf soils and on Xerofluvents. Kernfork and other low-lying soils along the Kern River may require

an extensive levee system with pumped outlets to provide flood protection and lower the water table.

Toxic salt reduction is needed on soils in which salts rise to the surface and accumulate in the root zone over a period of years. This problem is common in areas with poor drainage or a high water table. It occurs primarily in Kelso Valley in this survey area. A drainage system is necessary in these areas. Leaching can reduce the content of soluble salts. Kernfork loam, saline-sodic, is an example of a soil in the survey area that is affected by salinity. Intensive management is required to reduce the salinity and sodicity of the soil and thus maintain its productivity. Careful application of irrigation water is needed to prevent the buildup of a high water table.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (UDSA, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless a close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not included in all soil surveys.

The capability classification of map units in this survey area is given in the section "Detailed Soil Map Units" and in table 5.

Major Land Resource Areas

A major land resource area is a broad geographic area that has a distinct combination of climate, topography, vegetation, land use, and general type of farming (USDA, 2006a). Parts of four of these nationally designated areas are in this survey area. These areas and their numbers are Sacramento and San Joaquin Valleys, MLRA 17, generally in the western part of the survey area; Sierra Nevada Foothills, MLRA 18, generally east of MLRA 17; and Southern Nevada Basin and Range, MLRA 29, and Mojave Desert, MLRA 30, both of which are generally in the southeastern part of the survey area.

Important Farmlands

Several kinds of important farmland are defined by the U.S. Department of Agriculture. These are prime farmland, unique farmland, additional farmland of statewide importance, and additional farmland of local importance. Two of these are recognized in this survey area—prime farmland and additional farmland of statewide importance.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in table 6. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

Additional farmland of statewide importance is land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops.

The criteria for defining and delineating this land are to be determined by the appropriate State agency or agencies. Generally, additional farmlands of statewide importance include those that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce as high a yield as prime farmland if conditions are favorable. In some States, additional farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

The map units in the survey area that are considered additional farmland of statewide importance are listed in table 7. This list does not constitute a recommendation for a particular land use. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

California Storie Index

Prepared by Anthony "Toby" O'Geen, Ph.D., Soils Extension Specialist, University of California, Davis, and Susan Southard, Soil Data Quality Specialist, Natural Resources Conservation Service, Davis, California.

The Storie index is a widely known and accepted method of rating soils for land use and productivity in California (Storie, 1978). Ratings are generated from a broad range of soil profile and landscape characteristics. The Storie index of the soils in this survey area is shown in table 8. Historically, Storie index ratings have been "hand generated" by soil survey staff and collaborators. These ratings can be highly subjective because no single person has generated Storie ratings for the entire State and because there are inherent biases associated with the classification system. To reduce this subjectivity, a revised Storie index is used in the National Soils Information System (NASIS) to compute the ratings (O'Geen and Southard, 2005).

The model uses combinations of discrete and fuzzy logic functions (Cox, 1999) to obtain scores for the factors associated with the Storie index. If the modeled criteria in NASIS are used, subjectivity can be minimized and ratings can be generated in a timely and consistent manner. This model was used when most of the ratings for the soils in this survey area were generated.

The Storie index assesses the productivity of a soil on the basis of four factors. These are factor A, the degree of soil profile development; factor B, texture of the surface horizon; factor C, slope; and factor X, manageable features, including drainage, microrelief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are then multiplied together to derive an index rating (Storie, 1933, 1978). For map units with more than one major component, the Storie index can be a weighted average based on the percentages of the soil components in the unit, the rating can be based solely on the major soil component, or it can be the best rating in the unit.

For *factor A*, the degree of soil development is used to assess potential productivity. For alluvial soils, the score is progressively decreased with increasing degree of soil development and/or the presence of root-restrictive layers. Deep, well drained alluvial soils would be rated 100, whereas a similar soil with a restrictive horizon, such as a claypan or hardpan, would be rated much lower. For soils that formed in material weathered from bedrock, scoring is based on depth to lithic or paralithic contact.

Two main data sets in NASIS are used to model factor A, soil taxonomy and landform. Interpretive criteria implied in the Storie Profile Group (factor A) relied on the current taxonomic placement (Soil Survey Staff, 1999) of the soil in NASIS. In all situations, the upper limit of the scoring range was used for each soil profile group. For example, an Entisol that formed on the valley floor would be rated 100, whereas a Durixeralf that is on an old terrace and is less than 1 foot deep to a pan would receive a rating of 80. The fuzzy logic rule “more is better” was used to revise the upper limit of the score.

Factor B is based on texture of the surface horizon. Loamy soils receive the highest ratings, and clay-rich and sandy soils receive lower ratings. The scores are modified by content of rock fragments. They range from 100 to 10 percent.

Crisp values were assigned for surface horizon textural classes according to Storie (1978). The following textures were not listed in the original Storie index publication and were added and assigned ratings by the authors: silty clay, clay, coarse sand, very fine sandy loam, sandy clay, loamy coarse sand, loamy fine sand, loamy very fine sand, and silt. At the present time, the NASIS Storie model does not rate in-lieu-of textures because they were not addressed in the original Storie index. The content of rock fragments modified textural class ratings according to the fuzzy logic rule “less is better.” This fuzzy score for content of rock fragments was then used to weight the surface soil textural class score for factor B. For example, a silt loam with 0 percent rock fragments received a score of 100, while a very gravelly silt loam with 45 percent rock fragments received a score weighted proportionally to the amount of rock fragments.

Factor C is based on steepness of slope. Scores are 100 to 85 percent if slopes are nearly level or gently sloping conditions (0-8 percent), 95-70 percent if slopes are moderately sloping or strongly sloping (9-30 percent slopes), and 50 to 5 percent if slopes are steep (more than 30 percent).

When slope classes stored in NASIS were scored, the fuzzy logic rule set “less is better” was used. This function reduced the subjectivity associated with choosing a score from the range of scores within each factor. For example, the original Storie factor C (slope) has slope categories with scores that range from 100 for nearly level to 5 for very steep (Storie, 1978).

Factor X focuses on soil and landscape conditions, exclusive of the soil profile, that require special management. The characteristics considered are fertility, drainage, erosion, acidity, salt content, and microrelief.

Data elements stored in NASIS, such as drainage class, erosion class, microrelief, flooding, and ponding, were used to model the hydrologic and physical properties associated with the X factor. Toxic thresholds were established for electrical conductivity, sodium adsorption ratio, and pH to define adverse chemical properties used for the X factor. Optimum soil pH was used to characterize fertility. Fuzzy rule sets were implemented in NASIS to model chemical and fertility attributes associated with the X factor. A “less is better” curve was used to score erosion and salt content. Crisp values were assigned to hydrologic properties.

Named components in map units are assigned grades according to their suitability for general intensive agriculture as shown by their Storie index ratings. The six grades and their range in index ratings are:

- Grade 1—80 to 100
- Grade 2—60 to 79
- Grade 3—40 to 59
- Grade 4—20 to 39
- Grade 5—10 to 19
- Grade 6—less than 10

Grade 1 soils are well suited to intensively grown irrigated crops that are climatically adapted to the region.

Grade 2 soils are good agricultural soils, although they are not so desirable as soils in grade 1 because of a less permeable subsoil, deep cemented layers (e.g., duripans), a gravelly or moderately fine textured surface layer, moderate or strong slopes, restricted drainage, a low available water capacity, lower soil fertility, or a slight or moderate hazard of flooding.

Grade 3 soils are only fairly well suited to agriculture because of moderate soil depth; moderate to steep slopes; restricted permeability in the subsoil; a clayey, sandy, or gravelly surface layer; somewhat restricted drainage; acidity; low fertility; or a hazard of flooding.

Grade 4 soils are poorly suited. They are more limited in their agricultural potential than the soils in grade 3 because of such restrictions as a shallower depth; steeper slopes; poorer drainage; a less permeable subsoil; a gravelly, sandy, or clayey surface layer; channeled or hummocky microrelief; or acidity.

Grade 5 soils are very poorly suited to agriculture and are seldom cultivated. They are more commonly used as pasture, rangeland, or woodland.

Grade 6 soils and miscellaneous areas are not suited to agriculture because of very severe or extreme limitations. They are better suited to limited use as rangeland, protective habitat, woodland, or watershed.

Important note: This interpretation was not designed to be used in a regulatory manner.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 9a and 9b show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rangeland

Prepared by John E. Hansen, Rangeland Management Specialist, Natural Resources Conservation Service.

Rangeland occurs throughout most of the survey area. It begins on the fan remnants on the eastern edge of the San Joaquin Valley within MLRA 17 (Sacramento and San Joaquin Valleys), ascending eastward within MLRA 18 (Sierra Nevada Foothills), and continuing eastward within MLRA 29 (Southern Nevada Basin and Range). Generally, the plant communities in this survey area are complex and diverse. Three major bioregions (Central Valley, Sierra Nevada, and Mojave Desert) influence plant composition and production. Intermixing of characteristic plants from each bioregion occurs in many areas.

In this survey area, precipitation, elevation, and aspect play the greatest roles in determining the kind and amount of vegetation on rangeland. If areas have similar climate and topography, differences in the kind and amount of rangeland or forest

understory vegetation are closely related to the kind of soil. Effective management of the rangeland is based on the relationship between soils, vegetation, and the availability of water.

The rangeland on erosional fan remnants in MLRA 17 is characterized by a cover of annual grasses and forbs. Chanac and other soils annually produce about 1,800 pounds per acre (dry-weight). A major limitation affecting grazing in this area is an inadequate amount and distribution of livestock water. Typical vegetation consists of soft chess (*Bromus hordeaceus*), red brome (*Bromus rubens*), wild oat (*Avena fatua*), rat-tail fescue (*Vulpia myuros*), filaree (*Erodium* spp.), and burclover (*Medicago polymorpha*). Some soils typically have a scattered cover of allscale saltbush (*Atriplex polycarpa*).

Eastward into the western part of MLRA 18, an increase in elevation and precipitation corresponds with a scattered overstory of blue oak (*Quercus douglasii*) and foothill pine (*Pinus sabiniana*). The vegetation cover, though, is still dominated by annual grasses and forbs. Inadequate livestock water continues to be a major limitation. Arujo soils are typical in this zone.

Farther east, within MLRA 18, a canopy of blue oak and foothill pine becomes denser and interior live oak (*Quercus wislizeni*) is an additional species. The understory consists of shrubs, such as big sagebrush (*Artemisia tridentata*), and annual grasses and forbs. Some perennial grasses, such as blue wildrye (*Elymus glaucus*) and bottlebrush squirreltail (*Elymus elymoides*), occur. Some areas of chaparral in this area support buckbrush (*Ceanothus cuneatus*) and scrub oak (*Quercus dumosa*). Small areas of Jeffrey pine (*Pinus jeffreyi*) and black oak (*Quercus kelloggii*) are at the highest elevations. Tweedy and Walong soils are typical in this area. Steep slopes limit livestock distribution. Proper stocking rates and a uniform distribution of grazing help to keep a protective amount of plant residue on the surface and ensure the future productivity of desirable herbaceous plants.

Farther east, within MLRA 29, tree canopy diminishes with a decrease in annual precipitation. Shrubs dominate the landscape. Common shrub species include California buckwheat (*Eriogonum fasciculatum*), goldenbush (*Ericameria* spp.), rabbitbrush (*Chrysothamnus* spp.), white burrobush (*Hymenoclea salsola*), and mormon tea (*Ephedra viridis*). Some areas support scattered California juniper (*Juniperus californica*), and a few pockets of Joshua trees (*Yucca brevifolia*) occur. Annual production is about 300 to 500 pounds per acre (dry-weight). Grazing is limited by low production, steep slopes, and inadequate water for livestock. Xyno soils are typical in this zone.

The fans and flood plains east of Isabella Lake (South Fork of the Kern River) within MLRA 29 support a more diverse, more productive plant community. Kernfork soils, which are on flood plains, have a dominant cover of saltgrass (*Distichlis* spp.) and also support Indian ricegrass (*Achnatherum hymenoides*) and scattered rabbitbrush (*Chrysothamnus* spp.) and saltbush (*Atriplex* spp.). An overstory of cottonwood (*Populus* spp.) and willow (*Salix lasiolepis*) grows along stream corridors. Annual production is about 1,800 pounds per acre (dry-weight).

Kelval soils, also on flood plains, are higher in microrelief and coarser textured than the Kernfork soils. They support a shrub cover dominated by rabbitbrush and have a sparse understory of red brome (*Bromus rubens*) and redstem filaree (*Erodium cicutarium*). Annual production is about 550 pounds per acre (dry-weight).

The part of the survey area in Tulare County, also in MLRA 29, is typified by a denser tree canopy consisting of singleleaf pinyon. Interior live oak is on the steeper north-facing slopes. The more nearly level areas along drainageways are dominated by big sagebrush. Areas of singleleaf pinyon that have been mechanically chained in the past have been reoccupied by a cover of antelope bitterbrush (*Purshia tridentata*).

Table 10 shows, for each soil that supports rangeland or forest understory vegetation, the potential annual production of vegetation in favorable, normal, and

unfavorable years; the characteristic vegetation; and the average composition, by dry weight, of each species. An explanation of the column headings in table 10 follows.

Total dry-weight production is the amount of vegetation that can be expected to grow annually in a well managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Characteristic vegetation (the grasses, grasslike plants, forbs, shrubs, and trees that make up most of the potential natural plant community on each soil) is listed by common name. Under *species composition by weight*, the expected percentage of the total annual production is given for each species making up the potential natural vegetation. The amount that can be used as forage depends on the kinds of grazing animals and on the grazing season.

Range management requires knowledge of the kinds of soil and of the potential natural plant community. The objective in rangeland management commonly is to control grazing so that the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion are achieved. Sometimes, an area with a plant community somewhat different from the potential meets the landowner's objectives in terms of grazing needs, enhancement of wildlife habitat, and protection of soil and water resources.

The major management practices that are needed on the rangeland in the survey area include prescribed grazing, water developments, fencing, brush management, range planting, and animal trails and walkways.

Prescribed grazing, formerly called "proper grazing," is the controlled harvest of vegetation by grazing or browsing animals, managed for a specified objective. Properly following a grazing management plan ("prescription") improves or maintains the health and vigor of selected plants. Other benefits of prescribed grazing include improved animal health, improved water quality, and decreased soil erosion. The factors to be considered when a grazing prescription is designed include the degree of plant utilization, distribution of livestock for a uniform utilization of available resources, season of use, type of grazing animal, type of vegetation (both beneficial and harmful), water distribution, and stocking rate.

Water developments provide clean, dependable water for livestock and wildlife on selected sites. Providing a water supply affects the distribution of wildlife. Other benefits include improved animal health and reduced pressure on riparian areas. The factors to be considered when a water development is planned include the type and number of animals, terrain, season of use, soil-related limitations on the selected sites, and the cost of installation and maintenance.

Fencing is used to form a barrier that limits or prevents access by livestock, wildlife, or people. It is used to facilitate other conservation practices that treat natural resources. The factors to be considered when a fencing project is planned include the ease of livestock management, wildlife movement needs, soil-related limitations on the selected sites, the cost of construction and maintenance, and legal considerations. Fencing Cibo soils is difficult because excessive shrinking and swelling of the soils may force fenceposts out of the ground.

Brush management is the removal, reduction, or manipulation of shrubby plants. It can be conducted by chemical, mechanical, or biological means or by prescribed burning. It can result in the desired plant community, which can be maintained by

prescribed grazing. Other benefits include improved forage, enhanced wildlife habitat, removal of noxious plants, and a reduction in the hazard of wildfires. The factors to be considered when brush management is planned include the form of management, the growth stage of the targeted shrubs, the cost of implementation and followup, the availability of alternative forage during implementation, and the hazards that can affect other natural resources.

Range planting is the establishment of native or nonnative vegetation that is adapted to a given area. It can result in the desired plant community. The benefits of range planting include increased amounts of forage and/or improved forage species composition, browse or cover for livestock and wildlife, a reduced hazard of erosion, and protection of other natural resources. The factors to be considered when a range planting is planned include the nutritional or other value of the selected plant species, the suitability of the soil for planting, soil moisture and temperature regimes, the available water capacity of the soil, the time needed for establishment of the planting, the cost of implementation, and the availability of alternative forage during establishment.

Animal trails and walkways improve the access and movement of livestock or wildlife through difficult terrain. Benefits include improved grazing proficiency; better access to forage, water, and shelter; and easier handling of livestock. The factors to be considered when a trail or walkway is planned include the cost of implementation and maintenance, the hazard of soil erosion, and the potential for damage to other natural resources.

Technical assistance in managing rangeland can be obtained from the local offices of the Natural Resources Conservation Service, the Cooperative Extension Service, and the Kern Valley Resource Conservation District. Information about the plants identified in this section is available online in "PLANTS Database" (<http://plants.usda.gov>).

Wildlife Habitat

Prepared by Timothy S. Schweizer, Wildlife Biologist, NRCS Earth Team Volunteer.

Fish and wildlife are valuable resources in the survey area. They improve the quality of the environment, act as early indicators of pollution, and provide numerous opportunities for recreation. Wildlife-related activities, such as bird-watching, fishing, hunting, and general nature study, have a positive effect on the economy of the survey area. Many types of wildlife help in the natural control of animal and insect pest species.

The survey area includes portions of the southeastern San Joaquin Valley and adjacent foothills, the southern Sierra Nevada Mountain Range, and the western Mojave Desert. Walker Pass and other areas in the eastern Sierra Nevada Mountain Range have forests of Joshua trees, which are unique plant communities.

Warm-water fish, such as bass, bluegill, catfish, crappie, various species of sunfish, trout, and several nongame species, inhabit the Kern River, Lake Isabella, and other water bodies in the survey area. The Kern River drainage and other water bodies provide habitat for fish and other aquatic wildlife, including migratory birds of the Pacific Flyway. They also provide corridors of riparian vegetation, which is critical habitat for a wide variety of mammals, birds, reptiles, amphibians, and insects, including several threatened or endangered animal species.

Human activities have various effects on wildlife populations. Many wildlife species, including coyotes, opossums, and ground squirrels, can tolerate these activities and actually thrive in close association with humans. Conversely, the existence of some species has been threatened by human modification of the environment. The animal species in the survey area that have been listed as threatened or endangered by the State and/or Federal government include the San

Joaquin kit fox, Mojave ground squirrel, San Joaquin antelope squirrel, Swainson's hawk, willow flycatcher, southwestern willow flycatcher, western yellow-billed cuckoo, blunt-nosed leopard lizard, Tehachapi slender salamander, Kern Canyon slender salamander, and the valley elderberry longhorn beetle. Preserving habitat for threatened and endangered species can benefit other species and perhaps reduce the need for additional future listings. The survey area supports several threatened or endangered plant species, including Bakersfield cactus, California jewel-flower, Mojave tarplant, San Joaquin woolly-threads, San Joaquin adobe sunburst, and striped adobe lily.

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, water, and cover. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

The survey area has several kinds of wildlife habitat. Some of these are natural, and some are partly or completely influenced by human activities. Each habitat type is associated with characteristic kinds of soil.

Cropland occurs primarily at the eastern edge of the San Joaquin Valley, in the eastern part of the Kern River Valley, and in Kelso Valley. Many wildlife species inhabit either the cropland itself or the various micro-habitats that occur between crop fields.

Grassland occurs on the hills at the lower elevations on the west side of the Sierra Nevada Mountains. These hills are covered primarily with nonnative grasses and forbs. Few trees provide cover or perches for wildlife in this part of the survey area, but trees are abundant in riparian corridors, such as those along the Kern River, Cottonwood Creek, Caliente Creek, and Poso Creek.

Oak savannah occurs at intermediate elevations in the hills along the west side of the Sierra Nevada Mountains. Blue oak and smaller amounts of California foothill pine provide nesting and perching areas for birds. Raptors, such as golden eagles, red-tailed hawks, and kestrel, take advantage of the abundant prey, including small mammals and snakes.

Oak woodland occurs at higher elevations than the savannah on the west side of the Sierra Nevada Mountains. Interior live oak, canyon live oak, and California black oak provide habitat at the higher elevations. Various shrub species, such as scrub oak, buck brush and gooseberry, provide food and cover. Areas of chaparral are interspersed with the oak woodland. Deer, turkey, and California quail are common in the areas of oak woodland.

Desert scrub is on the hills and alluvial fans in the eastern Sierra Nevada Mountains. Because of a low amount of rainfall in these areas, biomass production tends to be low. As a result, the amount of food and water available for wildlife is limited. Certain species, such as chukar, are well adapted to these areas.

Pinyon forests are at the higher elevations in the eastern Sierra Nevada Mountains. Because of cool temperatures and a low amount of precipitation (mostly snowfall), much of this area has little understory vegetation to provide food for wildlife. Certain species, such as pinyon jays that feed on the pinyon nuts, are well adapted to the area. Some of the steeper north-facing slopes have oak woodland that provides habitat for deer and black bears. Many narrow riparian areas within the pinyon forests provide important habitat for wildlife.

The Kern Valley has many habitat types in a relatively small area. This diversity of habitat types supports an abundance of different kinds of birds, mammals, amphibians, and reptiles.

Livestock grazing occurs throughout most of the survey area. With proper management, the grazing can be compatible with wildlife. Management

considerations include the use of grazing systems that improve the amount of ground cover and promote growth of the plant species most desirable to livestock and wildlife. Grazing in riparian areas should be strictly controlled so that these areas can maintain their characteristic plant communities and the wildlife dependent on them. Brush clearing and thinning activities can enhance the habitat for wildlife by retaining the most productive patches of shrubs for cover.

In areas of woodland, retaining trees that are past maturity, as well as their snags, at a rate of one or two per acre helps to provide optimum perching, nesting, and food-storage sites for birds and cavity-nesting mammals. Fallen trees and branches provide feeding, perching, and sheltering areas.

The development of year-round water supplies, such as livestock troughs and guzzlers, and the careful management of existing water sources in springs and riparian areas greatly enhance the habitat for all wildlife.

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, yards, fruit trees, gardens, and cropland from wind and snow and provide food and cover for wildlife. Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

The trees that are commonly grown as windbreaks in this survey area are Arizona cypress, Elderica pine, and incense cedar. Information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service, from the Cooperative Extension Service, or from a commercial nursery.

Hydric Soils

A list of the map unit components (both major and minor) that are rated as hydric soils in the survey area is on file in Section 2 of the NRCS Field Office Technical Guide in Bakersfield, California, and is available in Section II of the electronic Field Office Technical Guide (eFTOG) and in the Soil Data Mart (<http://soildatamart/nrcs.usda.gov/>). This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and Vasilas, 2006).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric

soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

Recreation

The soils of the survey area are rated in tables 11a and 11b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. A rating of *no limitations* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Limitations* with numerical ratings between 0.00 and 1.00 can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Limitations* with a numerical rating of 1.00 indicate that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 11a and 11b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Lawns, landscaping, and golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand,

clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils (USDA, 2001).

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 12a and 12b show the degree and kind of soil limitations

that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. A rating of *no limitations* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Limitations* with numerical ratings between 0.00 and 1.00 can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Limitations* with a numerical rating of 1.00 indicate that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Sanitary Facilities

Tables 13a and 13b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. A rating of *no limitations* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Limitations* with numerical ratings between 0.00 and 1.00 can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Limitations* with a numerical rating of 1.00 indicate that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in

contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse

daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 14a and 14b give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 14a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair, or poor* as potential sources of sand and gravel. A rating of *good or fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The numbers 0.00 to 0.07 indicate that the layer is a poor source. The numbers 0.75 to 1.00 indicate that the layer is a good source. The numbers 0.08 to 0.74 indicate the degree to which the layer is a likely source.

The soils are rated *good, fair, or poor* as potential sources of topsoil, reclamation material, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Water Management

Table 15 provides information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for embankments, dikes, and levees and for pond reservoir areas. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. A rating of *no limitations* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Limitations* with numerical ratings between 0.00 and 1.00 can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Limitations* with a numerical rating of 1.00 indicate that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, compaction characteristics, and many other soil properties.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils (USDA, 2004).

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Data on soil properties are available in an online soil characterization database (<http://ssldata.nrcs.usda.gov/>).

Engineering Soil Properties

Table 16 gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Texture terms and codes are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SC-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index.

Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Soil Properties

Table 17 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $1/3$ - or $1/10$ -bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (Ksat). The estimates in the table indicate the rate of water movement, in micrometers per second, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture.

Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $1/3$ - or $1/10$ -bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion Properties

Erosion factors are shown in the table 18 as the K factor (K_w and K_f) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Depth to the upper and lower boundaries of each layer is indicated.

Erosion factor K_w indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor K_f indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

Table 19 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

Table 20 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of

flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 21 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 22 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Xeralf (*Xer*, meaning dry, plus *alf*, from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Haploxeralfs (*Haplo*, meaning minimal horizonation, plus *xeralf*, the suborder of the Alfisols that has a xeric moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Haploxeralfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, superactive, thermic Typic Haploxeralfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The Blasingame series is an example.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 2006). Unless otherwise indicated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series or in taxa above the series level.

Alberti Series

The Alberti series consists of shallow, well drained soils that formed in residuum weathered from gabbro and/or granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Alberti soils are classified as clayey, smectitic, thermic, shallow Vertic Rhodoxeralfs.

Typical pedon

In map unit 530, Alberti complex, 15 to 50 percent slopes; Kern County, California, about 1.5 miles (2.4 kilometers) south of the town of Bodfish; 1,600 feet (487.7 meters) south and 350 feet (106.7 meters) east of the northwest corner of sec. 24, T. 27 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 34 minutes 7 seconds north and longitude 118 degrees 29 minutes 59 seconds west; USGS Lake Isabella South, California, Quadrangle, NAD83.

- A—0 to 2 inches (0 to 5 centimeters); dark reddish brown (5YR 3/4) cobbly clay loam, dark reddish brown (5YR 3/3) moist; moderate very fine and fine granular structure; slightly hard, friable, sticky and plastic; few very fine roots; common very fine interstitial pores; few cracks 1 to 2 millimeters wide; 15 percent 2- to 75-millimeter pebbles, 9 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); abrupt wavy boundary.
- ABt—2 to 4 inches (5 to 10 centimeters); dark reddish brown (2.5YR 3/4) cobbly clay loam, dark reddish brown (2.5YR 2.5/4) moist; strong medium subangular blocky structure; hard, friable, sticky and plastic; common very fine and fine and few medium roots; few fine tubular and interstitial pores; common thin and few moderately thick clay films in pores and on faces of peds; few cracks 1 to 2 millimeters wide; 15 percent 2- to 75-millimeter pebbles, 9 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
- Bt1—4 to 10 inches (10 to 25 centimeters); dark reddish brown (2.5YR 3/4) cobbly clay, dark reddish brown (2.5YR 2.5/4) moist; strong medium prismatic structure; hard, firm, very sticky and very plastic; common very fine and fine and few medium and coarse roots; few very fine interstitial and few fine tubular pores; many moderately thick clay films in pores and on faces of peds; very few cracks 1 to 3 millimeters wide; 15 percent 2- to 75-millimeter pebbles, 9 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
- Bt2—10 to 16 inches (25 to 41 centimeters); cobbly clay, dark reddish brown (2.5YR 3/4) moist and dry; strong coarse prismatic structure; very hard, firm, very sticky and very plastic; few very fine, fine, and medium roots; few very fine interstitial and few fine and medium tubular pores; many moderately thick clay films in pores

and on faces of peds; very few cracks 1 millimeter wide; 15 percent 2- to 75-millimeter pebbles, 9 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.

Cr—16 to 22 inches (41 to 56 centimeters); weathered gabbro bedrock; few roots in cracks.

R—22 to 32 inches (56 to 81 centimeters); hard gabbro bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The depth to hard bedrock is 20 to 26 inches (51 to 65 centimeters). The percentage of the surface covered by granitoid and gabbro rock fragments is as follows: 20 to 35 percent by 2- to 75-millimeter pebbles, 5 to 25 percent by 75- to 250-millimeter cobbles, and 1 to 5 percent by 250- to 600-millimeter stones. Cracks form as the soils dry.

A and ABt horizons:

Hue—2.5YR, 5YR, or 7.5YR dry and moist

Value—3 or 4 dry and 2 or 3 moist

Chroma—3 to 6 dry and 2 to 6 moist

Texture of the fine-earth fraction—loam or clay loam

Content of clay—22 to 35 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—2 to 43 percent 2- to 75-millimeter pebbles, 0 to 11 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bt horizon:

Hue—2.5YR, 5YR, 7.5YR, or 10R dry and moist

Value—3 or 4 dry and 2 or 3 moist

Chroma—3 to 6 dry and 2 to 6 moist

Texture of the fine-earth fraction—clay loam or clay

Content of clay—22 to 60 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—2 to 26 percent 2- to 75-millimeter pebbles, 6 to 11 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Aquents

Aquents consist of very deep, very poorly drained soils that formed in alluvium derived from granite. These soils are on flood plains and in channels, depressions, and mountain valleys. Slope is 0 to 5 percent.

Typical pedon

In map unit 220, Aquents-Aquolls-Riverwash complex, 0 to 5 percent slopes, flooded; Kern County, California, near the Kern River; about 100 feet (30.5 meters) north and 1,960 feet (597.4 meters) east of the southwest corner of sec. 11, T. 26 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 28 seconds north and longitude 118 degrees 18 minutes 5 seconds west; USGS Weldon, California, Quadrangle, NAD83.

This pedon is representative of the Aquents in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 7 inches (0 to 18 centimeters); light brownish gray (10YR 6/2) loamy fine sand, dark brownish gray (10YR 4/2) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine and few fine, medium, and coarse roots; common very fine interstitial and few very fine tubular pores; slightly effervescent; disseminated carbonates; moderately alkaline (pH 8.4); abrupt smooth boundary.
- Cng—7 to 18 inches (18 to 45 centimeters); dark grayish brown (10YR 4/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; common very fine, fine, and medium and few coarse roots; common very fine interstitial and tubular pores; few fine distinct redoximorphic accumulations of iron, very dark brown (10YR 2/2) and dark brown (10YR 3/3) moist; strongly effervescent; disseminated carbonates; moderately alkaline (pH 8.4); clear smooth boundary.
- C1—18 to 33 inches (45 to 84 centimeters); grayish brown (10YR 5/2) loamy fine sand, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and medium and common coarse roots; few very fine interstitial pores; few fine and medium redoximorphic accumulations of iron, dark brown (10YR 3/3) and dark grayish brown (10YR 4/2) moist; strongly effervescent; disseminated carbonates; moderately alkaline (pH 7.9); abrupt wavy boundary.
- C2—33 to 60 inches (84 to 152 centimeters); pale brown (10YR 6/3) sand, grayish brown (10YR 5/2) moist; single grained; loose, nonsticky and nonplastic; common very fine and fine and few medium and coarse roots; few very fine interstitial pores; common medium redoximorphic accumulations of iron, dark yellowish brown (10YR 4/4) moist; moderately alkaline (pH 7.9).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to a water table is less than 24 inches (61 centimeters). Redoximorphic accumulations with hue of 7.5YR, 10YR, or 2.5Y occur within 20 inches (51 centimeters) of the surface. Many areas have an accumulation of salts, particularly in the upper part of the profile.

A horizon:

Hue—10YR dry and moist

Value—6 dry and 4 moist

Chroma—2 dry and moist

Texture of the fine-earth fraction—sandy loam, loamy fine sand, or coarse sand

Content of clay—2 to 11 percent

Content of organic matter—0.5 to 1 percent

Reaction—moderately alkaline or strongly alkaline

Cng horizon:

Hue—10YR dry and moist

Value—4 dry and 3 moist

Chroma—2 dry and moist

Texture of the fine-earth fraction—loamy sand, fine sandy loam, or sand

Content of clay—10 to 18 percent

Content of organic matter—0.01 to 0.09 percent

Reaction—moderately alkaline or strongly alkaline

C horizon:

Hue—10YR dry and moist

Value—6 dry and 5 moist

Chroma—2 dry and moist

Texture of the fine-earth fraction—sand or loamy fine sand
Content of clay—1 to 12 percent
Content of organic matter—0.05 to 0.2 percent
Reaction—slightly alkaline or moderately alkaline

Aquolls

Aquolls consist of very deep, very poorly drained soils that formed in alluvium derived from granitoid rocks. These soils are on flood plains and in channels and mountain valleys. Slope is 0 to 5 percent.

Typical pedon

In map unit 220, Aquents-Aquolls-Riverwash complex, 0 to 5 percent slopes, flooded; Kern County, California, about 250 feet (76.2 meters) east and 150 feet (45.7 meters) south of the northwest corner of sec. 15, T. 26 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 26 seconds north and longitude 118 degrees 19 minutes 27 seconds west; USGS Weldon, California, Quadrangle, NAD83.

This pedon is representative of the Aquolls in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- An—0 to 3 inches (0 to 8 centimeters); gray (10YR 5/1) silt loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine and common fine roots; common very fine tubular and few very fine interstitial pores; common fine distinct brown (10YR 5/3) redoximorphic accumulations, dark brown (10YR 3/3) moist; strongly effervescent; disseminated carbonates; moderately alkaline (pH 8.4); abrupt smooth boundary.
- A—3 to 12 inches (8 to 30 centimeters); grayish brown (10YR 5/2) very fine sandy loam, dark brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; many very fine and few fine roots; few very fine interstitial pores; few fine distinct dark brown (10YR 3/1) redoximorphic accumulations, very dark grayish brown (10YR 3/1) moist; strongly effervescent; disseminated carbonates; slightly alkaline (pH 7.8); clear smooth boundary.
- C1—12 to 42 inches (30 to 107 centimeters); grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; single grained; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; few very fine interstitial pores; common fine and medium distinct brown (10YR 5/3) redoximorphic accumulations, dark brown (10YR 3/3) moist; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); abrupt smooth boundary.
- C2—42 to 60 inches (107 to 152 centimeters); grayish brown (10YR 5/2) loamy fine sand, very dark gray (10YR 3/1) moist; single grained; soft, very friable, nonsticky and nonplastic; few very fine roots; few very fine pores; common fine distinct brown (10YR 5/3) redoximorphic accumulations, dark brown (10YR 3/3) moist; neutral (pH 6.8).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to a water table is less than 24 inches (61 centimeters). Redoximorphic accumulations with hue of 7.5YR, 10YR, or 2.5Y occur within 15 inches (38 centimeters) of the surface. Many areas have an accumulation of salts, particularly in the upper part of the profile.

An horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 1 to 3 moist
Chroma—1 to 3 dry and moist
Texture of the fine-earth fraction—sandy loam, silt loam, or clay loam
Content of clay—5 to 30 percent
Content of organic matter—1 to 3 percent
Reaction—moderately alkaline or strongly alkaline

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 1 to 3 moist
Chroma—1 to 3 dry and 1 to 3 moist
Texture of the fine-earth fraction—sandy loam or silt loam
Content of clay—5 to 18 percent
Content of organic matter—1 to 3 percent
Reaction—slightly alkaline or moderately alkaline

C horizon:

Hue—10YR dry and 10YR or 7.5YR moist
Value—4 to 6 dry and 3 or 4 moist
Chroma—2 to 4 dry and 1 to 4 moist
Texture of the fine-earth fraction—loamy fine sand or fine sandy loam
Content of clay—5 to 18 percent
Content of organic matter—0.05 to 0.06 percent
Reaction—neutral or slightly alkaline

Arujo Series

The Arujo series consists of deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 65 percent. Arujo soils are classified as fine-loamy, mixed, superactive, thermic Pachic Argixerolls.

Typical pedon

In map unit 264, Arujo-Walong-Tunis association, 9 to 30 percent slopes; Kern County, California, about 1,000 feet (304.8 meters) north and 2,200 feet (615.7 meters) east of the southwest corner of sec. 20, T. 30 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 18 minutes 26 seconds north and longitude 118 degrees 14 minutes 41 seconds west; USGS Cross Mountain, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine and moderate medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); abrupt smooth boundary.
- A2—2 to 14 inches (5 to 36 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; common very fine and few fine roots; common very fine tubular and few fine interstitial pores; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear wavy boundary.
- Bt1—14 to 20 inches (36 to 51 centimeters); brown (10YR 4/3) sandy clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and plastic; few very fine, fine, and medium

roots; few fine and common very fine tubular pores; common thin and few moderately thick clay films bridging sand grains; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

Bt2—20 to 31 inches (51 to 79 centimeters); brown (10YR 4/3) sandy clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; common moderately thick clay films in pores and coating faces of peds; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); gradual smooth boundary.

Bt3—31 to 45 inches (79 to 114 centimeters); brown (10YR 4/3) sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; many moderately thick clay films in pores and coating faces of peds; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

Bt4—45 to 58 inches (114 to 147 centimeters); dark yellowish brown (10YR 4/4) sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and plastic; few very fine, fine, medium, and coarse roots; few medium and common fine tubular and few very fine interstitial pores; common thin clay films bridging sand grains; 7 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

Cr—58 to 68 inches (147 to 172 centimeters); weathered granodiorite bedrock; root penetration ends abruptly; crushes easily to sandy loam texture.

Range in characteristics

The depth to weathered bedrock is 40 to 60 inches (102 to 152 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 60 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, 0 to 5 percent by 250- to 600-millimeter stones, and 0 to 2 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam

Content of clay—10 to 20 percent

Content of organic matter—1 to 2 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 2 percent 600- to 3,000-millimeter boulders

Bt horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam, loam, clay loam, or sandy clay loam

Content of clay—12 to 35 percent

Content of organic matter—0.1 to 2 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 2 percent 600- to 3,000-millimeter boulders

Auberry Series

The Auberry series consists of deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 15 to 50 percent. Auberry soils are classified as fine-loamy, mixed, semiactive, thermic Ultic Haploxeralfs.

Typical pedon

In map unit 104, Auberry-Rock outcrop complex, 9 to 50 percent slopes; in the soil survey area called "Tulare County, California, Central Part"; on the Tule River Indian Reservation; about 800 feet (243.8 meters) northwest of the Painted Rock Campground sanitary disposal site, in an unsectionalized area, T. 22 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 36 degrees 2 minutes 41 seconds north and longitude 118 degrees 44 minutes 7 seconds west; USGS Solo Peak, California, Quadrangle, NAD83.

- A1—0 to 11 inches (0 to 28 centimeters); grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) moist; massive; hard, friable, nonsticky and nonplastic; many very fine and fine roots; many very fine and common fine tubular pores; moderately acid (pH 5.8); clear wavy boundary.
- A2—11 to 16 inches (28 to 41 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, very friable, nonsticky and nonplastic; many very fine and fine roots; few very fine interstitial and many very fine and common fine tubular pores; moderately acid (pH 5.8); clear smooth boundary.
- Bt1—16 to 22 inches (41 to 56 centimeters); yellowish brown (10YR 5/4) loam, brown (10YR 4/3) moist; moderate coarse subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; common fine roots; many very fine, common fine, and few medium tubular pores; common moderately thick clay films lining pores and bridging mineral grains; moderately acid (pH 5.8); gradual smooth boundary.
- Bt2—22 to 32 inches (56 to 81 centimeters); brown (7.5YR 5/4) sandy clay loam, brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; very hard, firm, sticky and plastic; common fine roots; many very fine and fine tubular pores; common moderately thick clay films lining pores and bridging mineral grains and few moderately thick clay films on faces of peds; moderately acid (pH 5.8); gradual smooth boundary.
- Bt3—32 to 43 inches (81 to 109 centimeters); light yellowish brown (10YR 6/4) loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; common fine roots; few fine tubular pores; few thin clay films lining pores and bridging mineral grains; moderately acid (pH 5.8); clear smooth boundary.
- BC—43 to 56 inches (109 to 142 centimeters); light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine tubular pores; slightly acid (pH 6.2); clear smooth boundary.
- Cr—56 to 66 inches (142 to 167 centimeters); weathered quartz diorite bedrock.

Range in characteristics

The depth to weathered bedrock ranges from 40 to 60 inches (102 to 152 centimeters).

A horizon:

Hue—10YR dry and moist
Value—3 to 6 dry and moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—8 to 15 percent
Content of organic matter—0.9 to 2 percent
Reaction—slightly acid to strongly acid
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—10YR or 7.5YR dry and moist
Value—4 to 6 dry and 2 to 4 moist
Chroma—1 to 3 dry and moist
Texture of the fine-earth fraction—loam, sandy clay loam, or clay loam
Content of clay—10 to 30 percent
Content of organic matter—0.5 to 1 percent
Reaction—slightly acid to strongly acid
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles

BC horizon:

Hue—10YR dry and moist
Value—4 to 6 dry and 3 to 5 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—sandy loam or coarse sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0 to 0.5 percent
Reaction—neutral to strongly acid
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles

Backcanyon Series

The Backcanyon series consists of shallow, well drained soils that formed in residuum weathered from metasedimentary and/or granitoid rocks (fig. 15). These soils are on hillslopes or mountain slopes. Slope is 15 to 60 percent. Backcanyon soils are classified as loamy, mixed, superactive, thermic, shallow Calcic Haploxerepts.

Typical pedon

In map unit 270, Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes; Kern County, California, about 13.2 miles (21.2 kilometers) northeast of Stevenson Peak; 160 feet (48.8 meters) south and 120 feet (36.6 meters) east of the northwest corner of projected sec. 22, T. 30 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 19 minutes 4 seconds north and longitude 118 degrees 19 minutes 20 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

A—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) gravelly sandy loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly effervescent; disseminated carbonates; moderately alkaline (pH 7.9); abrupt smooth boundary.

Bk1—3 to 9 inches (8 to 23 centimeters); yellowish brown (10YR 5/4) gravelly fine sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular



Figure 15.—Profile of the shallow Backcanyon soil in map unit 270 (Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes). Depth is marked in centimeters.

blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine, fine, and medium roots; few very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly effervescent; carbonates disseminated and

segregated as coatings on the underside of pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

Bk2—9 to 15 inches (23 to 38 centimeters); yellowish brown (10YR 5/4) gravelly fine sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine and fine and common medium roots; few very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly effervescent; carbonates disseminated and segregated as coatings on the underside of pebbles; moderately alkaline (pH 8.0); clear wavy boundary.

Cr—15 to 23 inches (38 to 58 centimeters); weathered, discontinuous, decomposing, calcareous metamorphic rocks intermingled with granitoid rocks.

R—23 inches (58 centimeters); hard, calcareous metamorphic rocks intermingled with granitoid rocks.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The depth to hard bedrock is 11 to 24 inches (28 to 60 centimeters). The percentage of the surface covered by metasedimentary and/or granitoid rock fragments is as follows: 5 to 15 percent by 2- to 75-millimeter pebbles, 0 to 3 percent by 75- to 250-millimeter cobbles, and 0 to 2 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or fine sandy loam

Content of clay—8 to 18 percent

Content of organic matter—0.9 to 3 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles, 0 to 6 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bk horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 3 to 5 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or fine sandy loam

Content of clay—8 to 30 percent

Content of organic matter—0.1 to 1 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles, 0 to 6 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Blasingame Series

The Blasingame series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 60 percent. Blasingame soils are classified as fine-loamy, mixed, superactive, thermic Typic Haploxeralfs.

Typical pedon

In map unit 297, Walong-Blasingame-Rock outcrop association, 30 to 60 percent slopes; Kern County, California, about 6 miles (9.66 kilometers) northeast of Woody and about 7.5 miles (12.1 kilometers) northwest of Glennville; 0.22 mile (0.35 kilometer) southeast of the Tulare County line along Old Stage Drive; 250 feet (76.2 meters) south and 715 feet (217.9 meters) east of the northwest corner of sec. 6, T. 25 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 47 minutes 20 seconds north and longitude 118 degrees 47 minutes 36 seconds west; USGS White River, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; hard, friable, slightly sticky and nonplastic; many very fine and few fine roots; many very fine and common fine tubular pores; 7 percent 2- to 75-millimeter pebbles and 5 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); clear smooth boundary.
- ABt—3 to 10 inches (8 to 25 centimeters); brown (7.5YR 4/3) sandy loam, dark brown (7.5YR 3/2) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; common very fine and fine and few medium tubular pores; few thin clay bridges between sand grains; 7 percent 2- to 75-millimeter pebbles and 5 percent 250- to 600-millimeter stones; neutral (pH 6.8); clear smooth boundary.
- Bt1—10 to 17 inches (25 to 43 centimeters); dark brown (7.5YR 3/4) sandy clay loam, dark brown (7.5YR 3/2) moist; weak coarse prismatic structure parting to moderate medium subangular blocky; very hard, friable, sticky and plastic; common very fine roots; few very fine and common fine and medium tubular pores; common thin and few moderately thick clay films bridging sand grains; 7 percent 2- to 75-millimeter pebbles and 5 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear smooth boundary.
- Bt2—17 to 27 inches (43 to 69 centimeters); brown (7.5YR 4/4) sandy clay loam, dark brown (7.5YR 3/4) moist; weak coarse prismatic and moderate coarse subangular blocky structure; very hard, friable, sticky and plastic; common very fine roots; few very fine and common fine tubular pores; common moderately thick and few thick clay films bridging sand grains; 7 percent 2- to 75-millimeter pebbles and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.4); gradual wavy boundary.
- Bt3—27 to 33 inches (69 to 84 centimeters); brown (7.5YR 4/4) sandy clay loam, dark brown (7.5YR 3/4) moist; weak coarse prismatic and weak coarse subangular blocky structure; very hard, friable, sticky and plastic; few very fine roots; common very fine tubular pores; common moderately thick clay films bridging sand grains; 7 percent 2- to 75-millimeter pebbles and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.6); abrupt wavy boundary.
- Cr—33 to 43 inches (84 to 109 centimeters); weathered, medium grained granodiorite bedrock.

Range in characteristics

The depth to a paralithic contact is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 50 percent by 2- to 75-millimeter pebbles and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

- Hue—10YR or 7.5YR dry and moist
Value—4 or 5 dry and 3 moist
Chroma—3 or 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy loam
Content of clay—8 to 20 percent
Content of organic matter—0.5 to 1 percent
Reaction—slightly acid to slightly alkaline
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles and 0 to 10 percent 250- to 600-millimeter stones

Bt horizon:

Hue—7.5YR or 5YR dry and moist
Value—3 to 5 dry and moist
Chroma—4 to 6 dry and 2 to 4 moist
Texture of the fine-earth fraction—loam, sandy clay loam, or clay loam
Content of clay—18 to 30 percent
Content of organic matter—0.05 to 1 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles and 0 to 10 percent 250- to 600-millimeter stones

Brecken Series

The Brecken series consists of very deep, well drained soils that formed in alluvium derived from mixed rock sources. These soils are on dissected fan remnants and dissected stream terraces. Slope is 15 to 60 percent. Brecken soils are classified as loamy-skeletal, mixed, superactive, thermic Typic Argixerolls.

Typical pedon

In map unit 185, Brecken-Cuyama-Pleito complex, 15 to 60 percent slopes; Kern County, California, about 13 miles (20.9 kilometers) east of Bakersfield, between Breckenridge Road and State Highway 178; 2,050 feet (624.8 meters) east and 2,050 feet (624.8 meters) south of the northwest corner of sec. 17, T. 29 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 24 minutes 28 seconds north and longitude 118 degrees 47 minutes 0 seconds west; USGS Rio Bravo Ranch, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 4/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; hard, very friable, slightly sticky and nonplastic; common very fine roots; common very fine interstitial pores; 22 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 3 percent 250- to 600-millimeter stones; neutral (pH 6.8); abrupt smooth boundary.
- Bt1—3 to 12 inches (8 to 31 centimeters); dark brown (10YR 3/3) cobbly sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine interstitial and few very fine tubular pores; few thin clay films bridging sand grains; 17 percent 2- to 75-millimeter pebbles, 12 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.6); clear smooth boundary.
- Bt2—12 to 19 inches (31 to 48 centimeters); brown (10YR 4/3) very cobbly sandy clay loam, dark brown (10YR 3/3) moist; moderate coarse subangular structure; hard, very friable, moderately sticky and moderately plastic; common very fine roots; common very fine and few fine interstitial and common very fine and few fine tubular pores; common moderately thick clay films bridging sand grains and few thin clay films in pores and on faces of peds; 20 percent 2- to 75-millimeter pebbles, 35 percent 75- to 250-millimeter cobbles, and 3 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.6); clear smooth boundary.

- Bt3—19 to 39 inches (48 to 99 centimeters); brown (10YR 4/3) extremely cobbly sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; common very fine interstitial and few very fine tubular pores; few thin clay films bridging sand grains; 30 percent 2- to 75-millimeter pebbles, 30 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.6); clear smooth boundary.
- BC—39 to 60 inches (99 to 152 centimeters); dark yellowish brown (10YR 4/4) very cobbly coarse sandy loam, dark yellowish brown (10YR 3/4) moist; weak very coarse subangular structure; soft, very friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial pores; 35 percent 2- to 75-millimeter pebbles, 20 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.4).

Range in characteristics

Some pedons have a C horizon. The percentage of the surface covered by rock fragments of mixed mineralogy is as follows: 50 to 70 percent by 2- to 75-millimeter pebbles and 10 to 30 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—1 to 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—10 to 20 percent
Content of organic matter—1 to 3 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—15 to 30 percent 5- to 75-millimeter pebbles, 0 to 6 percent 75- to 250-millimeter cobbles, and 0 to 5 percent 250- to 600-millimeter stones

Bt horizon:

Hue—10YR dry and moist
Value—3 to 6 dry and 2 or 3 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—sandy loam or sandy clay loam
Content of clay—18 to 35 percent
Content of organic matter—0 to 2 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—10 to 35 percent 5- to 75-millimeter pebbles, 5 to 40 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

BC horizon:

Hue—10YR dry and moist
Value—4 to 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—coarse sandy loam or sandy clay loam
Content of clay—10 to 22 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—30 to 40 percent 2- to 75-millimeter pebbles, 15 to 25 percent 75- to 250-millimeter cobbles, and 3 to 10 percent 250- to 600-millimeter stones

Calcic Haploxerepts

Calcic Haploxerepts consist of very deep, well drained soils that formed in mixed marine sediments and/or residuum. These soils are on fan remnants, stream terraces, and hillslopes. Slope is 15 to 60 percent. The soils are classified as fine-silty, mixed, superactive, thermic Calcic Haploxerepts.

Typical pedon

In map unit 174, Xeric Torriorthents-Calcic Haploxerepts association, 15 to 60 percent slopes; Kern County, California, about 75 feet (22.9 meters) southeast of MacPhearson Oil Company well (Thomas #4); 1,400 feet (426.7 meters) north and 825 feet (251.5 meters) west of the southeast corner of sec. 12, T. 28 S., R. 28 E.; Mount Diablo Base and Meridian; latitude 35 degrees 30 minutes 12 seconds north and longitude 118 degrees 54 minutes 30 seconds west; USGS Knob Hill, California, Quadrangle, NAD83.

This pedon is representative of the Calcic Haploxerepts in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) silty clay loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; moderately hard, friable, moderately sticky and moderately plastic; many very fine and few fine roots; many very fine and fine interstitial pores; moderately alkaline (pH 8.0); abrupt smooth boundary.
- Bk—2 to 12 inches (5 to 31 centimeters); light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate coarse prismatic and moderate medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; few very fine tubular and few very fine and fine interstitial pores; few fine carbonate threads; very slightly effervescent; moderately alkaline (pH 8.0); clear wavy boundary.
- Bky—12 to 23 inches (31 to 58 centimeters); pale brown (10YR 6/3) silt loam, brown (10YR 4/3) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; few very fine roots; common very fine tubular and few very fine and fine interstitial pores; common fine carbonate threads and common medium platelike gypsum crystals; strongly effervescent; moderately alkaline (pH 8.0); clear irregular boundary.
- Cyn—23 to 60 inches (58 to 152 centimeters); light gray (10YR 7/1) loam, gray (10YR 6/1) moist; common medium and coarse mottles, pale yellow (5Y 7/4) moist; strong coarse and very coarse subangular blocky structure; extremely hard, very firm, slightly sticky and slightly plastic; few very fine roots; many very fine and fine interstitial pores; common medium platelike gypsum crystals; gypsum seams running nearly vertical, spaced 18 to 30 inches (46 to 76 centimeters) apart; noneffervescent; moderately alkaline (pH 8.0).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

About 5 to 25 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—silty clay loam

Content of clay—27 to 35 percent
Content of organic matter—0.5 to 2 percent
Reaction—moderately alkaline
Content of rock fragments—0 to 6 percent 2- to 75-millimeter pebbles

B horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—silt loam
Content of clay—15 to 27 percent
Content of organic matter—0.1 to 1 percent
Reaction—moderately alkaline
Content of rock fragments—0 to 6 percent 2- to 75-millimeter pebbles

Calicreek Series

The Calicreek series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on flood plains. Slope is 0 to 2 percent. Calicreek soils are classified as sandy, mixed, thermic Xeric Torrifuvents.

Typical pedon

In map unit 213, Calicreek loamy coarse sand, 0 to 2 percent slopes, occasionally flooded; Kern County, California, about 4.6 miles (7.4 kilometers) north of Arvin, 0.25 mile (0.40 kilometer) south of Mountain Road, and 0.5 mile (0.8 kilometer) west of Towerline Road; about 1,140 feet (347.5 meters) south and 2,350 feet (716.3 meters) west of the northeast corner of sec. 36, T. 30 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 16 minutes 44 seconds north and longitude 118 degrees 48 minutes 55 seconds west; USGS Edison, California, Quadrangle, NAD83.

- Ap—0 to 7 inches (0 to 18 centimeters); brown (10YR 5/3) loamy coarse sand, very dark grayish brown (10YR 3/2) moist; single grained; loose, nonsticky and nonplastic; few medium and fine and common very fine roots; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly effervescent; disseminated carbonates; neutral (pH 7.3); clear wavy boundary.
- C1—7 to 18 inches (18 to 46 centimeters); brown (10YR 5/3) loamy coarse sand, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few medium, fine, and very fine roots; few very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly effervescent; disseminated carbonates; moderately alkaline (pH 7.9); clear smooth boundary.
- C2—18 to 23 inches (46 to 58 centimeters); brown (10YR 5/3) fine sandy loam, mixed dark brown (10YR 3/3) and very dark grayish brown (10YR 3/3) moist; massive; slightly hard, friable, slightly sticky and nonplastic; few coarse and medium, common fine, and few very fine roots; few very fine interstitial and common very fine tubular pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; strongly effervescent; disseminated carbonates; moderately alkaline (pH 7.9); abrupt smooth boundary.
- C3—23 to 26 inches (58 to 66 centimeters); light brownish gray (10YR 6/2) coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few very fine roots; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); abrupt wavy boundary.

- C4—26 to 31 inches (66 to 79 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; slightly hard, friable, slightly sticky and nonplastic; few very fine roots; few very fine interstitial and tubular pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly effervescent; disseminated carbonates; moderately alkaline (pH 7.9); abrupt wavy boundary.
- C5—31 to 37 inches (79 to 94 centimeters); brown (10YR 5/3) gravelly coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.8); clear smooth boundary.
- C6—37 to 60 inches (94 to 152 centimeters); light brownish gray (10YR 6/2) coarse sand, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.8).

Range in characteristics

In some areas the soils have no carbonates. Stratification is common throughout the soils. About 10 to 60 percent of the surface is covered by granitoid rock fragments (0- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 2 or 3 moist
Chroma—1 to 3 dry and 2 to 5 moist
Texture of the fine-earth fraction—loamy coarse sand, loamy sand, or sandy loam
Content of clay—4 to 15 percent
Content of organic matter—0.2 to 0.9 percent
Reaction—slightly acid to moderately alkaline
Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 to 5 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—stratified coarse sand to fine sandy loam
Content of clay—1 to 12 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles and 0 to 5 percent 75- to 250-millimeter cobbles

Calpine Series

The Calpine series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on alluvial fans and low pediments. Slope is 5 to 30 percent. Calpine soils are classified as coarse-loamy, mixed, superactive, mesic Aridic Haploxerolls.

Typical pedon

In map unit 560, Sacatar-Wortley-Calpine complex, 5 to 30 percent slopes; Kern County, California, about 24 miles (38.6 kilometers) north of Onyx and 0.25 mile (0.4 kilometer) west of Chimney Meadow; about 1,860 feet (566.9 meters) north and 1,830 feet (557.8 meters) east of the southwest corner of sec. 8, T. 24 S., R. 37 E.;

Mount Diablo Base and Meridian; latitude 35 degrees 51 minutes 20 seconds north and longitude 118 degrees 0 minutes 50 seconds west; USGS Lamont Peak, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); grayish brown (10YR 5/2) loamy coarse sand, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.6); abrupt smooth boundary.
- A2—2 to 10 inches (5 to 25 centimeters); grayish brown (10YR 5/2) coarse sandy loam, very dark brown (10YR 2/2) moist; moderate coarse and very coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common fine and medium and few coarse roots; few very fine interstitial and tubular pores; 8 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.6); clear wavy boundary.
- Bw1—10 to 30 inches (25 to 76 centimeters); brown (10YR 5/3) coarse sandy loam, very dark grayish brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine, medium, and coarse roots; many very fine and few fine tubular pores; few thin clay bridges between mineral grains; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.8); diffuse wavy boundary.
- Bw2—30 to 68 inches (76 to 173 centimeters); brown (10YR 5/3) coarse sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine and medium roots; few very fine tubular pores; few thin clay bridges between mineral grains; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.8).

Range in characteristics

The percentage of the surface covered by granitoid rock fragments is as follows: 0 to 15 percent by 2- to 75-millimeter pebbles and 0 to 10 percent by 75- to 250-millimeter cobbles.

A horizon:

- Hue—10YR dry and moist
- Value—5 dry and 2 or 3 moist
- Chroma—2 to 4 dry and moist
- Texture of the fine-earth fraction—loamy coarse sand or coarse sandy loam
- Content of clay—6 to 10 percent
- Content of organic matter—1 to 4 percent
- Reaction—slightly acid or neutral
- Content of rock fragments—0 to 14 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bw horizon:

- Hue—10YR dry and moist
- Value—5 or 6 dry and 3 or 4 moist
- Chroma—3 or 4 dry and 2 or 3 moist
- Texture of the fine-earth fraction—coarse sandy loam or sandy loam
- Content of clay—7 to 12 percent
- Content of organic matter—0.1 to 1 percent
- Reaction—neutral
- Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Canebrake Series

The Canebrake series consists of shallow, somewhat excessively drained soils that formed in colluvium derived from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 9 to 60 percent. Canebrake soils are classified as mixed, mesic, shallow Xeric Torripsamments.

Typical pedon

In map unit 507, Xyno-Canebrake-Pilotwell association, dry, 30 to 60 percent slopes; Kern County, California, about 3.5 miles (5.6 kilometers) east of Canebrake, California, and about 1,260 feet (384 meters) west of State Highway 178; about 1,580 feet (481.6 meters) south and 1,330 feet (405.4 meters) west of the northeast corner of sec. 26, T. 25 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 43 minutes 45 seconds north and longitude 118 degrees 4 minutes 53 seconds west; USGS Walker Pass, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few fine roots; many medium interstitial pores; 23 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 3 percent 250- to 600-millimeter stones; slightly acid (pH 6.3); clear wavy boundary.
- A2—2 to 7 inches (5 to 18 centimeters); light brownish gray (10YR 6/2) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and common fine roots; many fine interstitial pores; 23 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 3 percent 250- to 600-millimeter stones; slightly acid (pH 6.3); clear wavy boundary.
- C—7 to 17 inches (18 to 43 centimeters); pale brown (10YR 6/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine and fine tubular and common fine interstitial pores; 23 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 3 percent 250- to 600-millimeter stones; neutral (pH 6.6); clear wavy boundary.
- Cr—17 to 27 inches (43 to 68 centimeters); weathered granitoid bedrock; clay films and dark organic staining on fracture faces; few fine roots in the fractures.

Range in characteristics

Some pedons do not have a C horizon. The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 0 to 15 percent by 2- to 75-millimeter pebbles, 0 to 10 percent by 75- to 250-millimeter cobbles, and 0 to 10 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—coarse sand, loamy coarse sand, or loamy sand

Content of clay—3 to 10 percent

Content of organic matter—0.1 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 30 percent 2- to 75-millimeter pebbles, 0 to 9 percent 75- to 250-millimeter cobbles, and 0 to 17 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—coarse sand or loamy coarse sand

Content of clay—3 to 10 percent

Content of organic matter—0.2 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 37 percent 2- to 75-millimeter pebbles, 0 to 9 percent 75- to 250-millimeter cobbles, and 0 to 17 percent 250- to 600-millimeter stones

Centerville Series

The Centerville series consists of well drained soils that formed in alluvium derived from granitoid rocks. These soils are moderately deep to a densic horizon. They are on fan remnants. Slope is 2 to 30 percent. Centerville soils are classified as fine, smectitic, thermic Aridic Calcixererts.

Typical pedon

In map unit 195, Centerville-Delvar complex, 9 to 30 percent slopes; Kern County, California, about 1,830 feet (557.8 meters) west and 60 feet (18.3 meters) south of the northeast corner of sec. 2, T. 25 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 47 minutes 26 seconds north and longitude 119 degrees 2 minutes 2 seconds west; USGS Weldon, California, Quadrangle, NAD83.

Ap—0 to 10 inches (0 to 25 centimeters); dark grayish brown (10YR 4/2) clay, very dark brown (10YR 2/2) moist; strong very coarse subangular blocky structure; very hard, friable, very sticky and very plastic; few coarse and medium, common fine, and few very fine roots; many very fine interstitial and few very fine tubular pores; cracks 4 centimeters wide; moderately alkaline (pH 7.9); clear smooth boundary

ABss—10 to 22 inches (25 to 56 centimeters); variegated dark brown (10YR 3/3) and brown (7.5YR 5/4) clay, very dark brown (10YR 2/2) and brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure; very hard, friable, very sticky and very plastic; few coarse, medium, and fine and common very fine roots; common very fine and fine tubular and few very fine interstitial pores; cracks 3 centimeters wide; few intersecting slickensides; few thin clay films on faces of peds and in pores; strongly effervescent; disseminated carbonates; moderately alkaline (pH 8.0); abrupt irregular boundary.

Btk1—22 to 34 inches (56 to 86 centimeters); variegated dark brown (10YR 3/3) and strong brown (7.5YR 4/6) clay, dark brown (10YR 3/2) and brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; very hard; friable; very sticky and very plastic; few medium and fine and common very fine roots; few very fine and common fine interstitial and few very fine tubular pores; cracks 1 to 3 centimeters wide; common thin clay films on faces of peds; strongly effervescent; carbonates disseminated and segregated as common fine threads and soft masses; 12 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear irregular boundary.

Btk2—34 to 40 inches (86 to 102 centimeters); variegated yellowish brown (10YR 5/4) and dark brown (10YR 3/3) clay, brown (7.5YR 4/4) and dark brown (10YR 3/2) moist; weak very coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine, fine, and medium roots; common very fine and fine tubular and few very fine interstitial pores; common thin clay bridges between

mineral grains; slightly effervescent; carbonates disseminated and segregated as common fine threads and soft masses; 12 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear wavy boundary.

Btk3—40 to 56 inches (102 to 142 centimeters); pale brown (10YR 6/3) sandy clay loam, brown (7.5YR 4/4) moist; weak very coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine roots; common very fine and few fine interstitial and few fine tubular pores; common thin clay bridges between mineral grains; slightly effervescent; disseminated carbonates; 12 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

2Bd—56 to 61 inches (142 to 152 centimeters); light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, slightly sticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 12 percent 2- to 75-millimeter pebbles; noneffervescent; moderately alkaline (pH 8.0).

Range in characteristics

The depth to a Bd horizon is 40 to 60 inches (102 to 152 centimeters). Cracks 1 to 4 centimeters wide extend from the surface to a depth of 22 to 35 inches (56 to 89 centimeters). About 5 to 40 percent of the surface covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR and 7.5YR dry and moist
Value—3 to 5 dry and 2 to 4 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—clay
Content of clay—40 to 60 percent
Content of organic matter—1 to 2 percent
Reaction—neutral to moderately alkaline
Effervescence—none to strong

B horizon:

Hue—10YR and 7.5YR dry and moist
Value—3 to 6 dry and 3 or 4 moist
Chroma—3 to 6 dry and 2 to 4 moist
Texture of the fine-earth fraction—sandy loam, loam, sandy clay loam, clay loam, or clay
Content of clay—20 to 60 percent
Content of organic matter—0.1 to 1 percent
Reaction—slightly alkaline or moderately alkaline
Effervescence—slight to strong
Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

Chanac Series

The Chanac series consists of very deep, well drained soils that formed in alluvium derived from mixed rock sources. These soils are on fan remnants and stream terraces. Slope is 2 to 60 percent. Chanac soils are classified as fine-loamy, mixed, superactive, thermic Calcic Haploxerepts.

Typical pedon

In map unit 192, Chanac-Pleito complex, 5 to 30 percent slopes; Kern County, California, about 380 feet (115.8 meters) south and 2,610 feet (795.5 meters) west of

the northeast corner of sec. 27, T. 25 S., R. 27. E.; Mount Diablo Base and Meridian; latitude 35 degrees 43 minutes 55 seconds north and longitude 119 degrees 3 minutes 13 seconds west; USGS Deepwell Ranch, California, Quadrangle, NAD83.

- Ap—0 to 8 inches (0 to 20 centimeters); brown (10YR 5/3) sandy clay loam, dark brown (10YR 3/3) moist; weak very coarse subangular blocky structure; very hard, friable, sticky and plastic; common very fine roots; few very fine interstitial and tubular pores; 8 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; moderately alkaline (pH 8.0); clear smooth boundary.
- AB—8 to 22 inches (20 to 56 centimeters); brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; massive; hard, friable, sticky and plastic; common very fine and few fine, medium, and coarse roots; common very fine tubular and few very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles; strongly effervescent; carbonates disseminated and segregated as few fine threads; moderately alkaline (pH 8.2); clear wavy boundary.
- Bk1—22 to 31 inches (56 to 79 centimeters); yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine and few fine roots; common very fine tubular and few very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles; strongly effervescent; carbonates disseminated and segregated as common fine threads; moderately alkaline (pH 8.2); clear irregular boundary.
- Bk2—31 to 42 inches (79 to 107 centimeters); yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 3/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; common very fine interstitial and few very fine tubular pores; 8 percent 2- to 75-millimeter pebbles; violently effervescent; carbonates disseminated and segregated as common fine threads and common fine soft masses; moderately alkaline (pH 8.2); clear wavy boundary.
- 2Btk1—42 to 52 inches (107 to 132 centimeters); yellowish brown (10YR 5/4) loam, strong brown (7.5YR 4/6) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; few very fine roots; few very fine interstitial and tubular pores; common thin clay films on faces of peds; violently effervescent; carbonates disseminated and segregated as many medium soft masses; 8 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.2); clear smooth boundary.
- 2Btk2—52 to 60 inches (132 to 152 centimeters); brown (7.5YR 4/4) clay loam, brown (7.5YR 4/4) moist; weak medium subangular blocky structure; hard, friable, very sticky and plastic; few very fine roots; few very fine tubular pores; common thin clay films on faces of peds; 8 percent 2- to 75-millimeter pebbles; strongly effervescent; carbonates disseminated and segregated as common fine threads and soft masses; moderately alkaline (pH 8.2).

Range in characteristics

Some pedons have a C horizon. Segregated carbonates occur at a depth of less than 40 inches (102 centimeters). In the 2Btk horizon, carbonates occur as threads and/or soft masses. About 0 to 10 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—3 or 4 dry and 3 moist

Texture of the fine-earth fraction—loam, sandy clay loam, or clay loam

Content of clay—15 to 35 percent

Content of organic matter—0.3 to 1 percent

Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

Bk horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—4 dry and moist
Texture of the fine-earth fraction—coarse sandy loam, sandy loam, loam, sandy clay loam, or clay loam
Content of clay—10 to 35 percent
Content of organic matter—0 to 1 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

2Btk horizon:

Hue—10YR or 7.5YR dry and moist
Value—4 to 7 dry and 4 moist
Chroma—4 dry and 4 to 6 moist
Texture of the fine-earth fraction—coarse sandy loam, sandy loam, loam, sandy clay loam, or clay loam
Content of clay—18 to 35 percent
Content of organic matter—0 to 0.9 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

Chollawell Series

The Chollawell series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on fan remnants and fan piedmonts and in mountain valleys. Slope is 2 to 20 percent. Chollawell soils are classified as coarse-loamy, mixed, superactive, thermic Xeric Haplargids.

Typical pedon

In map unit 246, Chollawell gravelly loamy coarse sand, 5 to 15 percent slopes; Kern County, California, about 1,110 feet (335.3 meters) west and 320 feet (97.5 meters) north of the southeast corner of sec. 36, T. 26 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 37 minutes 2 seconds north and longitude 118 degrees 16 minutes 34 seconds west; USGS Woolstalf Creek, California, Quadrangle, NAD83.

A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; 28 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); abrupt smooth boundary.

A2—2 to 19 inches (5 to 48 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark grayish brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; 28 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear wavy boundary.

Bt1—19 to 35 inches (48 to 89 centimeters); brown (10YR 5/3) gravelly coarse sandy loam, dark brown (10YR 3/3) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; common thin clay films bridging mineral grains; 28 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear wavy boundary.

Bt2—35 to 54 inches (89 to 137 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; few thin clay films bridging mineral grains; 28 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); gradual wavy boundary.

C—54 to 60 inches (137 to 152 centimeters); light yellowish brown (10YR 6/4) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; 27 percent 2- to 75-millimeter pebbles; neutral (pH 7.2).

Range in characteristics

About 40 to 70 percent of the surface is covered by 2- to 75-millimeter pebbles.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 moist

Chroma—3 dry and 2 to 4 moist

Texture of the fine-earth fraction—loamy coarse sand, coarse sandy loam, or sandy loam

Content of clay—4 to 12 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—0 to 52 percent 2- to 75-millimeter pebbles and 0 to 5 percent 75- to 250-millimeter cobbles

B horizon:

Hue—10YR or 7.5YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—coarse sandy loam

Content of clay—10 to 18 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—0 to 52 percent 2- to 75-millimeter pebbles and 0 to 20 percent 75- to 250-millimeter cobbles

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—coarse sand or loamy coarse sand

Content of clay—1 to 10 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—0 to 46 percent 2- to 75-millimeter pebbles, 0 to 25 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Cibo Series

The Cibo series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes. Slope is 15 to 50 percent. Cibo soils are classified as fine, smectitic, thermic Aridic Haploxererts.

Typical pedon

In map unit 302, Feethill-Cibo-Cieneba complex, 15 to 30 percent slopes; Kern County, California, about 1,100 feet (335.3 meters) east and 50 feet (15.2 meters) south of the northwest corner of sec. 11, T. 27 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 36 minutes 5 seconds north and longitude 118 degrees 49 minutes 55 seconds west; USGS Pine Mountain, California, Quadrangle, NAD83.

A—0 to 5 inches (0 to 13 centimeters); very dark grayish brown (10YR 3/2) clay loam, very dark brown (10YR 2/2) moist; strong coarse and very coarse prismatic and medium angular blocky structure; extremely hard, firm, very sticky and very plastic; common very fine and few fine roots; common very fine tubular and interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.

Bw—5 to 9 inches (13 to 23 centimeters); brown (7.5YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; strong coarse and very coarse prismatic and medium angular blocky structure; extremely hard, firm, very sticky and very plastic; common very fine and few fine roots; few fine tubular and interstitial and common very fine tubular pores; 5 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.4); clear wavy boundary.

Bss1—9 to 18 inches (23 to 46 centimeters); brown (7.5YR 5/4) clay loam, very dark grayish brown (10YR 3/2) moist; strong coarse and very coarse prismatic and medium and coarse angular blocky structure; very hard, firm, very sticky and very plastic; few very fine roots; few very fine tubular and interstitial pores; soil cracks forming wedge-shaped aggregates; few moderately thick pressure faces and slickensides; few moderately thick clay films in pores; 5 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.6); gradual wavy boundary.

Bss2—18 to 23 inches (46 to 58 centimeters); brown (7.5YR 5/4) clay loam, dark brown (10YR 3/3) moist; strong coarse prismatic and coarse and very coarse angular blocky structure; extremely hard, firm, very sticky and very plastic; very few very fine roots; few very fine tubular and interstitial pores; soil cracks forming wedge-shaped aggregates; few moderately thick clay films in pores; few moderately thick pressure faces and slickensides; 5 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.6); abrupt wavy boundary.

R—23 to 33 inches (58 to 84 centimeters); hard granitoid bedrock.

Range in characteristics

The depth to bedrock is 20 to 40 inches (51 to 102 centimeters). About 10 to 20 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR or 7.5YR dry and moist

Value—3 or 4 dry and 2 or 3 moist

Chroma—2 to 4 dry and 2 moist

Texture of the fine-earth fraction—clay loam or clay

Content of clay—35 to 50 percent

Content of organic matter—1 to 2 percent

Reaction—slightly acid to moderately alkaline

Content of rock fragments—0 to 10 percent 2- to 75-millimeter pebbles

B horizon:

Hue—10YR or 7.5YR dry and moist

Value—3 to 5 dry and 2 or 3 moist

Chroma—2 to 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—clay loam or clay

Content of clay—35 to 50 percent
Content of organic matter—0.5 to 2 percent
Reaction—slightly acid to moderately alkaline
Content of rock fragments—0 to 10 percent 2- to 75-millimeter pebbles

Cieneba Series

The Cieneba series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 60 percent. Cieneba soils are classified as loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents.

Typical pedon

In map unit 267, Cieneba-Vista-Rock outcrop complex, 30 to 60 percent slopes; Kern County, California, about 1,940 feet (591.3 meters) east and 1,720 feet (524.3 meters) south of the northwest corner of sec. 10, T. 29 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 25 minutes 25 seconds north and longitude 118 degrees 44 minutes 51 seconds west; USGS Mount Adelaide, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); clear smooth boundary.
- A2—2 to 6 inches (5 to 15 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); gradual smooth boundary.
- C—6 to 16 inches (15 to 41 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; loose, nonsticky and nonplastic; few very fine and fine roots; few very fine interstitial and few fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); abrupt wavy boundary.
- Cr—16 to 26 inches (41 to 66 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 25 to 80 percent by 2- to 75-millimeter pebbles and 0 to 15 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—7 to 18 percent
Content of organic matter—0.5 to 1 percent
Reaction—moderately acid to neutral

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles, 0 to 10 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—3 to 5 dry and 3 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—7 to 18 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—moderately acid to neutral

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles, 0 to 10 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Cinco Series

The Cinco series consists of very deep, excessively drained or somewhat excessively drained soils that formed in alluvium derived from mixed rock sources. These soils are on fan remnants and mountain slopes. Slope is 30 to 75 percent. Cinco soils are classified as mixed, thermic Xeric Torripsamments.

Typical pedon

In map unit 238, Cinco gravelly loamy sand, 50 to 75 percent slopes; Kern County, California, near Caliente Creek; about 1,320 feet (402.3 meters) south and 2,020 feet (615.7 meters) west of the northeast corner of sec. 19, T. 30 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 18 minutes 27 seconds north and longitude 118 degrees 47 minutes 46 seconds west; USGS Edison, California, Quadrangle, NAD 83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) gravelly loamy sand, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 20 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); clear smooth boundary.
- C1—3 to 10 inches (8 to 25 centimeters); yellowish brown (10YR 5/4) gravelly loamy sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); gradual smooth boundary.
- C2—10 to 39 inches (25 to 99 centimeters); yellowish brown (10YR 5/4) gravelly loamy sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); gradual smooth boundary.
- C3—39 to 60 inches (99 to 152 centimeters); light yellowish brown (10YR 6/4) gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; single grained; loose, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5).

Range in characteristics

About 20 to 70 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy.

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—loamy coarse sand or loamy sand
Content of clay—0 to 5 percent
Content of organic matter—0.5 to 1 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—4 to 35 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 4 or 5 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—loamy coarse sand or loamy sand
Content of clay—0 to 5 percent
Content of organic matter—0 to 0.5 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—4 to 35 percent 2- to 75-millimeter pebbles

Cowspring Series

The Cowspring series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 50 percent. Cowspring soils are classified as coarse-loamy, mixed, superactive, thermic Xeric Haplargids.

Typical pedon

In map unit 259, Cowspring gravelly loamy coarse sand, 15 to 50 percent slopes; Kern County, California, about 1.5 miles (2.4 kilometers) southwest of Hoffman Peak; 1,600 feet (487.7 meters) north and 480 feet (146.3 meters) east of the southwest corner of sec. 1, T. 30 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 21 minutes 11 seconds north and longitude 118 degrees 10 minutes 45 seconds west; USGS Cross Mountain, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); abrupt smooth boundary.
- Bt1—3 to 10 inches (8 to 25 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, dark yellowish brown (10YR 3/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine roots; few very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; few thin clay films bridging sand grains; slightly alkaline (pH 7.5); clear smooth boundary.
- Bt2—10 to 15 inches (25 to 38 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, dark yellowish brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial and few very fine tubular pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear wavy boundary.
- Bt3—15 to 27 inches (38 to 69 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, dark yellowish brown (10YR 3/3) moist; single grained; loose

when dry and when moist, nonsticky and nonplastic when wet; common very fine roots; few very fine tubular pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear wavy boundary.

Cr—27 to 37 inches (69 to 94 centimeters); weathered and fractured granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). About 45 to 75 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—3 to 10 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—10YR or 7.5YR dry and moist

Value—4 to 6 dry and 3 to 5 moist

Chroma—4 dry and moist

Texture of the fine-earth fraction—coarse sandy loam or sandy loam

Content of clay—12 to 18 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Crouch Series

The Crouch series consists of very deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 15 to 50 percent. Crouch soils are classified as coarse-loamy, mixed, superactive, mesic Ultic Haploxerolls.

Typical pedon

In map unit 122, Crouch coarse sandy loam, 30 to 50 percent slopes; in the soil survey area called "Tulare County, California, Central Part"; on the Tule River Indian Reservation; about 575 feet (175.3 meters) east and 575 feet (175.3 meters) north of the southwest corner of projected sec. 30, T. 21 S., R. 31 E.; Mount Diablo Base and Meridian; latitude 36 degrees 4 minutes 23 seconds north and longitude 118 degrees 40 minutes 33 seconds west; USGS Solo Peak, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); dark grayish brown (10YR 4/2) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine roots; many very fine and fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.1); gradual smooth boundary.

- A2—5 to 16 inches (13 to 41 centimeters); dark grayish brown (10YR 4/2) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine, common fine, and few medium and coarse roots; many very fine and fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.1); gradual wavy boundary.
- A3—16 to 22 inches (41 to 56 centimeters); brown (10YR 5/2) coarse sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine, common fine, and few medium roots; many very fine and fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.1); clear irregular boundary.
- Bw—22 to 43 inches (56 to 109 centimeters); pale brown (10YR 6/3) coarse sandy loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine, common fine, and few medium roots; many very fine interstitial and few fine tubular pores; 10 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.1); gradual smooth boundary.
- C—43 to 70 inches (109 to 178 centimeters); pale brown (10YR 6/3) loamy sand, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.1); abrupt irregular boundary.
- Cr—70 to 80 inches (178 to 203 centimeters); light gray, strongly weathered quartz diorite bedrock; easily excavated and crushed to coarse sand.

Range in characteristics

The depth to weathered bedrock is more than 60 inches (152 centimeters). About 5 to 20 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—3 to 5 dry and moist
Chroma—1 to 3 dry and moist
Texture of the fine-earth fraction—coarse sandy loam
Content of clay—7 to 12 percent
Content of organic matter—1 to 3 percent
Reaction—moderately acid or slightly acid
Content of rock fragments—0 to 20 percent 5- to 75-millimeter pebbles

B horizon:

Hue—10YR dry and moist
Value—6 or 7 dry and 4 or 5 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or loam
Content of clay—7 to 15 percent
Content of organic matter—0.5 to 1 percent
Reaction—moderately acid or slightly acid
Content of rock fragments—0 to 20 percent 5- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—6 dry and 4 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—loamy sand or coarse sandy loam
Content of clay—1 to 7 percent

Content of organic matter—0.1 to 1 percent

Reaction—moderately acid or slightly acid

Content of rock fragments—0 to 20 percent 5- to 75-millimeter pebbles

Cumulic Endoaquolls

Cumulic Endoaquolls consist of very deep, poorly drained soils that formed in alluvium derived from granitoid rocks. These soils are in channels and depressions, on flood plains, and in mountain valleys. Slope is 0 to 5 percent. The soils are classified as coarse-loamy, mixed, superactive, frigid Cumulic Endoaquolls.

Typical pedon

In map unit 556, as a minor component, Cumulic Endoaquolls, frigid, in an area of Toll loamy coarse sand, 2 to 9 percent slopes; Kern County, California, about 2,500 feet (762.0 meters) north and 1,230 feet (374.9 meters) east of the southwest corner of sec. 31, T. 22 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 58 minutes 7 seconds north and longitude 118 degrees 1 minute 42 seconds west; USGS Sacatar Canyon, California, Quadrangle, NAD83.

This pedon is representative of the Cumulic Endoaquolls in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A1—0 to 11 inches (0 to 28 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark brown (10YR 2/2) moist; strong medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; many very fine and many fine roots; common very fine interstitial pores; violently effervescent; disseminated carbonates; 3 percent 2- to 5-millimeter pebbles; moderately alkaline (pH 8.2); clear smooth boundary.
- A2—11 to 28 inches (28 to 71 centimeters); grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine interstitial pores; slightly effervescent; disseminated lime; 3 percent 2- to 5-millimeter pebbles; slightly alkaline (pH 7.6); gradual smooth boundary.
- Cg1—28 to 52 inches (71 to 132 centimeters); gray (5Y 5/1) sandy loam, very dark gray (5Y 3/1) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and few fine roots; common very fine interstitial pores; common fine distinct iron concentrations, dark brown (10YR 3/3) moist; slightly effervescent; disseminated lime; 3 percent 2- to 5-millimeter pebbles; slightly alkaline (pH 7.6); clear smooth boundary.
- Cg2—52 to 65 inches (132 to 165 centimeters); gray (5Y 6/1) coarse sandy loam, dark gray (5Y 4/1) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine interstitial pores; few fine distinct iron concentrations, dark brown (10YR 3/3) moist; 3 percent 2- to 5-millimeter pebbles; slightly alkaline (pH 7.6).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 dry and 1 or 2 moist

Texture of the fine-earth fraction—sandy loam
Content of clay—7 to 18 percent
Content of organic matter—2 to 4 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 6 percent 2- to 5-millimeter pebbles

C horizon:

Hue—5Y dry and moist
Value—5 or 6 dry and 2 to 4 moist
Chroma—1 or 2 dry and 1 to 4 moist
Texture of the fine-earth fraction—sand, loamy sand, coarse sandy loam, sandy loam, or silt loam
Content of clay—7 to 18 percent
Content of organic matter—0.5 to 2 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 6 percent 2- to 5-millimeter pebbles

Cuyama Series

The Cuyama series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on stream terraces and fan remnants. Slope is 2 to 30 percent. Cuyama soils are classified as fine-loamy, mixed, superactive, thermic Xeric Haplargids.

Typical pedon

In map unit 184, Cuyama sandy loam, 2 to 5 percent slopes; Kern County, California, about 2,400 feet (731.5 meters) east and 1,200 feet (365.8 meters) south of the northwest corner of sec. 34, T. 30 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 16 minutes 44 seconds north and longitude 118 degrees 44 minutes 40 seconds west; USGS Bena, California, Quadrangle, NAD83.

Ap—0 to 10 inches (0 to 25 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable, slightly sticky and nonplastic; few fine and common very fine roots; few very fine interstitial and common very fine tubular pores; 12 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); abrupt wavy boundary.

Btk1—10 to 21 inches (25 to 53 centimeters); yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, sticky and plastic; few medium, common fine, and few very fine roots; few very fine interstitial and tubular pores; common thin and few moderately thick clay films bridging mineral grains; violently effervescent; carbonates disseminated and segregated as common medium seams and soft masses; 9 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); clear smooth boundary.

Btk2—21 to 32 inches (53 to 81 centimeters); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine interstitial and tubular pores; common thin clay films bridging mineral grains; strongly effervescent; carbonates disseminated and segregated as common medium seams and soft masses; 13 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly alkaline (pH 8.5); clear smooth boundary.

Bk1—32 to 39 inches (81 to 111 centimeters); light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; single grained; slightly hard, friable, slightly sticky and nonplastic; few very fine roots; few very

fine interstitial and tubular pores; few thin clay films bridging mineral grains; slightly effervescent; carbonates disseminated and segregated as common fine soft masses and seams; 13 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly alkaline (pH 8.5); abrupt wavy boundary.

Bk2—39 to 54 inches (111 to 137 centimeters); pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; few medium, common fine, and few very fine roots; common very fine interstitial pores; strongly effervescent; carbonates disseminated and segregated as common fine seams and coatings on the underside of pebbles; 13 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly alkaline (pH 8.5); clear wavy boundary.

Bk3—54 to 60 inches (137 to 152 centimeters); pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine roots; few very fine interstitial pores; strongly effervescent; carbonates disseminated and segregated as common medium seams and coatings on the underside of pebbles; 13 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; strongly alkaline (pH 8.5).

Range in characteristics

Some pedons have a C horizon. Where present, carbonates are segregated in threads, seams, masses, and coatings on pebbles. The percentage of the surface covered by granitoid rock fragments is as follows: 25 to 80 percent by 2- to 75-millimeter pebbles and 1 to 20 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—5 to 20 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Btk horizon:

Hue—10YR dry and moist

Value—3 to 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—sandy loam, loam, sandy clay loam, or clay loam

Content of clay—10 to 30 percent

Content of organic matter—0 to 0.5 percent

Reaction—slightly alkaline to strongly alkaline

Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles, 0 to 17 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bk horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sandy loam, loam, sandy clay loam, or clay loam

Content of clay—8 to 35 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly alkaline to strongly alkaline
Content of rock fragments—2 to 32 percent 2- to 75-millimeter pebbles, 3 to 9 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Deadfoot Series

The Deadfoot series consists of moderately deep, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 30 to 60 percent. Deadfoot soils are classified as sandy-skeletal, mixed, mesic Torriorthentic Haploxerolls.

Typical pedon

In map unit 570, Deadfoot-Scodie-Rock outcrop complex, 30 to 60 percent slopes; Tulare County, California, about 5.5 miles (8.9 kilometers) southwest of Little Lake and 11 miles (17.7 kilometers) southeast of Kennedy Meadows; 1,370 feet (417.6 meters) south and 500 feet (152.4 meters) west of the northeast corner of sec. 33, T. 23 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 53 minutes 43 seconds north and longitude 117 degrees 59 minutes 23 seconds west; USGS Little Lake, California, Quadrangle, NAD83.

- A1—0 to 3 inches (0 to 8 centimeters); grayish brown (10YR 5/2) very bouldery loamy coarse sand, very dark grayish brown (10YR 3/2) moist; strong medium granular structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, 10 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear smooth boundary.
- A2—3 to 10 inches (8 to 25 centimeters); grayish brown (10YR 5/2) very stony loamy coarse sand, very dark grayish brown (10YR 3/2) moist; weak coarse granular structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine, coarse, and very coarse roots; many very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, 10 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear wavy boundary.
- C—10 to 23 inches (25 to 58 centimeters); light brownish gray (10YR 6/2) very stony loamy coarse sand, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and coarse roots; many very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, 10 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); gradual irregular boundary.
- Cr—23 to 33 inches (58 to 83 centimeters); weathered granodiorite bedrock; can be dug with a spade when moist.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 15 to 35 percent by 2- to 75-millimeter pebbles, 5 to 15 percent by 75- to 250-millimeter cobbles, 5 to 15 percent by 250- to 600-millimeter stones, and 0 to 10 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist
Value—5 dry and 3 moist

Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—loamy coarse sand
Content of clay—3 to 10 percent
Content of organic matter—1 to 2 percent
Reaction—neutral
Content of rock fragments—2 to 20 percent 2- to 75-millimeter pebbles, 2 to 15 percent 75- to 250-millimeter cobbles, 2 to 15 percent 250- to 600-millimeter stones, and 2 to 10 percent 600- to 3,000-millimeter boulders

C horizon:

Hue—10YR dry and moist
Value—4 to 6 dry and 3 or 4 moist
Chroma—2 to 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—loamy coarse sand
Content of clay—3 to 10 percent
Content of organic matter—0.5 to 1 percent
Reaction—neutral
Content of rock fragments—2 to 20 percent 2- to 75-millimeter pebbles, 2 to 15 percent 75- to 250-millimeter cobbles, 2 to 15 percent 250- to 600-millimeter stones, and 2 to 10 percent 600- to 3,000-millimeter boulders

Deerspring Series

The Deerspring series consists of very deep, moderately well drained soils that formed in alluvium derived from mixed rock sources. These soils are on flood plains and in mountain valleys. Slope is 0 to 5 percent. Deerspring soils are classified as coarse-loamy, mixed, superactive, mesic Cumulic Haploxerolls.

Typical pedon

In map unit 554, Deerspring fine sandy loam, 0 to 5 percent slopes; Kern County, California, about 3.5 miles (5.6 kilometers) south of Kennedy Meadows camp; 1,100 feet (335.3 meters) north and 1,750 feet (533.4 meters) east of the southwest corner of sec. 17, T. 22 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 36 degrees 0 minutes 19 seconds north and longitude 118 degrees 7 minutes 2 seconds west; USGS Long Canyon, California, Quadrangle, NAD83.

- A1—0 to 11 inches (0 to 28 centimeters); dark grayish brown (10YR 4/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine, fine, and medium roots; common very fine and fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- A2—11 to 24 inches (28 to 61 centimeters); brown (10YR 4/3) fine sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine, fine, and medium roots; common very fine and fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- C1—24 to 38 inches (61 to 97 centimeters); grayish brown (2.5Y 4/2) fine sandy loam, very dark grayish brown (2.5Y 3/2) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; many very fine, fine, and medium roots; common very fine and fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- C2—38 to 56 inches (97 to 142 centimeters); grayish brown (2.5Y 5/2) loam, very dark grayish brown (10YR 3/2) moist; massive; slightly hard, very friable, slightly

sticky and slightly plastic; many very fine, fine, and medium roots; common very fine and fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); gradual smooth boundary.

C3—56 to 80 inches (142 to 203 centimeters); grayish brown (2.5Y 5/2) loam, very dark grayish brown (10YR 3/2) moist; common very fine and fine mottles, dark yellowish brown (10YR 3/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine and fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

About 5 to 15 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and 1 to 3 moist

Texture of the fine-earth fraction—fine sandy loam or loam

Content of clay—8 to 18 percent

Content of organic matter—1 to 4 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR or 2.5Y dry and moist

Value—4 or 5 dry and 2 to 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—loamy sand, coarse sandy loam, sandy loam, fine sandy loam, or loam

Content of clay—5 to 18 percent

Content of organic matter—0.5 to 3 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

Delano Series

The Delano series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on fan remnants and stream terraces. Slope is 0 to 9 percent. Delano soils are classified as fine-loamy, mixed, superactive, thermic Xeric Haplargids.

Typical pedon

In map unit 145, Delano loamy sand, 0 to 2 percent slopes; Kern County, California, about 1,300 feet (396.2 meters) north and 200 feet (61.0 meters) east of the southwest corner of sec. 12, T. 30 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 19 minutes 44 seconds north and longitude 118 degrees 49 minutes 25 seconds west; USGS Edison, California, Quadrangle, NAD83.

Ap—0 to 7 inches (0 to 18 centimeters); grayish brown (10YR 5/2) loamy sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; common very fine and fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; strongly acid (pH 5.5); abrupt smooth boundary.

- A—7 to 20 inches (18 to 51 centimeters); brown (10YR 5/3) sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; common very fine roots; few very fine interstitial pores; strongly acid (pH 5.5); clear smooth boundary.
- Bt1—20 to 31 inches (51 to 79 centimeters); yellowish brown (10YR 5/4) sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; hard, very friable, slightly sticky and nonplastic; few very fine roots; few very fine interstitial and tubular pores; few thin clay films bridging mineral grains; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); clear wavy boundary.
- Bt2—31 to 43 inches (79 to 109 centimeters); yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; few very fine roots; common very fine tubular and few very fine interstitial pores; common thin and few moderately thick clay films bridging mineral grains; 10 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear smooth boundary.
- Btk—43 to 55 inches (109 to 140 centimeters); light yellowish brown (10YR 6/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; common very fine tubular and few very fine interstitial pores; common moderately thick clay films bridging mineral grains and on faces of peds; violently effervescent; carbonates segregated in common medium and large seams; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.
- Bk—55 to 60 inches (140 to 152 centimeters); light yellowish brown (10YR 6/4) loamy sand, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine interstitial pores; strongly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0).

Range in characteristics

About 0 to 15 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy. In some pedons reaction in the A horizon has been lowered because of applications of soil amendments.

A horizon:

- Hue—10YR dry and moist
- Value—5 or 6 dry and 3 to 5 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—loamy sand, sandy loam, or sandy clay loam
- Content of clay—2 to 27 percent
- Content of organic matter—0 to 1 percent
- Reaction—strongly acid to slightly alkaline
- Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

B horizon:

- Hue—10YR dry and moist
- Value—5 or 6 dry and 4 or 5 moist
- Chroma—3 or 4 dry and moist
- Texture of the fine-earth fraction—loamy sand, sandy loam, loam, sandy clay loam, or clay loam
- Content of clay—5 to 35 percent
- Content of organic matter—0 to 0.75 percent
- Reaction—neutral to moderately alkaline
- Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

Delvar Series

The Delvar series consists of very deep, moderately well drained soils that formed in alluvium derived from mixed rock sources. These soils are on fan remnants. Slope is 2 to 30 percent. Delvar soils are classified as fine, smectitic, thermic Calcic Pachic Argixerolls.

Typical pedon

In map unit 380, Delvar-Pleito complex, 9 to 30 percent slopes; Kern County, California, about 2,530 feet (776.3 meters) south and 1,230 feet (374.9 meters) west of the northeast corner of sec. 26, T. 25 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 43 minutes 34 seconds north and longitude 119 degrees 1 minute 54 seconds west; USGS Deepwell Ranch, California, Quadrangle, NAD83.

- Ap1—0 to 4 inches (0 to 10 centimeters); dark grayish brown (10YR 4/2) clay loam, very dark brown (10YR 3/2) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; few fine roots; few very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); clear smooth boundary.
- Ap2—4 to 20 inches (10 to 51 centimeters); dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; common very fine tubular and few very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); clear wavy boundary.
- AB—20 to 26 inches (51 to 66 centimeters); dark grayish brown (10YR 4/2) clay, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; very hard, friable, very sticky and very plastic; few very fine roots; common very fine interstitial and few very fine tubular pores; few thin clay films on faces of peds and in pores; 12 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- Btk1—26 to 37 inches (66 to 94 centimeters); brown (10YR 4/3) clay, dark brown (10YR 3/3) moist; weak coarse prismatic structure parting to subangular blocky; very hard, friable, very sticky and very plastic; few very fine roots; common very fine tubular pores; common moderately thick clay films on faces of peds; strongly effervescent; carbonates disseminated and segregated as few fine threads; 12 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- Btk2—37 to 44 inches (94 to 112 centimeters); yellowish brown (10YR 5/4) clay, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; hard, friable, very sticky and very plastic; few very fine roots; common very fine tubular and few very fine interstitial pores; common thin clay bridges on faces of peds; strongly effervescent; carbonates disseminated and segregated as common fine threads and soft masses; 12 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- Btk3—44 to 51 inches (112 to 130 centimeters); yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; few very fine roots; common very fine tubular and interstitial pores; common thin clay bridges on faces of peds; strongly effervescent; carbonates disseminated and segregated as common fine filaments; 12 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear wavy boundary.
- Btk4—51 to 61 inches (130 to 155 centimeters); light yellowish brown (10YR 6/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine tubular and few very fine interstitial pores; few thin clay bridges on faces of peds;

strongly effervescent; carbonates disseminated and segregated as few fine threads; 12 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

About 5 to 30 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy. Some pedons do not have an AB horizon.

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy clay loam or clay loam
Content of clay—15 to 40 percent
Content of organic matter—1 to 3 percent
Reaction—slightly acid to moderately alkaline
Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles

Btk horizon:

Hue—10YR dry and moist
Value—3 to 6 dry and moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—sandy loam, sandy clay loam, clay loam, or clay
Content of clay—15 to 55 percent
Content of organic matter—0 to 2 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 23 percent 2- to 75-millimeter pebbles

Edmundston Series

The Edmundston series consists of deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 15 to 60 percent. Edmundston soils are classified as coarse-loamy, mixed, superactive, mesic Pachic Haploxerolls.

Typical pedon

In map unit 272, Tollhouse-Edmundston-Sorrell association, 15 to 50 percent slopes; Kern County, California, about 540 feet (164.6 meters) west and 1,200 feet (365.8 meters) south of the northeast corner of sec. 35, T. 29 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 22 minutes 31 seconds north and longitude 118 degrees 17 minutes 41 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

- A1—0 to 3 inches (0 to 8 centimeters); grayish brown (10YR 5/2) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 11 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly acid (pH 6.5); clear wavy boundary.
- A2—3 to 25 inches (8 to 64 centimeters); grayish brown (10YR 5/2) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few very fine and medium and common fine and coarse roots; few very fine interstitial pores; 11 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly acid (pH 6.5); clear wavy boundary.

Bw1—25 to 47 inches (64 to 120 centimeters); brown (10YR 5/3) gravelly coarse sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few very fine, medium, and coarse roots; few very fine interstitial and tubular pores; 20 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly acid (pH 6.5); clear wavy boundary.

Bw2—47 to 57 inches (120 to 145 centimeters); brown (10YR 5/3) gravelly coarse sandy loam, dark brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few very fine and medium roots; few very fine interstitial and tubular pores; 20 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly acid (pH 6.5); clear wavy boundary.

Cr—57 to 67 inches (145 to 170 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 40 to 60 inches (102 to 152 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 35 to 55 percent by 2- to 75-millimeter pebbles and 5 to 50 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—1 to 3 dry and moist

Texture of the fine-earth fraction—coarse sandy loam or sandy loam

Content of clay—8 to 18 percent

Content of organic matter—1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 29 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

B horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—coarse sandy loam or sandy loam

Content of clay—8 to 18 percent

Content of organic matter—0.5 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 40 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

Elkhills Series

The Elkhills series consists of very deep, well drained soils that formed in alluvium derived from mixed sources and/or lacustrine deposits. These soils are on dissected fan remnants. Slope is 9 to 50 percent. Elkhills soils are classified as coarse-loamy, mixed, superactive, calcareous, thermic Typic Torriorthents.

Typical pedon

In map unit 179, Torriorthents, stratified, eroded-Elkhills complex, 9 to 50 percent slopes; Kern County, California, about 200 feet (61.0 meters) north and 600 feet (182.90 meters) east of the southwest corner of sec. 28; T. 28 S., R. 28 E.; Mount Diablo Base and Meridian; latitude 35 degrees 27 minutes 24 seconds north and

longitude 118 degrees 58 minutes 24 seconds west; USGS Oil Center, California, Quadrangle, NAD83.

- A—0 to 29 inches (0 to 74 centimeters); light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; few fine and common very fine interstitial and few very fine tubular pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; strongly effervescent; moderately alkaline (pH 7.9); clear wavy boundary.
- C1—29 to 49 inches (74 to 124 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 12 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; strongly effervescent; moderately alkaline (pH 7.9); abrupt wavy boundary.
- C2—49 to 65 inches (124 to 165 centimeters); pale brown (10YR 6/3), stratified gravelly sand to silt loam, yellowish brown (10YR 5/4) moist; massive; loose when dry and when moist, slightly sticky and slightly plastic when wet; few very fine roots; few very fine interstitial pores; 26 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; strongly effervescent; moderately alkaline (pH 7.9); abrupt wavy boundary.

Range in characteristics

Some pedons have an AC horizon. The soils generally are slightly effervescent to violently effervescent throughout, but in some areas the lower horizons are noneffervescent. About 10 to 40 percent of the surface is covered by 2- to 75-millimeter pebbles from mixed sources.

A horizon:

- Hue—10YR dry and moist
- Value—6 dry and 4 or 5 moist
- Chroma—3 dry and moist
- Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or loam
- Content of clay—5 to 25 percent
- Content of organic matter—0 to 1 percent
- Reaction—slightly alkaline or moderately alkaline
- Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

C horizon:

- Hue—10YR or 2.5Y dry and moist
- Value—6 dry and 4 or 5 moist
- Chroma—2 to 4 dry and moist
- Texture of the fine-earth fraction—stratified sand to silt loam
- Content of clay—5 to 20 percent
- Content of organic matter—0 to 0.5 percent
- Reaction—slightly alkaline or moderately alkaline
- Content of rock fragments—0 to 45 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

Erskine Series

The Erskine series consists of shallow, well drained soils that formed in residuum weathered from igneous and/or gabbro rocks. These soils are on hillslopes and

mountain slopes. Slope is 5 to 60 percent. Erskine soils are classified as loamy, mixed, superactive, mesic, shallow Mollic Haploxeralfs.

Typical pedon

In map unit 289, Erskine-Hyte-Rock outcrop association, 30 to 60 percent slopes; Kern County, California, about 2,400 feet (731.5 meters) south and 2,450 feet (746.8 meters) east of the northwest corner of sec. 13, T. 28 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 29 minutes 41 seconds north and longitude 118 degrees 27 minutes 31 seconds west; USGS Piute Peak, California, Quadrangle, NAD83.

- A1—0 to 4 inches (0 to 10 centimeters); dark gray (10YR 4/1) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; single grained; loose, nonsticky and nonplastic; many very fine and few fine roots; many very fine and fine interstitial and few fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear wavy boundary.
- A2—4 to 8 inches (10 to 20 centimeters); dark grayish brown (10YR 4/2) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine and few fine roots; many very fine and fine interstitial and common very fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; slightly alkaline (pH 7.4); clear smooth boundary.
- Bt1—8 to 13 inches (20 to 33 centimeters); light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and few fine roots; common very fine interstitial and tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; few thin clay bridges on faces of peds; slightly alkaline (pH 7.4); clear wavy boundary.
- Bt2—13 to 18 inches (33 to 46 centimeters); very pale brown (10YR 7/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and few fine, medium, and coarse roots; common very fine and fine interstitial and tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; few thin clay bridges on faces of peds; slightly alkaline (pH 7.4); clear wavy boundary.
- Cr—18 to 28 inches (46 to 71 centimeters); weathered, partially decomposed granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). Some pedons have an O horizon, which is less than 1 inch thick. The percentage of the surface covered by igneous and/or gabbro rock fragments is as follows: 5 to 20 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, 0 to 5 percent by 250- to 600-millimeter stones, and 0 to 5 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—1 to 3 dry and 2 or 3 moist

Texture of the fine-earth fraction—loamy coarse sand, coarse sandy loam, or sandy loam

Content of clay—3 to 15 percent

Content of organic matter—0.5 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 5 percent 600- to 3,000-millimeter boulders

Bt horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 3 to 5 moist

Chroma—3 or 4 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—8 to 18 percent

Content of organic matter—0.2 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 5 percent 600- to 3,000-millimeter boulders

Exeter Series

The Exeter series consists of moderately deep, moderately well drained soils that formed in alluvium derived from granitoid rocks. These soils are on fan remnants. Slope is 0 to 9 percent. Exeter soils are classified as fine-loamy, mixed, superactive, thermic Typic Durixeralfs.

Typical pedon

In map unit 196, Exeter sandy loam, 2 to 9 percent slopes; Kern County, California, about 2,040 feet (621.8 meters) south and 1,420 feet (432.8 meters) west of the northeast corner of sec. 23, T. 25 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 44 minutes 30 seconds north and longitude 119 degrees 1 minute 52 seconds west; USGS Deepwell Ranch, California, Quadrangle, NAD83.

Ap1—0 to 4 inches (0 to 10 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 8 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

Ap2—4 to 8 inches (10 to 20 centimeters); brown (10YR 5/3) sandy clay loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine roots; common very fine tubular and few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

ABt—8 to 12 inches (20 to 30 centimeters); brown (10YR 5/3) sandy clay loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine roots; few very fine tubular pores; few thin clay bridges on faces of peds; 5 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

BAt—12 to 18 inches (30 to 46 centimeters); yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and

- few fine roots; few very fine tubular and few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; common thin clay bridges on faces of peds; moderately alkaline (pH 8.0); clear smooth boundary.
- Bt—18 to 25 inches (46 to 64 centimeters); brown (7.5YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; common very fine and few medium roots; common very fine interstitial and few very fine tubular pores; many moderately thick clay films on faces of peds and in pores; 3 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.
- Bqsm—25 to 39 inches (64 to 99 centimeters); indurated duripan; very hard, very firm; abrupt smooth boundary.
- C—39 to 60 inches (99 to 152 centimeters); yellowish brown (10YR 5/4) clay loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; hard, friable, nonsticky and nonplastic; common very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0).

Range in characteristics

The depth to an indurated duripan (Bqsm horizon) is 20 to 40 inches (51 to 102 centimeters). About 25 to 75 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

- Hue—10YR dry and moist
- Value—5 dry and 3 moist
- Chroma—3 dry and moist
- Texture of the fine-earth fraction—sandy loam or sandy clay loam
- Content of clay—10 to 20 percent
- Content of organic matter—0 to 1 percent
- Reaction—slightly alkaline or moderately alkaline
- Content of rock fragments—2 to 14 percent 2- to 75-millimeter pebbles

Bt horizon:

- Hue—10YR or 7.5YR dry and moist
- Value—5 or 6 dry and 3 or 4 moist
- Chroma—4 dry and moist
- Texture of the fine-earth fraction—sandy loam, loam, sandy clay loam, loam, or clay loam
- Content of clay—18 to 30 percent
- Content of organic matter—0 to 0.5 percent
- Reaction—slightly alkaline or moderately alkaline
- Content of rock fragments—0 to 14 percent 2- to 75-millimeter pebbles

Faycreek Series

The Faycreek series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 30 to 75 percent. Faycreek soils are classified as mixed, mesic, shallow Psammentic Haploxerolls.

Typical pedon

In map unit 330, Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes; Kern County, California, about 2,240 feet (682.8 meters) south and 1,830 feet (557.8 meters) west of the northeast corner of sec. 7, T. 26 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 57 seconds north and longitude 118

degrees 28 minutes 27 seconds west; USGS Lake Isabella North, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); dark grayish brown (10YR 4/2) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many medium interstitial pores; 20 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); clear wavy boundary.

A2—5 to 12 inches (13 to 30 centimeters); brown (10YR 4/3) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; common fine interstitial and few fine tubular pores; 20 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); abrupt wavy boundary.

Cr—12 to 22 inches (30 to 56 centimeters); weathered, partially decomposed granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 15 to 25 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—2 to 30 percent 2- to 75-millimeter pebbles, 2 to 5 percent 75- to 250-millimeter cobbles, and 0 to 15 percent 250- to 600-millimeter stones

Feethill Series

The Feethill series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 9 to 60 percent. Feethill soils are classified as fine-loamy, mixed, superactive, thermic Typic Argixerolls.

Typical pedon

In map unit 277, Feethill-Vista-Walong association, 15 to 60 percent slopes; Kern County, California, about 440 feet (134.1 meters) east and 2,530 feet (771.1 meters) south of the northwest corner of sec. 11, T. 29 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 25 minutes 16 seconds north and longitude 118 degrees 44 minutes 5 seconds west; USGS Mount Adelaide, California, Quadrangle, NAD83.

A—0 to 4 inches (0 to 10 centimeters); grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; many very fine roots; common

very fine interstitial pores; 4 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); abrupt smooth boundary.

- BAt—4 to 9 inches (10 to 23 centimeters); grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; common very fine interstitial and tubular pores; common thin clay films bridging mineral grains; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.
- Bt1—9 to 18 inches (23 to 46 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; common fine and medium tubular pores; few moderately thick and common thin clay films bridging mineral grains; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); gradual wavy boundary.
- Bt2—18 to 24 inches (46 to 61 centimeters); brown (10YR 5/3) sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; slightly hard, friable, sticky and plastic; few very fine, fine, and medium roots; few fine and medium tubular pores; common thin clay films bridging mineral grains; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.
- BC—24 to 30 inches (61 to 76 centimeters); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and coarse roots; few fine and medium tubular pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.
- Cr—30 to 40 inches (76 to 101 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). About 0 to 55 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy loam or loam
Content of clay—8 to 20 percent
Content of organic matter—1 to 3 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—10YR or 7.5YR dry and moist
Value—4 or 5 dry and 3 or 4 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—sandy clay loam or sandy loam
Content of clay—15 to 30 percent
Content of organic matter—0.5 to 2 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles

Friant Series

The Friant series consists of very shallow or shallow, well drained soils that formed in residuum weathered from schist and/or gneiss (fig. 16). These soils are on



Figure 16.—Profile of the shallow or very shallow Friant soil in map unit 430 (Friant-Rock outcrop complex, 15 to 75 percent slopes). Depth is marked in feet.

mountain slopes. Slope is 15 to 75 percent. Friant soils are classified as loamy, mixed, superactive, thermic Lithic Haploxerolls.

Typical pedon

In map unit 282, Tollhouse-Sesame-Friant association, 30 to 60 percent slopes; Kern County, California, about 3,000 feet (914.4 meters) west-southwest of Yates Hot Springs; 380 feet (115.8 meters) south and 700 feet (231.4 meters) east of the northwest corner of sec. 7, T. 29 S., R. 33 E.; Mount Diablo Base and Meridian;

latitude 35 degrees 25 minutes 35 seconds north and longitude 118 degrees 29 minutes 24 seconds west; USGS Piute Peak, California, Quadrangle, NAD83.

- A1—0 to 5 inches (0 to 13 centimeters); brown (10YR 4/3) stony sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 10 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); gradual smooth boundary.
- A2—5 to 15 inches (13 to 38 centimeters); brown (10YR 4/3) stony sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 10 percent 250- to 600-millimeter stones; slightly acid (pH 6.5); clear wavy boundary.
- R—15 to 25 inches (38 to 63 centimeters); hard mica schist bedrock.

Range in characteristics

The depth to hard bedrock is 6 to 20 inches (15 to 51 centimeters). The percentage of the surface covered by gneiss and/or schist rock fragments is as follows: 25 to 55 percent by 2- to 75-millimeter pebbles, 10 to 25 percent by 75- to 250-millimeter cobbles, and 10 to 30 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam, fine sandy loam, or loam

Content of clay—10 to 18 percent

Content of organic matter—1 to 2 percent

Reaction—moderately acid to neutral

Content of rock fragments—2 to 20 percent 2- to 75-millimeter pebbles, 2 to 10 percent 75- to 250-millimeter cobbles, and 5 to 15 percent 250- to 600-millimeter stones

Goldpeak Series

The Goldpeak series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on fan remnants. Slope is 2 to 8 percent. Goldpeak soils are classified as coarse-loamy, mixed, superactive, thermic Typic Haplargids.

Typical pedon

In map unit 6001, Goldpeak-Pinyonpeak-Wingap complex, 2 to 30 percent slopes; Kern County, California, about 23.6 miles (38 kilometers) north and 8.7 miles (14 kilometers) east of Mojave, California, in the foothills of the extreme southern Sierra Nevada Mountains; about 2,000 feet (610 meters) north of the intersection of BLM Roads SC 99 and SC 171; about 1,805 feet (550 meters) west and 1,198 feet (365 meters) north of the southeast corner of sec. 13, T. 29 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees, 24 minutes, 24.1 seconds north and longitude 118 degrees, 3 minutes, 48.9 seconds west; UTM 11S, 0403425E, 3918665N; USGS Dove Springs, California, Quadrangle, NAD83.

- A—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) gravelly loamy sand, brown (10YR 4/3) moist; moderate thick platy structure parting to weak subangular

blocky; moderately hard, very friable, nonsticky and nonplastic; many very fine and fine roots; many very fine vesicular pores; 15 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear wavy boundary.

- Bt1—2 to 10 inches (5 to 26 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine, common fine, and few medium roots; many very fine and common fine interstitial pores; 2 percent distinct dark yellowish brown (10YR 3/4) clay films on faces of peds; 15 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); gradual wavy boundary.
- Bt2—10 to 16 inches (26 to 40 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; common very fine and fine interstitial pores; 10 percent faint clay bridges between sand grains and 20 percent prominent dark yellowish brown (10YR 4/4) clay films on faces of peds; 15 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); clear wavy boundary.
- Bt3—16 to 48 inches (40 to 121 centimeters); light yellowish brown (10YR 6/4) gravelly coarse sandy loam, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; common fine and medium interstitial pores; 15 percent faint clay bridges between sand grains and 7 percent distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; 15 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); gradual irregular boundary.
- Bt4—48 to 95 inches (121 to 240 centimeters); light yellowish brown (10YR 6/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; very hard, friable, nonsticky and nonplastic; few very fine and fine roots; common medium interstitial pores; 20 percent prominent dark yellowish brown (10YR 4/4) clay films on faces of peds and on surfaces along root channels; 15 percent 2- to 75-millimeter pebbles; neutral (pH 6.6).

Range in characteristics

The soils have a typic-aridic moisture regime. Depth to the upper boundary of the argillic horizon is 15 to 35 centimeters. Some pedons have an ABt or Bw horizon. About 0 to 50 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—7.5YR or 10YR dry and moist
Value—4 to 6 dry
Chroma—3 to 6 dry and 2 to 4 moist
Texture of the fine-earth fraction—loamy sand
Content of clay—3 to 9 percent
Content of organic matter—0.25 to 0.6 percent
Reaction—slightly acid to slightly alkaline
Content of rock fragments—6 to 17 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—7.5YR or 10YR dry and moist
Value—5 or 6 dry and 3 to 5 moist
Chroma—3, 4, or 6 dry and moist
Texture of the fine-earth fraction—sandy loam, coarse sandy loam, or sandy clay loam
Content of clay—10 to 25 percent
Content of organic matter—0.25 to 0.60 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—5 to 25 percent 2- to 75-millimeter pebbles

Goodale Series

The Goodale series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from granitoid rocks. These soils are on inset fans and in channels, drainageways, and mountain valleys. Slope is 1 to 15 percent. Goodale soils are classified as sandy-skeletal, mixed, thermic Xeric Torriorthents.

Typical pedon

In map unit 352, Goodale-Riverwash complex, 0 to 5 percent slopes; Kern County, California, about 1,800 feet (548.6 meters) east and 1,340 feet (408.4 meters) north of the southwest corner of sec. 6, T. 27 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 36 minutes 20 seconds north and longitude 118 degrees 28 minutes 48 seconds west; USGS Lake Isabella South, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) very cobbly loamy coarse sand, very dark grayish brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 20 percent 23- to 75-millimeter pebbles, 25 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); abrupt wavy boundary.
- C1—3 to 8 inches (8 to 20 centimeters); pale brown (10YR 6/3) extremely cobbly loamy coarse sand, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; few medium and common fine and very fine roots; few very fine interstitial pores; 25 percent 23- to 75-millimeter pebbles, 25 percent 75- to 250-millimeter cobbles, and 10 percent 250- to 600-millimeter stones; neutral (pH 7.2); abrupt wavy boundary.
- C2—8 to 60 inches (20 to 152 centimeters); light yellowish brown (10YR 6/4) extremely cobbly loamy coarse sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine and common medium roots; common very fine and fine interstitial pores; 25 percent 23- to 75-millimeter pebbles, 25 percent 75- to 250-millimeter cobbles, and 10 percent 250- to 600-millimeter stones; neutral (pH 7.2).

Range in characteristics

The percentage of the surface covered by granitoid rock fragments is as follows: 30 to 50 percent by 2- to 75-millimeter pebbles, 5 to 25 percent by 75- to 250-millimeter cobbles, and 20 to 40 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 3 to 5 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—5 to 10 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—7 to 30 percent 2- to 75-millimeter pebbles, 10 to 30 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 3 to 5 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—5 to 10 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—5 to 30 percent 2- to 75-millimeter pebbles, 10 to 30 percent 75- to 250-millimeter cobbles, and 0 to 30 percent 250- to 600-millimeter stones

Grandora Series

The Grandora series consists of very deep, somewhat excessively drained soils that formed in colluvium and residuum derived from granite. These soils are on backslopes in the mountains. Slope is 15 to 60 percent. Grandora soils are classified as mixed, mesic Xeric Torripsammments.

Typical pedon

In map unit 5210, Grandora-Pinyonpeak association, 8 to 60 percent slopes; Kern County, California, about 29.2 miles (47 kilometers) north and 1.2 miles (2.0 kilometers) east of Mojave, California, at the southern end of the Scodie Mountains; approximately 2.5 miles (4.0 kilometers) east and 0.6 mile (1.0 kilometer) north of Mayan Peak; in an unsectionalized area 2,329 feet (710 meters) south and 951 feet (290 meters) east of the northeast corner of sec. 25, T. 28 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees, 28 minutes, 26.4 seconds north and longitude 118 degrees, 9 minutes, 14.0 seconds west; UTM 11S, 0395313E, 3926223N; USGS Pinyon Mountain, California, Quadrangle, NAD83.

A—0 to 3 inches (0 to 7 centimeters); brown (10YR 5/3) coarse sand, brown (10YR 4/3) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.8); abrupt wavy boundary.

ABt—3 to 9 inches (7 to 22 centimeters); brown (10YR 5/3) coarse sand, brown (10YR 4/3) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine to very coarse roots; many very fine interstitial and few fine tubular pores; 5 percent faint clay films on rock fragments and bridging sand grains; 10 percent 2- to 75-millimeter pebbles and 15 percent, 75- to 250-millimeter paracobbles; neutral (pH 7.0); abrupt wavy boundary.

Bt1—9 to 37 inches (22 to 95 centimeters); yellowish brown (10YR 5/4) paracobbly sand, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; moderately hard, very friable, nonsticky and nonplastic; few very fine to coarse roots; many very fine and few fine to coarse tubular pores; 10 percent faint clay films on rock fragments and bridging sand grains; 10 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear wavy boundary.

Bt2—37 to 60 inches (95 to 152 centimeters); yellowish brown (10YR 5/4) paracobbly coarse sand, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine, fine, and medium roots; common very fine interstitial and few fine tubular pores; 5 percent faint clay films on rock fragments and bridging sand grains; 10 percent 2- to 75-millimeter pebbles and 15 percent 75- to 250-millimeter paracobbles; slightly alkaline (pH 7.4).

Range in characteristics

The lower part of the soil profile typically has paracobbles and parastones. The soils have an aridic moisture regime bordering on xeric. About 0 to 60 percent of the surface is covered by granite rock fragments (2- to 75-millimeter pebbles).

A and ABt horizons:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—4 to 6 dry and moist

Texture of the fine-earth fraction—sand, coarse sand, loamy sand, or loamy coarse sand

Content of clay—2 to 6 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral

Content of rock fragments—5 to 35 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—4 to 6 dry and moist

Texture of the fine-earth fraction—coarse sand, sand, loamy sand, or loamy coarse sand

Content of clay—2 to 6 percent

Content of organic matter—0.25 to 0.75 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—5 to 30 percent 2- to 75-millimeter pebbles, 0 to 30 percent 75- to 250-millimeter paracobbles, and 0 to 15 percent 250- to 600-millimeter parastones

Haplodurids

Haplodurids consist of moderately deep, well drained soils that formed in alluvium derived from rocks of mixed mineralogy. These soils are on fan remnants. Slope is 2 to 30 percent. The soils are classified as mixed, superactive, thermic Haplodurids.

Typical pedon

In map unit 314, Premier-Haplodurids complex, 9 to 30 percent slopes; Kern County, California, about 2,640 feet (804.7 meters) south and 2,270 feet (691.9 meters) west of northeast corner section 10, T. 28 S., R. 27. E.; Mount Diablo Base and Meridian; latitude 35 degrees 30 minutes 24 seconds north and longitude 119 degrees 3 minutes 16 seconds west; USGS North of Oildale, California, Quadrangle, NAD83.

This pedon is representative of the Haplodurids in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

A1—0 to 6 inches (0 to 15 centimeters); pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and nonplastic; common very fine roots; common very fine interstitial pores; slightly alkaline (pH 7.6); clear smooth boundary.

A2—6 to 14 inches (15 to 36 centimeters); pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; moderately hard, friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial pores; slightly alkaline (pH 7.6); clear wavy boundary.

Bk1—14 to 23 inches (36 to 58 centimeters); light yellowish brown (10YR 6/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular

blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial pores; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bk2—23 to 25 inches (58 to 64 centimeters); light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine interstitial pores; slightly alkaline (pH 7.6); abrupt wavy boundary.

Bkqm—25 to 38 inches (64 to 97 centimeters); pink (7.5YR 7/4), indurated duripan, brown (7.5YR 4/4) moist; rigid, indurated; nonsticky and nonplastic; common very fine tubular pores; 10 percent patchy faint carbonate coatings on faces of peds and 55 percent discontinuous faint silica on faces of peds and in pores; 5 percent carbonate threads; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bkq1—38 to 50 inches (97 to 127 centimeters); light brown (7.5YR 6/4) sandy loam, brown (7.5YR 4/4) moist; rigid; very strongly cemented by carbonates and silica; nonsticky and nonplastic; common very fine tubular pores; 10 percent patchy faint carbonate coatings on faces of peds and 30 percent discontinuous faint silica on faces of peds and in pores; 5 percent carbonate threads; violently effervescent; 2 percent 2- to 5-millimeter pebbles; moderately alkaline (pH 7.9); abrupt smooth boundary.

Bkq2—50 to 60 inches (127 to 152 centimeters); light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; extremely hard, slightly rigid; very strongly cemented by carbonates and silica; nonsticky and nonplastic; few very fine tubular pores; 30 percent discontinuous faint silica on faces of peds and in pores; strong effervescence; 2 percent 2- to 5-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to a cemented and indurated duripan is 20 to 40 inches (51 to 102 centimeters).

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 dry and moist
Texture of the fine-earth fraction—fine sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0.2 to 1 percent
Reaction—neutral to moderately alkaline

B horizon:

Hue—10YR or 7.5YR dry and moist
Value—6 or 7 dry and 3 to 5 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—coarse sandy loam, sandy loam, fine sandy loam, or loam
Content of clay—10 to 18 percent
Content of organic matter—0.2 to 0.8 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 3 percent 2- to 5-millimeter pebbles

Havala Series

The Havala series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are in mountain valleys and on old stream terraces and fan remnants. Slope is 2 to 15 percent. Havala soils are classified as fine-loamy, mixed, superactive, thermic Pachic Argixerolls.

Typical pedon

In map unit 281, Havala-Walong-Kernfork association, 1 to 20 percent slopes; Kern County, California, about 1,000 feet (304.8 meters) east-northeast of Yates Hot Springs; 2,100 feet (640.1 meters) north and 900 feet (274.3 meters) west of the southeast corner of sec. 6, T. 29 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 26 minutes 0 seconds north and longitude 118 degrees 28 minutes 38 seconds west; USGS Piute Peak, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); clear wavy boundary.
- A2—2 to 13 inches (5 to 33 centimeters); brown (10YR 5/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine and fine roots; few very fine interstitial and tubular pores; 13 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); gradual wavy boundary.
- Bt1—13 to 29 inches (33 to 74 centimeters); brown (10YR 5/3) gravelly sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine, medium, and coarse and common fine roots; common fine tubular and few very fine interstitial pores; common thin clay bridges and few moderately thick clay films on faces of peds; 13 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); clear wavy boundary.
- Bt2—29 to 60 inches (74 to 152 centimeters); yellowish brown (10YR 5/4) gravelly sandy loam, brown (10YR 4/3) moist; massive, hard, friable, nonsticky and nonplastic; few very fine, fine, and medium roots; few very fine interstitial pores; common thin clay bridges and few moderately thick clay films on faces of peds in fractures; 13 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5).

Range in characteristics

The percentage of the surface covered by granitoid rock fragments is as follows: 0 to 50 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 450-millimeter stones.

A horizon:

- Hue—10YR dry and moist
- Value—4 or 5 dry and 3 or 4 moist
- Chroma—2 to 4 dry and moist
- Texture of the fine-earth fraction—sandy loam
- Content of clay—12 to 18 percent
- Content of organic matter—1 to 2 percent
- Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

B horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam, fine sandy loam, loam, sandy clay loam, or clay loam

Content of clay—12 to 35 percent

Content of organic matter—0 to 1 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Hesperia Series

The Hesperia series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on alluvial fans. Slope is 0 to 9 percent. Hesperia soils are classified as coarse-loamy, mixed, superactive, nonacid, thermic Xeric Torriorthents.

Typical pedon

In map unit 136, Hesperia sandy loam, 2 to 9 percent slopes; Kern County, California, about 1,100 feet (335.3 meters) south and 220 feet (67.1 meters) east of the northwest corner of sec. 26, T. 30 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 17 minutes 37 seconds north and longitude 118 degrees 50 minutes 32 seconds west; USGS Edison, California, Quadrangle, NAD83.

- Ap—0 to 7 inches (0 to 18 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; common very fine roots; few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); clear smooth boundary.
- C1—7 to 13 inches (18 to 33 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine roots; few very fine tubular and interstitial pores; 13 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- C2—13 to 22 inches (33 to 56 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; hard, friable, nonsticky and nonplastic; common very fine roots; few very fine tubular and interstitial pores; 13 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- C3—22 to 27 inches (56 to 69 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable, nonsticky and nonplastic; few very fine interstitial and tubular pores; 13 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.
- C4—27 to 60 inches (69 to 152 centimeters); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine tubular and interstitial pores; 13 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

Some pedons have carbonates below a depth of 20 inches. About 5 to 25 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—5 dry and 3 or 4 moist
Chroma—3 or 4 dry and 3 moist
Texture of the fine-earth fraction—sandy loam
Content of clay—8 to 18 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly acid to moderately alkaline
Content of rock fragments—0 to 9 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or fine sandy loam
Content of clay—8 to 18 percent
Content of organic matter—0 percent
Reaction—slightly alkaline to moderately alkaline
Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles

Hoffman Series

The Hoffman series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes. Slope is 15 to 60 percent. Hoffman soils are classified as coarse-loamy, mixed, superactive, thermic Typic Haploxeralfs.

Typical pedon

In map unit 250, Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes; Kern County, California, about 160 feet (48.8 meters) west and 2,090 feet (637.0 meters) north of the southeast corner of sec. 26, T. 29 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 17 minutes 44 seconds north and longitude 118 degrees 10 minutes 54 seconds west; USGS Cross Mountain, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear smooth boundary.

A2—5 to 11 inches (13 to 28 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; common very fine and few fine roots; common very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); gradual smooth boundary.

Bw—11 to 22 inches (28 to 56 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine and few medium and coarse roots; common very fine interstitial pores;

24 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear smooth boundary.

Bt—22 to 34 inches (56 to 86 centimeters); yellowish brown (10YR 5/4) gravelly coarse sandy loam, brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; slightly hard; friable; slightly sticky and nonplastic; common very fine and few fine roots; common very fine tubular and few very fine interstitial pores; few faint 10YR 3/2 patchy clay bridges between sand grains; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear wavy boundary.

Cr—34 to 44 inches (86 to 111 centimeters); weathered, partially decomposed granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 25 percent by 2- to 75-millimeter pebbles and 5 to 20 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

B horizon:

Hue—10YR or 7.5YR dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand, coarse sandy loam, or sandy loam

Content of clay—8 to 18 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Hogeye Series

The Hogeye series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Hogeye soils are classified as coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents.

Typical pedon

In map unit 520, Kernville-Hogeye-Rock outcrop complex, 15 to 30 percent slopes; Kern County, California, about 1 mile (1.61 kilometers) northwest of the town of Lake Isabella; 1,790 feet (545.6 meters) north and 2,120 feet (646.2 meters) east of the southwest corner of sec. 36, T. 26 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 37 minutes 18 seconds north and longitude 118 degrees 29 minutes 49 seconds west; USGS Lake Isabella, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 4/3) gravelly coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear wavy boundary.
- A2—2 to 20 inches (5 to 51 centimeters); brown (10YR 5/3) gravelly coarse sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; common very fine interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear smooth boundary.
- C—20 to 29 inches (51 to 74 centimeters); brown (10YR 5/3) gravelly coarse sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and coarse roots; common very fine interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent 250- to 600-millimeter stones, and 2 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); abrupt irregular boundary.
- Cr—29 to 40 inches (74 to 102 centimeters); weathered granitoid bedrock.
- R—40 to 50 inches (102 to 127 centimeters); hard, fractured granitoid bedrock.

Range in characteristics

The depth to weathered granitoid bedrock is 20 to 40 inches (51 to 102 centimeters). The depth to hard granitoid bedrock is 40 to 60 inches (102 to 152 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 15 percent by 2- to 75-millimeter pebbles, 5 to 15 percent by 75- to 250-millimeter cobbles, 5 to 15 percent by 250- to 600-millimeter stones, and 0 to 3 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist
Value—3 to 5 dry and moist
Chroma—3 or 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0 to 1 percent
Reaction—neutral
Content of rock fragments—0 to 14 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 5 percent 600- to 3,000-millimeter boulders

C horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 3 or 4 moist
Chroma—3 dry and 2 or 3 moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0 to 0.5 percent
Reaction—neutral
Content of rock fragments—0 to 14 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, 0 to 5 percent 250- to 600-millimeter stones, and 0 to 5 percent 600- to 3,000-millimeter boulders

Hungrygulch Series

The Hungrygulch series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 30 to 60 percent. Hungrygulch soils are classified as coarse-loamy, mixed, superactive, nonacid, mesic Typic Xerorthents.

Typical pedon

In map unit 525, Hungrygulch-Kernville-Hogeye association, 30 to 60 percent slopes; Kern County, California, about 3.5 miles (5.6 kilometers) north of Miracle Hot Springs, near Keyesville; 1,800 feet (548.6 meters) east and 2,340 feet (713.2 meters) south of the northwest corner of sec. 35, T. 26 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 37 minutes 29 seconds north and longitude 118 degrees 30 minutes 55 seconds west; USGS Miracle Hot Springs, California, Quadrangle, NAD83.

- A1—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) coarse sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine and fine interstitial pores; 8 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.6); clear wavy boundary.
- A2—3 to 19 inches (8 to 48 centimeters); light brownish gray (10YR 6/2) coarse sandy loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; common very fine and fine interstitial and few very fine tubular pores; 8 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.8); clear wavy boundary.
- C—19 to 26 inches (48 to 66 centimeters); pale brown (10YR 6/3) gravelly coarse sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine and common medium roots; common very fine and fine interstitial and few very fine tubular pores; 20 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.0); abrupt irregular boundary.
- Cr—26 to 36 inches (66 to 91 centimeters); weathered, partially decomposed granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 15 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—coarse sandy loam

Content of clay—8 to 15 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral

Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—coarse sandy loam

Content of clay—8 to 15 percent

Content of organic matter—0.2 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—4 to 35 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Hyte Series

The Hyte series consists of shallow, well drained soils that formed in residuum weathered from granitoid and/or gabbro rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Hyte soils are classified as loamy, mixed, superactive, thermic, shallow Mollic Haploxeralfs.

Typical pedon

In map unit 289, Erskine-Hyte-Rock outcrop association, 30 to 60 percent slopes; Kern County, California, about 800 feet (243.8 meters) south and 350 feet (106.7 meters) east of the northwest corner of sec. 13, T. 28 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 29 minutes 55 seconds north and longitude 118 degrees 29 minutes 56 seconds west; USGS Piute Peak, California, Quadrangle, NAD83.

- A1—0 to 1 inch (0 to 3 centimeters); brown (10YR 5/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium granular structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine interstitial pores; 23 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); abrupt wavy boundary.
- A2—1 to 5 inches (3 to 13 centimeters); brown (10YR 5/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine and few fine roots; many very fine interstitial and few very fine and fine tubular pores; 23 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
- Bt1—5 to 9 inches (13 to 23 centimeters); brown (10YR 5/3) gravelly sandy loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine roots; many very fine and fine tubular and interstitial pores; common thin and moderately thick clay films on faces of peds and in pores; 20 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
- Bt2—9 to 14 inches (23 to 36 centimeters); brown (10YR 5/3) gravelly sandy loam, dark grayish brown (10YR 4/2) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few fine and medium roots; many very fine and fine tubular and interstitial pores; common thin and moderately thick clay films on faces of peds and in pores; 20 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-

millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
Cr—14 to 24 inches (36 to 61 centimeters); weathered, partially decomposed granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 30 to 70 percent by 2- to 75-millimeter pebbles, 0 to 3 percent by 75- to 250-millimeter cobbles, and 0 to 3 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR or 7.5YR dry and moist
Value—5 dry and 3 moist
Chroma—2 to 6 dry and moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—7 to 15 percent
Content of organic matter—1 to 2 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—8 to 37 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bt horizon:

Hue—7.5YR dry and moist
Value—5 or 6 dry and 3 to 5 moist
Chroma—3 to 6 dry and moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0.2 to 1 percent
Reaction—neutral or slightly alkaline
Content of rock fragments—8 to 37 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Indiano Series

The Indiano series consists of moderately deep, well drained soils that formed in residuum weathered from gabbro and/or metavolcanic rocks. These soils are on mountain slopes. Slope is 30 to 60 percent. Indiano soils are classified as fine-loamy, mixed, superactive, mesic Aridic Argixerolls.

Typical pedon

In map unit 558, Indiano-Wortley complex, 30 to 60 percent slopes; Kern County, California, about 16 miles (25.8 kilometers) north-northeast of Onyx, California, and about 1 mile (1.6 kilometers) northwest of Chimney Peak; in an unsectionalized area, T. 23 N., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 53 minutes 46 seconds north and longitude 118 degrees 4 minutes 22 seconds west; USGS Sacatar Canyon, California, Quadrangle, NAD83.

A—0 to 6 inches (0 to 15 centimeters); brown (10YR 5/3) cobbly sandy loam, very dark grayish brown (10YR 3/2) moist; strong fine and medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine, fine, and medium roots; common very fine interstitial and few fine tubular pores; 20 percent

2- to 75-millimeter pebbles and 10 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); abrupt wavy boundary.

Bt1—6 to 12 inches (15 to 30 centimeters); brown (10YR 5/3) gravelly sandy clay loam, dark brown (10YR 3/3) moist; strong fine angular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine, fine, and medium roots; common very fine tubular pores; common thin clay films bridging mineral grains; 20 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); abrupt wavy boundary.

Bt2—12 to 28 inches (30 to 71 centimeters); yellowish brown (10YR 5/4) gravelly sandy clay loam, dark brown (10YR 3/3) moist; moderate medium and coarse angular blocky structure; very hard, firm, sticky and plastic; few medium roots; few very fine tubular pores; many thin and common moderately thick clay films on faces of peds, lining pores, and bridging mineral grains; 25 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); clear wavy boundary.

Cr—28 to 38 inches (71 to 96 centimeters); weathered gabbro bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by rock fragments of mixed mineralogy is as follows: 10 to 20 percent by 2- to 75-millimeter pebbles and 10 to 20 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam

Content of clay—10 to 20 percent

Content of organic matter—1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—2 to 36 percent 2- to 75-millimeter pebbles and 0 to 20 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sandy clay loam or clay loam

Content of clay—20 to 35 percent

Content of organic matter—0.1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—2 to 44 percent 2- to 75-millimeter pebbles and 0 to 20 percent 75- to 250-millimeter cobbles

Inyo Series

The Inyo series consist of very deep, excessively drained soils that formed in alluvium derived from mixed rocks. These soils are on alluvial fans, stream terraces, inset fans, fan piedmonts, and fan aprons and in mountain valleys. Slope is 0 to 15 percent. Inyo soils are classified as mixed, thermic Xeric Torripsamments.

Typical pedon

In map unit 241, Inyo gravelly loamy coarse sand, 0 to 5 percent slopes; Kern County, California, about 880 feet (268.2 meters) south and 2,210 feet (673.6 meters)

east of the northwest corner of sec. 22, T. 29 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 24 minutes 15 seconds north and longitude 118 degrees 12 minutes 36 seconds west; USGS Pinyon Mountain, California, Quadrangle, NAD83.

A—0 to 8 inches (0 to 20 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 22 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); gradual smooth boundary.

C1—8 to 30 inches (20 to 51 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; few very fine roots; few very fine interstitial pores; 22 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); gradual smooth boundary.

C2—30 to 60 inches (51 to 152 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, brown (10YR 4/3) moist; single grain, loose, nonsticky and nonplastic; few very fine roots; few very fine interstitial pores; 22 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); gradual smooth boundary.

Range in characteristics

About 0 to 80 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and 2 to 4 moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—2 to 8 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—0 to 35 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—2 to 8 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 35 percent 2- to 75-millimeter pebbles

Jawbone Series

The Jawbone series consists of very shallow or shallow, somewhat excessively drained soils that formed in colluvium over residuum weathered from granitoid rocks. These soils are on the backslopes of hills and mountains. Slope is 30 to 60 percent. Jawbone soils are classified as mixed, thermic, shallow Typic Torripsamments.

Typical pedon

In map unit 3251, Jawbone association, 8 to 50 percent slopes, in the soil survey area called "Mojave Desert Area, Northwest Part"; San Bernardino County, California; 1,608 feet (490 meters) south and 1,542 feet (470 meters) west of the northeast corner of sec. 12, T. 27 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 36 minutes 12.6 seconds north and longitude 117 degrees 56 minutes 33.8

seconds west; UTM 11S, 414609E 3940381N; USGS Freeman Junction, California, Quadrangle, NAD83.

A—0 to 2 inches (0 to 5 centimeters); pale brown (10YR 6/3) loamy sand, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine irregular pores; 8 percent 2- to 5-millimeter pebbles; neutral (pH 7.2); clear wavy boundary.

Bw—2 to 5 inches (5 to 14 centimeters); pale brown (10YR 6/3) loamy sand, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine irregular and common fine tubular pores; 9 percent 2- to 5-millimeter pebbles and 1 percent 5- to 75-millimeter pebbles; slightly alkaline (pH 7.4); abrupt wavy boundary.

Cr—5 to 16 inches (14 to 41 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 4 to 12 inches (10 to 30 centimeters). About 5 to 55 percent of the surface is covered by of 2- to 75-millimeter pebbles.

A horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 4 to 6 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy sand

Content of clay—3 to 7 percent

Content of organic matter—0 to 0.25 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 18 percent 2- to 75-millimeter pebbles

Bw, C, or Ck horizon:

Hue—10YR dry and moist

Value—6 dry and 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy sand

Content of clay—3 to 7 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 10 percent 2- to 75-millimeter pebbles

One of the Jawbone soils in map unit 3250 is a taxadjunct to the series. It is classified as a mixed, thermic Typic Torripsamment. It has hard bedrock at a depth of 30 to 39 inches (75 to 100 centimeters) and thus is deeper than the range defined for series. This difference, however, does not significantly affect the use and management of the soil.

Kelval Series

The Kelval series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on flood plains and in mountain valleys. Slope is 0 to 2 percent. Kelval soils are classified as sandy, mixed, thermic Torrifluventic Haploxerolls.

Typical pedon

In map unit 222, Kelval fine sandy loam, 0 to 2 percent slopes, occasionally flooded; Kern County, California, about 2,910 feet (887.0 meters) west and 2,040 feet (621.8

meters) north of the southeast corner of sec. 18, T. 26 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 39 minutes 56 seconds north and longitude 118 degrees 15 minutes 42 seconds west; USGS Weldon, California, Quadrangle, NAD83.

- Ap—0 to 7 inches (0 to 18 centimeters); grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and nonplastic; common medium and fine and few very fine roots; few very fine interstitial and tubular pores; 11 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); abrupt smooth boundary.
- A—7 to 13 inches (18 to 33 centimeters); grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few medium, fine, and very fine roots; few very fine interstitial pores; 11 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.
- C1—13 to 24 inches (33 to 61 centimeters); grayish brown (10YR 5/2) gravelly loamy sand, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine and very fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); abrupt wavy boundary.
- C2—24 to 33 inches (61 to 84 centimeters); grayish brown (10YR 5/2) gravelly loamy sand, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; common fine and few very fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); clear irregular boundary.
- C3—33 to 48 inches (84 to 122 centimeters); brown (10YR 5/3) gravelly sand, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine and very fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); clear wavy boundary.
- C4—48 to 60 inches (122 to 152 centimeters); brown (10YR 5/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; few fine and very fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly effervescent; disseminated carbonates; moderately alkaline (pH 7.9).

Range in characteristics

The C horizons are highly stratified. The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 70 percent by 2- to 75-millimeter pebbles, 5 to 10 percent by 75- to 250-millimeter cobbles, and 20 to 50 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy sand, sandy loam, or fine sandy loam

Content of clay—4 to 14 percent

Content of organic matter—0.5 to 2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 30 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 9 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—sand, loamy sand, loamy fine sand, coarse sandy loam, sandy loam, or fine sandy loam

Content of clay—4 to 15 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 34 percent 2- to 75-millimeter pebbles, 0 to 6 percent 75- to 250-millimeter cobbles, and 0 to 9 percent 250- to 600-millimeter stones

Kenypeak Series

The Kenypeak series consists of very shallow or shallow, well drained soils that formed in residuum weathered from schist and/or metasedimentary rocks. These soils are on mountain slopes. Slope is 30 to 80 percent. Kenypeak soils are classified as loamy-skeletal, mixed, superactive, frigid Lithic Haploxerolls.

Typical pedon

In map unit 552, Kenypeak-Torriorthentic Haploxerolls association, skeletal, 30 to 60 percent slopes; Kern County, California, about 5.7 miles (9.2 kilometers) west-northwest of the Chimney Peak Fire Station, about 2.2 miles (3.5 kilometers) northwest of Bear Mountain, about 7.6 miles (12.2 kilometers) north of the Kern County line, and about 3.1 miles (5.0 kilometers) east of the Sequoia National Forest boundary; 220 feet (67.1 meters) due south of the easternmost point along a 180-degree bend west of Chimney Peak Road, toward Rockhouse Basin, in an unsectionalized area; latitude 35 degrees 53 minutes 55 seconds north and longitude 118 degrees 6 minutes 37 seconds west; USGS Sacatar Canyon, California, Quadrangle, NAD83.

A1—0 to 3 inches (0 to 8 centimeters); dark grayish brown (10YR 4/2) gravelly fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium and moderate very fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; many very fine and fine interstitial and common very fine and fine tubular pores; 30 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 1 percent 250- to 600-millimeter stones; neutral (pH 6.8); clear smooth boundary.

A2—3 to 12 inches (8 to 30 centimeters); brown (10YR 4/3) extremely cobbly fine sandy loam, dark brown (10YR 3/3) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, common fine, common medium, and few coarse roots; common very fine and fine interstitial and common very fine and fine tubular pores; few distinct patchy organic coatings in root channels and pores; 40 percent 2- to 75-millimeter pebbles, 20 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 6.8); abrupt irregular boundary.

R—12 to 14 inches (30 to 55 centimeters); hard, interbedded schist and metasedimentary bedrock.

Range in characteristics

The depth to hard bedrock is 5 to 20 inches (13 to 51 centimeters). The top of the bedrock has cracks 5 or more inches (13 or more centimeters) wide. The percentage of the surface covered by schist and/or metasedimentary rock fragments is as

follows: 5 to 60 percent by 2- to 75-millimeter pebbles, 1 to 30 percent by 75- to 250-millimeter cobbles, and 0 to 10 percent by 250- to 600-millimeter stones.

A horizon:

- Hue—10YR dry and moist
- Value—4 or 5 dry and 2 or 3 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—sandy loam or fine sandy loam
- Content of clay—5 to 15 percent
- Content of organic matter—1 to 3 percent
- Reaction—slightly acid or neutral
- Content of rock fragments—10 to 61 percent 2- to 75-millimeter pebbles, 0 to 30 percent 75- to 250-millimeter cobbles, and 0 to 5 percent 250- to 600-millimeter stones

Kernfork Series

The Kernfork series consists of very deep, somewhat poorly drained soils that formed in alluvium derived from granitoid rocks. These soils are in depressions, on stream terraces and flood plains, and in mountain valleys. Slope is 0 to 5 percent. Kernfork soils are classified as coarse-loamy, mixed, superactive, thermic Cumulic Endoaquolls.

Typical pedon

In map unit 210, Kernfork fine sandy loam, 0 to 2 percent slopes, occasionally flooded; Kern County, California, about 350 feet (106.7 meters) south and 250 feet (76.2 meters) east of the northwest corner of sec. 18, T. 26 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 24 seconds north and longitude 118 degrees 16 minutes 17 seconds west; USGS Weldon, California, Quadrangle, NAD83.

- Ap—0 to 6 inches (0 to 15 centimeters); grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 3 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- Bg—6 to 27 inches (15 to 69 centimeters); grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial pores; few fine distinct redoximorphic concentrations, yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) moist; 7 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); abrupt wavy boundary.
- Cg1—27 to 30 inches (69 to 76 centimeters); grayish brown (10YR 5/2) loamy sand, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; common very fine roots; few very fine interstitial and tubular pores; few fine and medium distinct redoximorphic concentrations, brown (10YR 5/3), very dark grayish brown (10YR 3/2, and dark yellowish brown (10YR 4/4) moist; 7 percent 2- to 75-millimeter pebbles; very slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); abrupt wavy boundary.
- Cg2—30 to 42 inches (76 to 107 centimeters); light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; few very fine interstitial and tubular pores; few medium distinct redoximorphic concentrations, dark yellowish

brown (10YR 4/4) moist; 7 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); abrupt wavy boundary.

Cg3—42 to 45 inches (107 to 114 centimeters); light brownish gray (10YR 6/2) loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; few very fine interstitial and tubular pores; common fine and medium distinct redoximorphic concentrations, yellowish brown (10YR 5/6) and dark yellowish brown (10YR 3/4 and 4/4) moist; 7 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5); abrupt smooth boundary.

Cg4—45 to 60 inches (114 to 152 centimeters); pale brown (10YR 6/3) sandy loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and nonplastic; few very fine roots; few very fine interstitial pores; common fine distinct redoximorphic concentrations, yellowish brown (10YR 5/6) moist, and common fine faint redoximorphic concentrations, dark yellowish brown (10YR 4/4) moist; 7 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; slightly alkaline (pH 7.5).

Range in characteristics

Some pedons do not have a B horizon. The depth to a water table is 0 to 3 feet (0 to 91 centimeters). Redoximorphic concentrations occur within 6 inches (15 centimeters) of the surface. The B and C horizons are highly stratified. About 5 to 30 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam, loam, or fine sandy loam

Content of clay—8 to 20 percent

Content of organic matter—1 to 6 percent

Reaction—neutral to strongly alkaline

Content of rock fragments—0 to 9 percent 2- to 75-millimeter pebbles

B horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 to 3 dry and moist

Texture of the fine-earth fraction—sandy loam, fine sandy loam, or loam

Content of clay—8 to 18 percent

Content of organic matter—1 to 3 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 9 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy sand, coarse sandy loam, sandy loam, fine sandy loam, loam, or silt loam

Content of clay—3 to 18 percent

Content of organic matter—0.05 to 2 percent

Reaction—neutral to strongly alkaline

Content of rock fragments—0 to 9 percent 2- to 75-millimeter pebbles

Kernville Series

The Kernville series consists of very shallow or shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 75 percent. Kernville soils are classified as mixed, thermic, shallow Typic Xeropsamments.

Typical pedon

In map unit 330, Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes; Kern County, California, about 2 miles (3.2 kilometers) south of the town of Wofford Heights; about 1,580 feet (481.6 meters) west and 2,840 feet (865.6 meters) north of the southeast corner of sec. 7, T. 26 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 51 seconds north and longitude 118 degrees 28 minutes 25 seconds west; USGS Lake Isabella North, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; many fine interstitial pores; 20 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); clear wavy boundary.

A2—5 to 16 inches (13 to 41 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common fine interstitial and few fine tubular pores; 20 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); abrupt wavy boundary.

Cr—16 to 19 inches (41 to 48 centimeters); weathered, partially decomposed granodiorite bedrock.

R—19 to 29 inches (48 to 73 centimeters); hard, fractured granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 7 to 19 inches (18 to 48 centimeters). The depth to hard bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 0 to 10 percent by 2- to 75-millimeter pebbles, 0 to 15 percent by 75- to 250-millimeter cobbles, 0 to 15 percent by 250- to 600-millimeter stones, and 2 to 5 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—0.5 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—15 to 40 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 11 percent 250- to 600-millimeter stones

Kiscove Series

The Kiscove series consists of very shallow or shallow, well drained soils that formed in residuum weathered from metamorphic rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 60 percent. Kiscove soils are classified as loamy, mixed, superactive, mesic, shallow Typic Haploxeralfs.

Typical pedon

In map unit 650, Stineway-Kiscove-Rock outcrop association, 30 to 75 percent slopes; Kern County, California, about 1.25 miles (2.0 kilometers) northwest of the town of Mountain Mesa, about 600 feet (182.9 meters) southeast of State Highway 178; 2,560 feet (780.3 meters) east and 1,260 feet (384.1 meters) north of the southwest corner of sec. 22, T. 26 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 38 minutes 57 seconds north and longitude 118 degrees 25 minutes 25 seconds west; USGS Lake Isabella North, California, Quadrangle, NAD83.

A—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) gravelly loam, dark brown (10YR 3/3) moist; moderate thin and medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); abrupt wavy boundary.

Bt1—2 to 3 inches (5 to 8 centimeters); brown (10YR 5/3) gravelly clay loam, dark yellowish brown (10YR 3/4) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and slightly plastic; many very fine and few fine and medium roots; common very fine tubular and interstitial pores; few thin clay films on faces of peds and lining pores; 29 percent 2- to 75-millimeter pebbles and 5 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); clear wavy boundary.

Bt2—3 to 9 inches (8 to 23 centimeters); brown (10YR 5/3) gravelly clay loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine and few medium roots; common very fine tubular and interstitial pores; common moderately thick clay films on faces of peds and lining pores; 29 percent 2- to 75-millimeter pebbles and 5 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); clear wavy boundary.

Cr—9 to 12 inches (23 to 30 centimeters); weathered, soft metamorphic bedrock.

R—12 to 22 inches (30 to 55 centimeters); hard, highly fractured metamorphic bedrock.

Range in characteristics

The depth to weathered bedrock is 5 to 19 inches (13 to 48 centimeters). The depth to hard bedrock is 9 to 20 inches (23 to 51 centimeters). The percentage of the surface covered by metamorphic rock fragments is as follows: 15 to 25 percent by 2- to 75-millimeter pebbles and 0 to 10 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR or 7.5YR dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—8 to 25 percent

Content of organic matter—0 to 2 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 43 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—10YR or 7.5YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loam or clay loam

Content of clay—20 to 35 percent

Content of organic matter—0 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 43 percent 2- to 75-millimeter pebbles and 0 to 10 percent 75- to 250-millimeter cobbles

Koehn Series

The Koehn series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from granitoid rocks. These soils are in drainageways. Slope is 2 to 4 percent. Koehn soils are classified as mixed, thermic Typic Torripsamments.

Typical pedon

In map unit 4432, Koehn association, 2 to 4 percent slopes; Kern County, California, about 20.5 miles (33 kilometers) north and 9.3 miles (15 kilometers) east of Mojave, California, about 3.1 miles (5 kilometers) north and 0.3 mile (0.5 kilometer) west of Jawbone Canyon OHV Visitors Center, within the BLM Jawbone-Butterbredt ACEC; 2,024 feet (617 meters) west and 810 feet (247 meters) south of the northeast corner of sec. 9, T. 30 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 20 minutes 41.8 seconds north and longitude 118 degrees minutes 27.5 seconds west; USGS Cinco, California, Quadrangle, NAD83.

- A—0 to 1 inch (0 to 3 centimeters); brown (10YR 5/3) coarse sand, dark grayish brown (10YR 4/2) moist; weak medium platy structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine roots; common very fine and fine tubular pores; 7 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear wavy boundary.
- C1—1 to 8 inches (3 to 20 centimeters); pale brown (10YR 6/3) sand, brown (10YR 4/3) moist; weak fine to coarse subangular blocky structure parting to massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; few very fine interstitial pores; 5 percent 2- to 5-millimeter pebbles; neutral (pH 7.0); gradual wavy boundary.
- C2—8 to 21 inches (20 to 53 centimeters); light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and coarse roots; common very fine interstitial pores; 2 percent 2- to 5-millimeter pebbles; slightly alkaline (pH 7.4); gradual wavy boundary.
- C3—21 to 30 inches (53 to 75 centimeters); light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; weak medium and coarse subangular blocky structure parting to massive; slightly hard, very friable, nonsticky and nonplastic; few coarse roots; few very fine interstitial pores; 6 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.8); clear wavy boundary.
- Ck—30 to 35 inches (75 to 88 centimeters); light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few medium, coarse, and very coarse roots; common fine interstitial pores; 1 percent distinct white (10YR 8/1) carbonate coatings on rock fragments; 5 percent 2- to 75-millimeter pebbles and 5 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.8); clear wavy boundary.

C'—35 to 63 inches (88 to 159 centimeters); light yellowish brown (10YR 6/4) loamy sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few coarse roots; common very fine and fine interstitial pores; 4 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.6).

Range in characteristics

The soils have a typic-aridic moisture regime. About 0 to 50 percent of the surface is covered by 2- to 75-millimeter pebbles.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—loamy coarse sand or loamy sand

Content of clay—3 to 8 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—1 to 10 percent 2- to 75-millimeter pebbles

C horizons:

Hue—10YR dry and moist

Value—4 to 7 dry and 4 or 5 moist

Chroma—2 to 6 dry and moist

Texture of the fine-earth fraction—coarse sand, sand, loamy coarse sand, or loamy sand

Content of clay—2 to 10 percent

Content of organic matter—0 to 0.25 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—1 to 10 percent 2- to 75-millimeter pebbles and 0 to 5 percent 75- to 250-millimeter cobbles

Lachim Series

The Lachim series consists of moderately deep, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 30 to 60 percent. Lachim soils are classified as mixed, mesic Xeric Torripsamments.

Typical pedon

In map unit 540, Canebrake-Lachim complex, 30 to 60 percent slopes; Kern County, California, about 12 miles (19.3 kilometers) northeast of Onyx, 1.5 miles (2.4 kilometers) northwest of Lamont Peak, and 8.9 miles (14.3 kilometers) from State Highway 178 along Chimney Peak Road, about 600 feet (182.9 meters) west of the road; 820 feet (250.0 meters) south and 660 feet (201.2 meters) west of the southeast corner of sec. 26, T. 23 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 48 minutes 17 seconds north and longitude 118 degrees 3 minutes 35 seconds west; USGS Lamont Peak, California, Quadrangle, NAD83.

A—0 to 3 inches (0 to 8 centimeters); light brownish gray (10YR 6/2) gravelly loamy coarse sand, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; 16 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear smooth boundary.

- C1—3 to 13 inches (8 to 33 centimeters); pale brown (10YR 6/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and medium roots; many very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); gradual wavy boundary.
- C2—13 to 26 inches (33 to 66 centimeters); pale brown (10YR 6/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; many very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear wavy boundary.
- Cr—26 to 36 inches (66 to 91 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 15 percent by 2- to 75-millimeter pebbles and 5 to 15 percent by 75- to 250-millimeter cobbles.

A horizon:

- Hue—10YR dry and moist
- Value—6 dry and 4 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—loamy coarse sand or loamy sand
- Content of clay—3 to 10 percent
- Content of organic matter—0.5 to 1 percent
- Reaction—neutral
- Content of rock fragments—0 to 26 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

C horizon:

- Hue—10YR dry and moist
- Value—6 dry and 4 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—loamy coarse sand
- Content of clay—3 to 10 percent
- Content of organic matter—0.5 to 1 percent
- Reaction—neutral
- Content of rock fragments—0 to 26 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Lithic Xeric Haplargids

Lithic Xeric Haplargids consist of shallow, well drained soils that formed in a thin layer of alluvium derived from metasedimentary rocks. These soils are on alluvial fans and strath terraces and in mountain valleys. Slope is 5 to 30 percent. The soils are classified as mixed, mesic Lithic Xeric Haplargids.

Typical pedon

In map unit 544 Xeric Haplargids-Lithic Xeric Haplargids complex, mesic, 5 to 30 percent slopes; Kern County, California, about 2 miles (3.22 kilometers) east-northeast of Rockhouse Meadow; 1,960 feet (597.4 meters) south and 2,690 feet (819.9 meters) east of the northwest corner of sec. 25, T. 23 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 54 minutes 5 seconds north and longitude 118 degrees 9 minutes 26 seconds west; USGS Rockhouse Basin, California, Quadrangle, NAD83.

This pedon is representative of the Lithic Xeric Haplargids in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 9 inches (0 to 23 centimeters); brown (10YR 5/3) very gravelly sandy loam, very dark brown (10YR 3/2) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and fine and few medium roots; few very fine interstitial and tubular pores; 25 percent 2- to 75-millimeter pebbles and 10 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); clear wavy boundary.
- Bt—9 to 18 inches (23 to 46 centimeters); yellowish brown (10YR 5/4) very cobbly sandy loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; common very fine, fine, and medium roots; few very fine interstitial and tubular pores; common thin clay films in pores; 20 percent 2- to 75-millimeter pebbles and 35 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); abrupt wavy boundary.
- R—18 to 28 inches (46 to 71 centimeters); fractured metasedimentary bedrock.

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by metasedimentary rock fragments is as follows: 20 to 50 percent by 2- to 75-millimeter pebbles and 0 to 5 percent by 75- to 250-millimeter cobbles.

A horizon:

- Hue—10YR dry and moist
- Value—5 dry and 3 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—sandy loam
- Content of clay—5 to 10 percent
- Content of organic matter—0.1 to 1 percent
- Reaction—neutral
- Content of rock fragments—20 to 30 percent 2- to 75-millimeter pebbles and 5 to 15 percent 75- to 250-millimeter cobbles

Bt horizon:

- Hue—10YR dry and moist
- Value—5 dry and 3 moist
- Chroma—3 or 4 dry and moist
- Texture of the fine-earth fraction—sandy loam
- Content of clay—5 to 10 percent
- Content of organic matter—0.1 to 1 percent
- Reaction—neutral
- Content of rock fragments—15 to 25 percent 2- to 75-millimeter pebbles and 30 to 40 percent 75- to 250-millimeter cobbles

Locobill Series

The Locobill series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid and/or metamorphic rocks. These soils are on hillslopes and mountain slopes. Slope is 9 to 60 percent. Locobill soils are classified as coarse-loamy, mixed, superactive, mesic Typic Haploxeralfs.

Typical pedon

In map unit 270, Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes; Kern County, California, about 2,650 feet (807.7 meters) west and 600 feet (182.9 meters) north of the southeast corner of sec. 17, T. 30 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 19 minutes 16 seconds north and longitude 118 degrees 20 minutes 0 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

- A1—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) sandy loam, dark yellowish brown (10YR 3/4) moist; moderate fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 7 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- Bw—3 to 13 inches (8 to 33 centimeters); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine roots; few fine tubular and few fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); gradual wavy boundary.
- Bt1—13 to 28 inches (33 to 71 centimeters); light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; few very fine and fine and common medium and coarse roots; few very fine interstitial pores; few thin clay films bridging sand grains; 27 percent 2- to 75-millimeter pebbles and 3 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); gradual wavy boundary.
- Bt2—28 to 35 inches (71 to 89 centimeters); light yellowish brown (10YR 4/4) gravelly sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; hard, firm, sticky and plastic; few very fine, fine, and medium roots; few very fine interstitial pores; few moderately thick clay films in pores and coating faces of peds and common thin clay films bridging sand grains; 22 percent 2- to 75-millimeter pebbles and 10 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear wavy boundary.
- Cr—35 to 45 inches (89 to 114 centimeters); weathered granitoid bedrock

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid and/or metamorphic rock fragments is as follows: 10 to 80 percent by 2- to 75-millimeter pebbles, 1 to 10 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

- Hue—10YR dry and moist
- Value—4 or 5 dry and 3 to 5 moist
- Chroma—2 to 3 dry and 2 to 4 moist
- Texture of the fine-earth fraction—sandy loam
- Content of clay—7 to 14 percent
- Content of organic matter—0.5 to 1 percent
- Reaction—neutral to moderately alkaline
- Content of rock fragments—5 to 15 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bt horizon:

- Hue—10YR or 7.5YR dry and moist
- Value—4 to 6 dry and 3 or 4 moist

Chroma—4 dry and moist

Texture of the fine-earth fraction—sandy loam or sandy clay loam

Content of clay—10 to 25 percent

Content of organic matter—0.1 to 1 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 40 percent 2- to 75-millimeter pebbles, 0 to 15 percent 75- to 250-millimeter cobbles, and 0 to 5 percent 250- to 600-millimeter stones

Martee Series

The Martee series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 30 to 75 percent. Martee soils are classified as sandy-skeletal, mixed, mesic, shallow Ultic Haploxerolls.

Typical pedon

In map unit 253, Sorrell-Martee-Rock outcrop complex, 30 to 60 percent slopes; Kern County, California, about 2,150 feet (655.3 meters) north and 380 feet (115.8 meters) east of the southwest corner of sec. 20, T. 29 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 23 minutes 53 seconds north and longitude 118 degrees 15 minutes 7 seconds west; USGS Claraville, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); dark grayish brown (10YR 4/2) bouldery loamy coarse sand, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine and few coarse roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 20 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear smooth boundary.

A2—5 to 11 inches (13 to 28 centimeters); brown (10YR 4/3) bouldery loamy coarse sand, very dark grayish brown (10YR 3/2) moist; single grained; loose, nonsticky and nonplastic; many very fine and fine and few coarse roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 20 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); abrupt wavy boundary.

Cr—11 to 12 inches (28 to 31 centimeters); weathered granodiorite bedrock

R—12 to 22 inches (31 to 56 centimeters); hard granodiorite bedrock

Range in characteristics

The depth to weathered bedrock is 10 to 18 inches (25 to 46 centimeters). The depth to hard bedrock is 12 to 20 inches (30 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 25 to 50 percent by 2- to 75-millimeter pebbles, 5 to 25 percent by 75- to 250-millimeter cobbles, 1 to 10 percent by 250- to 600-millimeter stones, and 15 to 40 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—1 to 4 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—15 to 30 percent 2- to 75-millimeter pebbles, 5 to 15 percent 75- to 250-millimeter cobbles, 2 to 10 percent 250- to 600-millimeter stones, and 10 to 20 percent 600- to 3,000-millimeter boulders

Nord Series

The Nord series consists of very deep, well drained soils that formed in mixed alluvium on flood plains. Slope is 0 to 2 percent. Nord soils are classified as coarse-loamy, mixed, superactive, thermic Cumulic Haploxerolls.

Typical pedon

In map unit 197, Nord fine sandy loam, 0 to 2 percent slopes, rarely flooded; Kern County, California, about 2,620 feet (798.6 meters) north and 630 feet (192.0 meters) east of the southwest corner of sec. 10, T. 25 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 46 minutes 10 seconds north and longitude 119 degrees 3 minutes 38 seconds west; USGS Richgrove, California, Quadrangle, NAD83.

- Ap1—0 to 6 inches (0 to 15 centimeters); dark grayish brown (10YR 4/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine roots; common very fine and few fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); abrupt smooth boundary.
- Ap2—6 to 9 inches (15 to 23 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; massive; hard, friable, slightly sticky and nonplastic; few very fine roots; few very fine tubular and interstitial pores; slightly alkaline (pH 7.5); clear smooth boundary.
- A—9 to 21 inches (23 to 53 centimeters); brown (10YR 4/3) sandy loam, very dark grayish brown (10YR 3/2) moist; massive; hard, friable, nonsticky and nonplastic; common very fine roots; few very fine tubular and interstitial pores; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); gradual smooth boundary.
- C1—21 to 39 inches (53 to 99 centimeters); brown (10YR 4/3) sandy loam, very dark brown (10YR 3/3) moist; massive; hard, friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); gradual smooth boundary.
- C2—39 to 57 inches (99 to 145 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial pores; very slightly effervescent in some parts; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); abrupt smooth boundary.
- C3—57 to 65 inches (145 to 165 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; massive; hard, friable, slightly sticky and nonplastic; few very fine roots; few very fine tubular and interstitial pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

About 5 to 35 percent of the surface is covered by rock fragments of mixed mineralogy (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—fine sandy loam
Content of clay—10 to 18 percent
Content of organic matter—1 to 2 percent
Reaction—moderately neutral or slightly alkaline
Content of rock fragments—0 to 15 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—5 to 15 percent 2- to 75-millimeter pebbles

Pilotwell Series

The Pilotwell series consists of moderately deep, somewhat excessively drained soils that formed in colluvium weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Pilotwell soils are classified as mixed, thermic Xeric Torripsamments.

Typical pedon

In map unit 250, Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes; Kern County, California, northeast of Hoffman Summit, north of Jawbone-Butterbredt Road, near Kelso Valley; about 1,200 feet (365.8 meters) east and 800 feet (243.8 meters) south of the northwest corner of sec. 31, T. 29 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 22 minutes 30 seconds north and longitude 118 degrees 9 minutes 33 seconds west; USGS Pinyon Mountain, California, Quadrangle, NAD83.

A—0 to 5 inches (0 to 13 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; common very fine interstitial pores; 26 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear smooth boundary.

C1—5 to 14 inches (13 to 36 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few very fine, fine, and medium roots; few very fine interstitial pores; 26 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.0); gradual smooth boundary.

C2—14 to 25 inches (36 to 64 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few very fine and fine roots; few very fine interstitial pores; 26 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear wavy boundary.

Cr—25 to 35 inches (64 to 89 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 30

percent by 2- to 75-millimeter pebbles, 2 to 10 percent by 75- to 250-millimeter cobbles, 0 to 1 percent by 250- to 600-millimeter stones, and 0 to 2 percent by 600- to 1,800-millimeter boulders.

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 2 or 3 moist
Chroma—2 to 4 dry and 3 or 4 moist
Texture of the fine-earth fraction—loamy coarse sand
Content of clay—5 to 10 percent
Content of organic matter—0.4 to 1 percent
Reaction—slightly acid to slightly alkaline
Content of rock fragments—0 to 34 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—loamy coarse sand
Content of clay—4 to 10 percent
Content of organic matter—0 to 0.5 percent
Reaction—slightly acid to slightly alkaline
Content of rock fragments—0 to 34 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Pinyonpeak Series

The Pinyonpeak series consists of very shallow or shallow, well drained soils that formed in colluvium and/or residuum weathered from granite. These soils are on the shoulders and backslopes of hills and mountains. Slope is 8 to 30 percent. Pinyonpeak soils are classified as loamy, mixed, superactive, thermic, shallow Typic Haplargids.

Typical pedon

In map unit 6001, Goldpeak-Pinyonpeak-Wingap complex, 2 to 30 percent slopes; Kern County, California, about 21.7 miles (35 kilometers) north and 3.7 miles (6.0 kilometers) east of the town of Mojave, California, in the extreme southern Sierra Nevada mountains; about 984 feet (300 meters) east and 2,297 feet (700 meters) north of the southwest corner of sec. 30, T. 29 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 22 minutes 57.5 seconds north and longitude 118 degrees 3 minutes 27.1 seconds west; UTM 11S, 0403947E, 3915992N; USGS Dove Springs, California, Quadrangle, NAD83.

A—0 to 2 inches (0 to 5 centimeters); yellowish brown (10YR 5/4) gravelly sandy loam, dark yellowish brown (10YR 3/4) moist; moderate very thick platy structure parting to weak medium subangular blocky; soft, very friable, slightly sticky and nonplastic; common very fine, fine, and medium roots; common very fine interstitial pores; 30 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); abrupt smooth boundary.

Bt—2 to 6 inches (5 to 15 centimeters); strong brown (7.5YR 4/6) very gravelly coarse sandy loam, dark brown (7.5YR 3/4) moist; weak medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine,

fine, and medium roots; common very fine interstitial pores; 20 percent prominent clay films bridging sand grains; 20 percent 2- to 5-millimeter pebbles, 10 percent 5- to 75-millimeter pebbles, and 25 percent 5- to 75- millimeter parapebbles; neutral (pH 7.0); abrupt irregular boundary.

Ct—6 to 8 inches (15 to 20 centimeters); gravel; few very fine and fine roots; 35 percent prominent clay films on rock fragments; 90 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); abrupt wavy boundary.

Crt-8 to 16 inches (20 to 40 centimeters); weathered granite rock with fractures 2 to 10 centimeters apart; 35 percent prominent clay films on rock fragments; gradual wavy boundary.

R—16 to 26 inches (40 to 65 centimeters); hard granite bedrock with fractures 10 to 20 centimeters apart.

Range in characteristics

The depth to weathered bedrock is 6 to 14 inches (15 to 36 centimeters). The depth to hard bedrock is 12 to 20 inches (30 to 50 centimeters). These soils have a typic-aridic moisture regime. About 60 to 90 percent of the surface is covered by 2- to 75-millimeter granite rock fragments.

A horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 to 5 moist

Chroma—3 or 4 dry or moist

Texture of the fine-earth fraction—sandy loam

Content of clay—5 to 12 percent

Content of organic matter—0.25 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—4 to 45 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—7.5YR or 10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—4 or 6 dry and 3 to 6 moist

Texture of the fine-earth fraction—coarse sandy loam or sandy loam

Content of clay—10 to 18 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—5 to 45 percent 2- to 75-millimeter pebbles and 15 to 30 percent 5- to 75-millimeter parapebbles

Pleito Series

The Pleito series consists of very deep, well drained soils that formed in mixed alluvium on fan remnants, stream terraces, and alluvial fans. Slope is 2 to 50 percent. Pleito soils are classified as fine-loamy, mixed, superactive, thermic Calcic Pachic Haploxerolls.

Typical pedon

In map unit 152, Pleito gravelly sandy clay loam, 2 to 5 percent slopes; Kern County, California; about 2,690 feet (819.9 meters) south and 1,300 feet (396.2 meters) west of the northeast corner of sec. 28, T. 30 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 17 minutes 21 seconds north and longitude 118 degrees 45 minutes 25 seconds west; USGS Edison, California, Quadrangle, NAD83.

- Ap—0 to 10 inches (0 to 25 centimeters); dark grayish brown (10YR 4/2) gravelly sandy clay loam, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure; very hard, friable, sticky and plastic; few fine and common very fine roots; few very fine interstitial and tubular pores; 15 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2) clear smooth boundary.
- A—10 to 27 inches (25 to 69 centimeters); dark grayish brown (10YR 4/2) gravelly sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; very hard, friable, sticky and plastic; few very fine roots; common very fine tubular and few very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly effervescent in some parts; disseminated carbonates; neutral (pH 7.2); clear wavy boundary.
- Bk1—27 to 38 inches (69 to 97 centimeters); brown (10YR 5/3) gravelly sandy clay loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; very hard, friable, sticky and plastic; few very fine roots; common very fine tubular and few very fine interstitial pores; strongly effervescent; carbonates disseminated and segregated as common fine threads and coatings on pebbles; 15 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 8.2); clear smooth boundary.
- Bk2—38 to 49 inches (97 to 124 centimeters); pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; common very fine interstitial and few very fine tubular pores; violently effervescent; carbonates disseminated and segregated as few fine threads, common fine soft masses, and coatings on pebbles; 15 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9); clear smooth boundary.
- Bk3—49 to 60 inches (124 to 152 centimeters); pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; common very fine interstitial pores; strongly effervescent; carbonates disseminated and segregated as coatings on pebbles; 15 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; moderately alkaline (pH 7.9).

Range in characteristics

In the Bk horizon, effervescence is strong or violent. Carbonates occur as threads, soft masses, and coatings on pebbles. Secondary carbonates occur below a depth of 27 inches (69 centimeters). The percentage of the surface covered by rock fragments of mixed mineralogy is as follows: 2 to 30 percent by 2- to 75-millimeter pebbles and 0 to 10 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam, sandy clay loam, or clay loam

Content of clay—15 to 35 percent

Content of organic matter—1 to 2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

Bk horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 4 to 6 moist

Chroma—2 to 4 dry and 3 or 4 moist

Texture of the fine-earth fraction—coarse sandy loam, sandy loam, loam, sandy clay loam, or clay loam

Content of clay—5 to 30 percent

Content of organic matter—0.1 to 1.5 percent

Reaction—moderately alkaline

Content of rock fragments—0 to 32 percent 2- to 75-millimeter pebbles and 0 to 6 percent 75- to 250-millimeter cobbles

Premier Series

The Premier series consists of very deep, well drained soils that formed in alluvium derived from granitoid and/or sedimentary rocks. These soils are on alluvial fans, fan remnants, and stream terraces. Slope is 2 to 45 percent. Premier soils are classified as coarse-loamy, mixed, superactive, calcareous, thermic Xeric Torriorthents.

Typical pedon

In map unit 178, Delano-Cuyama-Premier complex, 5 to 30 percent slopes; Kern County, California; about 1,485 feet (452.6 meters) east and 400 feet (121.9 meters) north of the southwest corner of sec. 25, T. 28 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 27 minutes 26 seconds north and longitude 119 degrees 1 minute 28 seconds west; USGS Oildale, California, Quadrangle, NAD83.

A1—0 to 4 inches (0 to 10 centimeters); brown (10YR 5/3) coarse sandy loam, dark yellowish brown (10YR 4/3) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and nonplastic; common very fine and few fine roots; common very fine interstitial pores; 2 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.

A2—4 to 14 inches (10 to 36 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; slightly sticky and nonplastic; common very fine and few fine roots; common very fine interstitial pores; slightly effervescent; disseminated carbonates; 2 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.

C1—14 to 33 inches (36 to 84 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; slightly sticky and nonplastic; common very fine roots; common very fine interstitial pores; strongly effervescent; disseminated carbonates; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); gradual smooth boundary.

C2—33 to 43 inches (84 to 109 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; slightly sticky and nonplastic; few very fine roots; common very fine interstitial pores; strongly effervescent; disseminated carbonates; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear smooth boundary.

C3—43 to 60 inches (109 to 152 centimeters); light yellowish brown (10YR 6/4) gravelly loamy coarse sand, dark yellowish brown (10YR 4/3) moist; weak coarse subangular blocky structure; nonsticky and nonplastic; common very fine interstitial pores; strongly effervescent; disseminated carbonates; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9).

Range in characteristics

Carbonates occur below the A horizon.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 or 4 moist

Chroma—2 to 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—5 to 18 percent
Content of organic matter—0.5 to 1 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 3 percent 2- to 5-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 4 or 5 moist
Chroma—2 to 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—loamy coarse sand, coarse sandy loam, sandy loam, or loam
Content of clay—5 to 18 percent
Content of organic matter—to 0.5 percent
Reaction—slightly alkaline to moderately alkaline
Content of rock fragments—0 to 3 percent 2- to 5-millimeter pebbles

Raggulch Series

The Raggulch series consists of shallow, well drained soils that formed in residuum weathered from sedimentary rocks and/or conglomerate. These soils are on ancient, dissected fan remnants. Slope is 5 to 30 percent. Raggulch soils are classified as loamy, mixed, superactive, thermic, shallow Mollic Haploxerafls.

Typical pedon

In map unit 201, Pleito-Chanac-Raggulch complex, 5 to 30 percent slopes; Kern County, California, about 400 feet (121.9 meters) east and 2,500 feet (762.0 meters) south of the northwest corner of sec. 2, T. 26 S., R. 28 E.; Mount Diablo Base and Meridian; latitude 35 degrees 41 minutes 48 seconds north and longitude 118 degrees 56 minutes 17 seconds west; USGS Sand Canyon, California, Quadrangle, NAD83.

- A—0 to 4 inches (0 to 10 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark gray (10YR 3/1) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; moderately alkaline (pH 7.9); clear smooth boundary.
- Bt1—4 to 8 inches (10 to 20 centimeters); grayish brown (10YR 5/2) sandy clay loam, very dark gray (10YR 3/1) moist; moderate coarse subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; few very fine interstitial and common very fine tubular pores; common thin clay bridges between sand grains and in pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; moderately alkaline (pH 7.9); clear smooth boundary.
- Bt2—8 to 16 inches (20 to 41 centimeters); grayish brown (10YR 5/2) sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine roots; few very fine interstitial and tubular pores; few thin clay bridges between sand grains; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; moderately alkaline (pH 7.9); abrupt wavy boundary.

Cr—16 to 18 inches (41 to 46 centimeters); weathered sandstone bedrock
R—18 to 28 inches (46 to 71 centimeters); hard sandstone conglomerate.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The depth to hard bedrock is 15 to 40 inches (38 to 102 centimeters). The percentage of the surface covered by sedimentary rock fragments is as follows: 5 to 10 percent by 2- to 75-millimeter pebbles, 10 to 25 percent by 75- to 250-millimeter cobbles, and 10 to 25 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—1 to 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—14 to 19 percent
Content of organic matter—1 to 2 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 18 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Bt horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 3 moist
Chroma—2 or 3 dry and 1 or 2 moist
Texture of the fine-earth fraction—sandy clay loam
Content of clay—20 to 35 percent
Content of organic matter—0.1 to 1 percent
Reaction—slightly alkaline or moderately alkaline
Content of rock fragments—0 to 18 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Rankor Series

The Rankor series consists of deep, well drained soils that formed in residuum weathered from schist or granitoid rocks. These soils are on mountain slopes. Slope is 5 to 75 percent. Rankor soils are classified as fine-loamy, mixed, superactive, mesic Pachic Argixerolls.

Typical pedon

In map unit 295, Tweedy-Tunis-Rankor association, 30 to 75 percent slopes; Kern County, California, about 1,300 feet (396.2 meters) south and 700 feet (231.4 meters) west of the northeast corner of sec. 31, T. 29 S., R. 32 E.; Mount Diablo Base and Meridian; latitude 35 degrees 21 minutes 58 seconds north and longitude 118 degrees 34 minutes 58 seconds west; USGS Oiler Peak, California, Quadrangle, NAD83.

A—0 to 5 inches (0 to 13 centimeters); dark grayish brown (10YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine roots; many very fine interstitial pores; 9 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); abrupt wavy boundary.

- Bt1—5 to 11 inches (13 to 28 centimeters); dark grayish brown (10YR 4/2) sandy clay loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; hard; friable, sticky and plastic; few fine and common very fine roots; few very fine tubular and interstitial pores; 9 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear smooth boundary.
- Bt2—11 to 21 inches (28 to 53 centimeters); dark grayish brown (10YR 4/2) sandy clay loam, very dark brown (10YR 2/2) moist; massive; very hard, friable, sticky and plastic; few coarse, medium, fine, and very fine roots; common medium, fine, and very fine tubular pores; common moderately thick clay films bridging sand grains; 9 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear smooth boundary.
- Bt3—21 to 33 inches (53 to 84 centimeters); brown (10YR 4/3) sandy clay loam, very dark grayish brown (10YR 3/3) moist; massive; very hard, friable, sticky and plastic; common very fine and few fine roots; common very fine tubular and few very fine interstitial pores; common thin and moderately thick clay films bridging and grains; 9 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); gradual smooth boundary.
- Bc1—33 to 58 inches (84 to 147 centimeters); brown (10YR 5/3) sandy clay loam, dark brown (10YR 3/3) moist; massive; very hard, friable, sticky and plastic; common very fine and few fine roots; few very fine tubular and interstitial pores; few thin clay films bridging sand grains; 9 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); clear smooth boundary
- Cr—58 to 68 inches (147 to 173 centimeters); highly weathered, interbedded mica schist and granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 40 to 60 inches (102 to 152 centimeters). The percentage of the surface covered by schist and/or granitoid rock fragments is as follows: 10 to 20 percent by 2- to 75-millimeter pebbles and 10 to 20 percent by 75- to 250-millimeter cobbles.

A horizon:

- Hue—10YR dry and moist
- Value—4 or 5 dry and 2 or 3 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—sandy loam
- Content of clay—10 to 20 percent
- Content of organic matter—1 to 3 percent
- Reaction—neutral or slightly alkaline
- Content of rock fragments—0 to 17 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

- Hue—10YR dry and moist
- Value—4 or 5 dry and 3 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—sandy loam or sandy clay loam
- Content of clay—10 to 35 percent
- Content of organic matter—0.1 to 3 percent
- Reaction—slightly acid to slightly alkaline
- Content of rock fragments—0 to 17 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Sacatar Series

The Sacatar series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 30 percent. Sacatar soils are classified as coarse-loamy, mixed, superactive, mesic Aridic Argixerolls.

Typical pedon

In map unit 560, Sacatar-Wortley-Calpine complex, 5 to 30 percent slopes; Kern County, California, about 1,600 feet (487.7 meters) south and 740 feet (225.6 meters) east of the northwest corner of sec. 8, T. 24 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 51 minutes 48 seconds north and longitude 118 degrees 1 minute 7 seconds west; USGS Lamont Peak, California, Quadrangle, NAD83.

- A—0 to 2 inches (0 to 5 centimeters); grayish brown (10YR 5/2) loamy coarse sand, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to single grained; soft, very friable, nonsticky and nonplastic; common very fine interstitial pores; 7 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); abrupt smooth boundary.
- AB—2 to 10 inches (5 to 25 centimeters); brown (10YR 5/3) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine, fine, and coarse and common medium roots; few very fine interstitial pores; neutral (pH 7.0); clear smooth boundary.
- Bt1—10 to 22 inches (25 to 56 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, nonsticky and slightly plastic; few medium and coarse roots; common very fine tubular pores; many thin clay films staining mineral grains and common thin clay films bridging mineral grains; 7 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.5); gradual wavy boundary.
- Bt2—22 to 34 inches (56 to 86 centimeters); yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, nonsticky and nonplastic; few thin clay films staining and bridging mineral grains; decomposing granitoid rocks make up about 40 percent of the horizon; 7 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 7.0); gradual wavy boundary.
- Cr—34 to 44 inches (86 to 111 centimeters); weathered, partially decomposed granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters).

A horizon:

- Hue—10YR dry and moist
Value—5 dry and 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—loamy coarse sand or coarse sandy loam
Content of clay—5 to 10 percent
Content of organic matter—1 to 2 percent
Reaction—neutral
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

- Hue—10YR or 7.5YR dry and moist

Value—5 dry and 3 or 4 moist
Chroma—4 dry and 3 or 4 moist
Texture of the fine-earth fraction—coarse sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0.5 to 1.5 percent
Reaction—neutral
Content of rock fragments—0 to 12 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Scodie Series

The Scodie series consists of very shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Scodie soils are classified as mixed, mesic, shallow Torripsammentic Haploxerolls.

Typical pedon

In map unit 557, Scodie-Canebrake-Deadfoot complex, 30 to 60 percent slopes; Tulare County, California, about 1.8 miles (2.9 kilometers) northeast of the Chimney Peak Fire Station and about 3,000 feet (914.4 meters) east-southeast of a windmill in Scodie Meadow; about 2,000 feet (609.6 meters) east and 1,700 feet (518.2 meters) south of the northwest corner of sec. 33, T. 23 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 53 minutes 33 seconds north and longitude 117 degrees 59 minutes 57 seconds west; USGS Little Lake, California, Quadrangle, NAD83.

- A1—0 to 3 inches (0 to 8 centimeters); dark grayish brown (10YR 4/2) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; weak thick platy structure parting to weak fine subangular blocky; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; common medium interstitial pores; 26 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); clear wavy boundary.
- A2—3 to 10 inches (8 to 25 centimeters); brown (10YR 4/3) gravelly loamy coarse sand, very dark brown (10YR 2/2) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine and medium and common fine roots; common medium interstitial and common fine tubular pores; 26 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.7); abrupt wavy boundary.
- Cr—10 to 20 inches (25 to 50 centimeters); weathered, partially decomposed granitoid bedrock; few medium and coarse roots in fractures.

Range in characteristics

The depth to weathered bedrock is 5 to 10 inches (13 to 25 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 25 percent by 2- to 75-millimeter pebbles, 0 to 10 percent by 75- to 250-millimeter cobbles, and 0 to 15 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—loamy coarse sand
Content of clay—3 to 10 percent
Content of organic matter—1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—5 to 43 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 9 percent 250- to 600-millimeter stones

Sesame Series

The Sesame series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 75 percent. Sesame soils are classified as fine-loamy, mixed, superactive, thermic Typic Haploxeralfs.

Typical pedon

In map unit 270, Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes; Kern County, California, about 900 feet (274.3 meters) south and 1,900 feet (579.1 meters) west of the northeast corner of sec. 21, T. 30 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 18 minutes 58 seconds north and longitude 118 degrees 19 minutes 49 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

A—0 to 3 inches (0 to 8 centimeters); brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 4 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); clear smooth boundary.

Bt1—3 to 9 inches (8 to 23 centimeters); brown (10YR 4/3) sandy loam, dark yellowish brown (10YR 3/4) moist; weak coarse subangular blocky structure; hard, friable, nonsticky and nonplastic; few very fine and medium and common fine roots; few very fine interstitial and few very fine and fine tubular pores; few thin clay films bridging mineral grains; 4 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); gradual wavy boundary.

Bt2—9 to 16 inches (23 to 41 centimeters); brown (7.5YR 5/4) sandy clay loam, brown (7.5YR 4/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine, fine, and coarse and common medium roots; few very fine interstitial and common very fine tubular pores; few moderately thick clay films on faces of peds and common thin clay films bridging mineral grains; 4 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear wavy boundary.

Bt3—16 to 24 inches (41 to 61 centimeters); brown (7.5YR 5/4) sandy clay loam, brown (7.5YR 4/4) moist; massive; hard, friable, sticky and slightly plastic; few very fine and fine roots; few very fine and fine tubular pores; common moderately thick clay films bridging mineral grains; 4 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); gradual wavy boundary.

BCt—24 to 33 inches (61 to 84 centimeters); brown (7.5YR 5/4) sandy loam, brown (7.5YR 4/4) moist; massive; very hard, friable, slightly sticky and slightly plastic; few very fine and common fine roots; common very fine tubular pores; few thin clay films in pores; 4 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); gradual wavy boundary.

Cr—33 to 43 inches (84 to 109 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). Some pedons do not have a BCt horizon. About 5 to 40 percent of the surface is covered by granitoid rock fragments (5 to 40 percent 2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 3 moist
Chroma—2 or 3 dry and 2 to 4 moist
Texture of the fine-earth fraction—sandy loam
Content of clay—10 to 20 percent
Content of organic matter—0.5 to 1 percent
Reaction—moderately acid to neutral
Content of rock fragments—0 to 6 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—10YR or 7.5YR dry and moist
Value—4 or 5 dry and 3 or 4 moist
Chroma—3 or 4 dry and 2 to 4 moist
Texture of the fine-earth fraction—sandy loam, loam, or sandy clay loam
Content of clay—10 to 27 percent
Content of organic matter—0.02 to 0.75 percent
Reaction—slightly acid or neutral
Content of rock fragments—0 to 6 percent 2- to 75-millimeter pebbles

Sorrell Series

The Sorrell series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks (fig. 17). These soils are on mountain slopes. Slope is 30 to 60 percent. Sorrell soils are classified as coarse-loamy, mixed, superactive, mesic Typic Argixerolls.

Typical pedon

In map unit 268, Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes; Kern County, California, about 200 feet (61.0 meters) south and 2,500 feet (762 meters) east of the northwest corner of sec. 3, T. 30 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 21 minutes 43 seconds north and longitude 118 degrees 18 minutes 58 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

- A1—0 to 4 inches (0 to 10 centimeters); dark grayish brown (10YR 4/2) bouldery coarse sandy loam, very dark brown (10YR 2/2) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear smooth boundary.
- A2—4 to 11 inches (10 to 28 centimeters); brown (10YR 4/3) bouldery coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and few medium roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); gradual smooth boundary.
- Bt1—11 to 26 inches (28 to 66 centimeters); brown (10YR 5/3) bouldery coarse sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and slightly plastic; few fine and medium and common coarse roots; few very fine interstitial pores; common thin clay films bridging mineral grains; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to



Figure 17.—Profile of the moderately deep, dark colored Sorrell soil in map unit 268 (Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes). Depth is marked in centimeters.

250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear smooth boundary.

Bt₂—26 to 36 inches (66 to 91 centimeters); yellowish brown (10YR 5/4) bouldery coarse sandy loam, brown (10YR 4/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine interstitial pores; common thin clay films bridging mineral grains and few moderately thick clay films on faces of peds; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, 5 percent 250- to 600-millimeter stones, and 5 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear wavy boundary.

Cr—36 to 46 inches (91 to 116 centimeters); weathered, partially decomposed granodiorite bedrock with a few roots in cracks.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 20 to 50 percent by 2- to 75-millimeter pebbles, 2 to 10 percent by 75- to 250-millimeter cobbles, 2 to 15 percent by 250- to 600-millimeter stones, and 0 to 20 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and 1 to 3 moist

Texture of the fine-earth fraction—loamy coarse sand or coarse sandy loam

Content of clay—5 to 14 percent

Content of organic matter—1 to 3 percent

Reaction—strongly acid to slightly alkaline

Content of rock fragments—5 to 15 percent 2- to 75-millimeter pebbles, 3 to 10 percent 75- to 250-millimeter cobbles, 3 to 10 percent 250- to 600-millimeter stones, and 3 to 10 percent 600- to 3,000-millimeter boulders

Bt horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—loamy sand, coarse sandy loam, or sandy loam

Content of clay—10 to 18 percent

Content of organic matter—0.5 to 1.5 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—5 to 15 percent 2- to 75-millimeter pebbles, 3 to 10 percent 75- to 250-millimeter cobbles, 3 to 10 percent 250- to 600-millimeter stones, and 3 to 10 percent 600- to 3,000-millimeter boulders

Southlake Series

The Southlake series consists of very deep, well drained soils that formed in mixed alluvium on fan remnants, in mountain valleys, and on fan piedmonts. Slope is 2 to 15 percent. Southlake soils are classified as loamy-skeletal, mixed, superactive, thermic Xeric Haplargids.

Typical pedon

In map unit 517, Southlake-Southlake, gravelly-Goodale complex, 5 to 15 percent slopes; Kern County, California, about 1.5 miles (2.4 kilometers) southeast of the community of South Lake, near Isabella Lake; 1,800 feet (548.6 meters) south and 2,050 feet (624.8 meters) east of the northwest corner of sec. 33, T. 26 S., R. 34 E.;

Mount Diablo Base and Meridian; latitude 35 degrees 37 minutes 31 seconds north and longitude 118 degrees 20 minutes 13 seconds west; USGS Weldon, California, Quadrangle, NAD83.

- A1—0 to 1 inch (0 to 3 centimeters); brown (10YR 5/3) stony sandy loam, very dark grayish brown (10YR 3/2) moist; moderate very thick platy structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.0); abrupt smooth boundary.
- A2—1 to 6 inches (3 to 15 centimeters); brown (10YR 5/3) stony sandy loam, very dark grayish brown (10YR 3/2) moist; moderate coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.0); abrupt wavy boundary.
- Bt1—6 to 15 inches (15 to 38 centimeters); yellowish brown (10YR 5/4) stony sandy loam, dark brown (10YR 3/3) moist; moderate coarse and medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; common thin clay films bridging mineral grains and lining pores; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear wavy boundary.
- Bt2—15 to 40 inches (38 to 102 centimeters); brown (10YR 5/4) stony sandy clay loam, brown (7.5YR 4/4) moist; strong coarse and medium angular blocky structure; very hard, firm, sticky and plastic; few very fine roots; few very fine tubular pores; continuous thin clay films bridging mineral grains; slightly effervescent; disseminated carbonates; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.2); clear wavy boundary.
- Bt3—40 to 60 inches (102 to 152 centimeters); brown (7.5YR 5/4) stony sandy clay loam, brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; hard, friable, sticky and slightly plastic; few fine roots; common very fine interstitial and few very fine tubular pores; many thin clay films on faces of peds, lining pores, and bridging mineral grains; 10 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.2).

Range in characteristics

The percentage of the surface covered by rock fragments of mixed mineralogy is as follows: 10 to 30 percent by 2- to 75-millimeter pebbles, 0 to 7 percent by 75- to 250-millimeter cobbles, and 0 to 8 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—3 or 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—5 to 15 percent

Content of organic matter—0 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—7 to 40 percent 2- to 75-millimeter pebbles, 0 to 10 percent 75- to 250-millimeter cobbles, and 0 to 11 percent 250- to 600-millimeter stones

Bt horizon:

Hue—10YR or 7.5YR dry and moist

Value—4 to 6 dry and 3 to 5 moist

Chroma—3 to 6 dry and moist

Texture of the fine-earth fraction—coarse sandy loam, sandy loam, or sandy clay loam

Content of clay—10 to 35 percent

Content of organic matter—0 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—3 to 48 percent 2- to 75-millimeter pebbles, 0 to 10 percent 75- to 250-millimeter cobbles, and 0 to 14 percent 250- to 600-millimeter stones

Steuber Series

The Steuber series consists of very deep, well drained soils that formed in alluvium derived from granitoid rocks. These soils are on alluvial fans, flood plains, and stream terraces. Slope is 0 to 5 percent. Steuber soils are classified as coarse-loamy, mixed, superactive, nonacid, thermic Mollic Xerofluvents.

Typical pedon

In map unit 303, Steuber sandy loam, 0 to 5 percent slopes; Kern County, California, about 500 feet (152.4 meters) west and 100 feet (30.5 meters) north of the projected southeast corner of sec. 32, T. 30 S., R. 31 E.; Mount Diablo Base and Meridian; latitude 35 degrees 16 minutes 4 seconds north and longitude 118 degrees 39 minutes 56 seconds west; USGS Bena, California, Quadrangle, NAD83.

Ap—0 to 7 inches (0 to 18 centimeters); brown (10YR 4/3) gravelly sandy loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular and few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); abrupt smooth boundary.

AC—7 to 25 inches (18 to 64 centimeters); dark brown (10YR 3/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine tubular and few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear smooth boundary.

C1—25 to 37 inches (64 to 94 centimeters); brown (10YR 4/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly sticky and slightly plastic; common very fine roots; common very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); abrupt smooth boundary.

C2—37 to 60 inches (94 to 152 centimeters); brown (10YR 4/3) gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly sticky and slightly plastic; few very fine roots; common very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5).

Range in characteristics

The C horizon is stratified in some pedons. The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 20 percent by 2- to 75-millimeter pebbles and 2 to 5 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist
Value—3 to 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—8 to 18 percent
Content of organic matter—0.5 to 1 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

C horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 to 4 moist
Chroma—2 to 4 dry and moist
Texture of the fine-earth fraction—loamy coarse sand, loamy sand, loamy fine sand, sandy loam, or sandy clay loam
Content of clay—5 to 20 percent
Content of organic matter—0 to 0.5 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Stineway Series

The Stineway series consists of shallow, well drained soils that formed in residuum weathered from metamorphic rocks and/or schist. These soils are on hillslopes and mountain slopes. Slope is 5 to 75 percent. Stineway soils are classified as loamy-skeletal, mixed, superactive, thermic Lithic Mollic Haploxeralfs.

Typical pedon

In map unit 650, Stineway-Kiscove-Rock outcrop association, 30 to 75 percent slopes; Kern County, California, about 3.5 miles (5.6 kilometers) north of the community of Mountain Mesa, near Lake Isabella; 210 feet (64.0 meters) north and 950 feet (289.6 meters) east of the southwest corner of sec. 2, T. 26 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 41 minutes 23 seconds north and longitude 118 degrees 24 minutes 40 seconds west; USGS Lake Isabella North, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 4/3) very gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine interstitial and few very fine tubular pores; 30 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); clear smooth boundary.
- Bt1—3 to 6 inches (8 to 15 centimeters); brown (10YR 4/3) very gravelly loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; very fine roots; few very fine interstitial and common very fine tubular pores; common thin clay films bridging mineral grains, in pores, and on faces of peds; 30 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); clear wavy boundary.
- Bt2—6 to 16 inches (15 to 41 centimeters); brown (10YR 5/3) very cobbly loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; common very fine roots; common

very fine tubular pores; many moderately thick clay films in pores and on faces of peds; 20 percent 2- to 75-millimeter pebbles, 25 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; slightly alkaline (pH 7.5); clear wavy boundary.

R—16 to 26 inches (41 to 66 centimeters); hard, highly fractured schist bedrock.

Range in characteristics

The depth to hard bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by metamorphic rock fragments is as follows: 15 to 35 percent by 2- to 75-millimeter pebbles, 0 to 15 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—8 to 20 percent

Content of organic matter—1 to 3 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—10 to 52 percent 2- to 75-millimeter pebbles, 0 to 15 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Bt horizon:

Hue—10YR dry and moist

Value—4 to 6 dry and 3 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—15 to 20 percent

Content of organic matter—0.2 to 2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—10 to 52 percent 2- to 75-millimeter pebbles, 0 to 30 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Strahle Series

The Strahle series consists of shallow, well drained soils that formed in residuum weathered from granitoid, rhyolite, and/or andesite rocks. These soils are on mountain slopes. Slope is 30 to 75 percent. Strahle soils are classified as loamy, mixed, superactive, thermic, shallow Mollic Haploxeralfs.

Typical pedon

In map unit 275, Strahle-Sesame-Tweedy association, 30 to 75 percent slopes; Kern County, California, about 1,520 feet (463.3 meters) north and 250 feet (76.2 meters) east of the southwest corner of sec. 15, T. 30 S., R. 33 E.; Mount Diablo Base and Meridian; latitude 35 degrees 18 minutes 58 seconds north and longitude 118 degrees 25 minutes 48 seconds west; USGS Loraine, California, Quadrangle, NAD83.

A—0 to 4 inches (0 to 10 centimeters); brown (10YR 4/3) gravelly sandy loam, dark brown (7.5YR 3/2) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter

pebbles and 5 percent 75- to 250-millimeter cobbles; neutral (pH 7.2); clear smooth boundary.

Bt1—4 to 7 inches (10 to 18 centimeters); dark yellowish brown (10YR 4/4) gravelly sandy clay loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; few very fine interstitial and few very fine tubular pores; few thin clay films bridging sand grains; 15 percent 2- to 75-millimeter pebbles and 5 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.8); gradual smooth boundary.

Bt2—7 to 12 inches (18 to 30 centimeters); brown (10YR 4/4) gravelly sandy clay loam, dark brown (7.5YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and plastic; common very fine roots; few very fine interstitial and common very fine tubular pores; common thin clay bridges and few moderately thick clay films in pores; 15 percent 2- to 75-millimeter pebbles and 5 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.8); clear wavy boundary.

Cr—12 to 14 inches (30 to 36 centimeters); weathered andesite bedrock.

R—14 to 24 inches (36 to 61 centimeters); hard andesite bedrock.

Range in characteristics

The depth to fractured bedrock is 10 to 18 inches (25 to 46 centimeters). The depth to hard bedrock is 12 to 20 inches (30 to 51 centimeters). The percentage of the surface covered by granitoid, rhyolite, and/or andesite rock fragments is as follows: 10 to 40 percent by 2- to 75-millimeter pebbles and 0 to 10 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR, 7.5YR, or 5YR dry and moist

Value—3 to 5 dry and 2 or 3 moist

Chroma—2 or 3 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—12 to 20 percent

Content of organic matter—1 to 2 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—10 to 34 percent 2- to 75-millimeter pebbles and 0 to 10 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—10YR, 7.5YR, or 5YR dry and moist

Value—4 or 5 dry and 2 to 4 moist

Chroma—2 to 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy clay loam or clay loam

Content of clay—25 to 35 percent

Content of organic matter—0.1 to 1 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—4 to 37 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Tibb creek Series

The Tibb creek series consists of shallow, well drained soils that formed in residuum weathered from metaquartzite and/or schist. These soils are on broad ridgetops. Slope is 5 to 30 percent. Tibb creek soils are classified as loamy, mixed, superactive, frigid, shallow Aridic Argixerolls.

Typical pedon

In map unit 553, Tibb creek gravelly loam, 5 to 30 percent slopes; Kern County, California, about 2 miles (3.2 kilometers) south-southeast of Bear Mountain; about 2,030 feet (618.7 meters) north and 1,780 feet (542.5 meters) east of the southwest corner of sec. 10, T. 24 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 51 minutes 21 seconds north and longitude 118 degrees 5 minutes 13 seconds west; USGS Lamont Peak, California, Quadrangle, NAD83.

A—0 to 8 inches (0 to 20 centimeters); brown (10YR 5/3) gravelly loam, dark brown (10YR 3/3) moist; moderate medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and few fine and medium roots; few very fine and fine tubular pores; 30 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); clear wavy boundary.

Bt—8 to 18 inches (20 to 46 centimeters); yellowish brown (10YR 5/4) gravelly clay loam, dark yellowish brown (10YR 4/4) moist; moderate coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine, fine, and medium roots; few very fine and fine tubular pores; few thin clay films on faces of peds and common thin clay films bridging mineral grains; 30 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); clear irregular boundary.

Cr—18 to 35 inches (46 to 89 centimeters); weathered bedrock

R—35 to 45 inches (89 to 114 centimeters); hard, fractured metasedimentary bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The depth to hard bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by metasedimentary rock fragments is as follows: 15 to 35 percent by 2- to 75-millimeter pebbles and 0 to 5 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loam

Content of clay—10 to 22 percent

Content of organic matter—1 to 2 percent

Reaction—slightly acid or neutral

Content of rock fragments—11 to 46 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loam or clay loam

Content of clay—18 to 36 percent

Content of organic matter—0.3 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—11 to 54 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Tips Series

The Tips series consists of very shallow or shallow, well drained soils that formed in residuum weathered from granitoid rocks (fig. 18). These soils are on hillslopes and mountain slopes and in mountain valleys. Slope is 5 to 60 percent. Tips soils are classified as loamy, mixed, superactive, thermic, shallow Xeric Haplargids.

Typical pedon

In map unit 250, Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes; Kern County, California, about 1.8 miles (2.9 kilometers) due east of the intersection of Kelso Valley Road and Jawbone Canyon Road; about 630 feet (192.0 meters) west and 50 feet (15.2 meters) north of the southeast corner of sec. 26, T. 29 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 22 minutes 40 seconds north and longitude 118 degrees 10 minutes 57 seconds west; USGS Pinyon Mountain, California, Quadrangle, NAD83.

- A—0 to 5 inches (0 to 13 centimeters); yellowish brown (10YR 5/4) gravelly loamy coarse sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); abrupt smooth boundary.
- Bt—5 to 10 inches (13 to 25 centimeters); brown (7.5YR 4/4) gravelly coarse sandy loam, dark brown (7.5YR 3/4) moist; weak medium subangular blocky structure; slightly hard, friable; slightly sticky and slightly plastic; few fine and common very fine roots; few very fine interstitial and tubular pores; common thin and few moderately thick clay films bridging and coating mineral grains and in pores; 30 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear wavy boundary.
- Cr—10 to 20 inches (25 to 50 centimeters); weathered granodiorite bedrock with clay stains in fractures.

Range in characteristics

The depth to weathered bedrock is 8 to 20 inches (21 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 30 to 80 percent by 2- to 75-millimeter pebbles, 1 to 15 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

- Hue—10YR dry and moist
- Value—5 dry and 3 or 4 moist
- Chroma—3 or 4 dry and 2 to 4 moist
- Texture of the fine-earth fraction—loamy coarse sand
- Content of clay—4 to 10 percent
- Content of organic matter—0.1 to 1 percent
- Reaction—slightly acid to slightly alkaline
- Content of rock fragments—10 to 43 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Bt horizon:

- Hue—10YR or 7.5YR dry and moist
- Value—4 to 6 dry and 3 or 4 moist
- Chroma—3 or 4 dry and moist
- Texture of the fine-earth fraction—loamy coarse sand, coarse sandy loam, or sandy loam
- Content of clay—7 to 18 percent



Figure 18.—Profile of the shallow or very shallow Tips soil in map unit 250 (Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes). Depth is marked in feet.

Content of organic matter—0 to 1 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—10 to 43 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Toll Series

The Toll series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from granitoid rocks. These soils are on alluvial fans and stream terraces and in mountain valleys. Slope is 2 to 9 percent. Toll soils are classified as mixed, mesic Xeric Torripsamments.

Typical pedon

In map unit 556, Toll loamy coarse sand, 2 to 9 percent slopes; Kern County, California, about 19 miles (30.6 kilometers) northeast of Onyx, California, and about 2 miles (3.2 kilometers) north of Scodie Meadow, in the Chimney Peak area; in an unsectionalized area, T. 23 S., R. 37 E.; Mount Diablo Base and Meridian; latitude 35 degrees 55 minutes 28 seconds north and longitude 118 degrees 0 minutes 12 seconds west; USGS Sacatar Canyon, California, Quadrangle, NAD83.

A—0 to 6 inches (0 to 15 centimeters); brown (10YR 5/3) loamy coarse sand, dark brown (10YR 3/3) moist; massive parting to single grained; soft, very friable, nonsticky and nonplastic; common very fine and few fine, medium, and coarse roots; many very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles; neutral (pH 6.8); clear wavy boundary.

C1—6 to 24 inches (15 to 61 centimeters); brown (10YR 5/3) coarse sand, dark brown (10YR 3/3) moist; massive parting to single grained; soft, very friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; many very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles; neutral (pH 6.8); gradual wavy boundary.

C2—24 to 60 inches (61 to 152 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; massive parting to single grained; soft, very friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; many very fine interstitial pores; 19 percent 2- to 75-millimeter pebbles; neutral (pH 6.8).

Range in characteristics

About 10 to 80 percent of the surface is covered by 2- to 5-millimeter pebbles.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—2 to 8 percent

Content of organic matter—0.5 to 1 percent

Reaction—neutral

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—coarse sand or loamy coarse sand

Content of clay—0 to 8 percent
Content of organic matter—0.1 to 1 percent
Reaction—neutral
Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles

Tollhouse Series

The Tollhouse series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 9 to 75 percent. Tollhouse soils are classified as loamy, mixed, superactive, mesic, shallow Entic Haploxerolls.

Typical pedon

In map unit 268, Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes; Kern County, California, about 1,640 feet (499.9 meters) west and 80 feet (24.4 meters) north of the southeast corner of sec. 34, T. 29 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 21 minutes 46 seconds north and longitude 118 degrees 18 minutes 40 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

A1—0 to 5 inches (0 to 13 centimeters); dark grayish brown (10YR 4/2) stony coarse sandy loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; many very fine roots; common very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, 8 percent 250- to 600-millimeter stones, and 1 percent 600- to 3,000-millimeter boulders; neutral (pH 6.7); gradual smooth boundary.

A2—5 to 13 inches (13 to 33 centimeters); dark grayish brown (10YR 4/2) stony coarse sandy loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; few very fine interstitial pores; 8 percent 2- to 75-millimeter pebbles, 3 percent 75- to 250-millimeter cobbles, 8 percent 250- to 600-millimeter stones, and 1 percent 600- to 3,000-millimeter boulders; neutral (pH 6.7); clear wavy boundary.

Cr—13 to 23 inches (33 to 58 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 20 to 80 percent by 2- to 75-millimeter pebbles, 1 to 10 percent by 75- to 250-millimeter cobbles, 5 to 10 percent by 250- to 600-millimeter stones, and 0 to 5 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist
Value—4 or 5 dry and 2 or 3 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—5 to 20 percent
Content of organic matter—1 to 2 percent
Reaction—neutral to moderately alkaline
Content of rock fragments—0 to 40 percent 2- to 75-millimeter pebbles, 0 to 10 percent 75- to 250-millimeter cobbles, 0 to 15 percent 250- to 600-millimeter stones, and 0 to 10 percent 600- to 3,000-millimeter boulders

Torriorthentic Haploxerolls

Torriorthentic Haploxerolls consist of moderately deep, well drained soils that formed in residuum weathered from metasedimentary rocks. These soils are on mountain slopes. Slope is 30 to 60 percent. The soils are classified as loamy-skeletal, mixed, superactive, thermic Torriorthentic Haploxerolls.

Typical pedon

In map unit 552, Kenypeak-Torriorthentic Haploxerolls association, skeletal, 30 to 60 percent slopes; Kern County, California, about 0.5 mile (0.8 kilometer) south-southwest of VABM Bear Mountain; in an unsectionalized area, T. 23 S., R. 26 E.; Mount Diablo Base and Meridian; latitude 35 degrees 52 minutes 30 seconds north and longitude 118 degrees 4 minutes 51 seconds west; USGS Lamont Peak, California, Quadrangle, NAD83.

This pedon is representative of the Torriorthentic Haploxerolls in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 10 inches (0 to 25 centimeters); grayish brown (10YR 5/2) very gravelly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and slightly plastic; few very fine and medium and common fine roots; few very fine and fine tubular pores; 35 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.8); clear wavy boundary.
- C1—10 to 19 inches (25 to 48 centimeters); brown (10YR 5/3) very gravelly loam, dark grayish brown (10YR 4/2) moist; massive; hard, very friable, nonsticky and nonplastic; few very fine, fine, and coarse and common medium roots; few very fine and fine tubular pores; 35 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.8); gradual wavy boundary.
- C2—19 to 34 inches (48 to 86 centimeters); light brownish gray (2.5Y 6/2) very gravelly loam, dark grayish brown (2.5Y 4/2) moist; massive; hard, friable, nonsticky and nonplastic; few fine, medium, and coarse roots; few very fine tubular pores; 35 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, and 2 percent 250- to 600-millimeter stones; neutral (pH 6.8); gradual irregular boundary.
- Cr—34 to 44 inches (86 to 112 centimeters); weathered, slatelike metasedimentary bedrock.

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The lower part of the C horizon is mixed with pieces of decomposing, fractured bedrock. The percentage of the surface covered by metasedimentary rock fragments is as follows: 30 to 60 percent by 2- to 75-millimeter pebbles, 1 to 5 percent by 75- to 250-millimeter cobbles, and 1 to 5 percent by 250- to 600-millimeter stones.

A horizon:

- Hue—10YR or 2.5Y dry and moist
- Value—5 dry and 3 moist
- Chroma—2 or 3 dry and moist
- Texture of the fine-earth fraction—sandy loam or loam
- Content of clay—5 to 15 percent
- Content of organic matter—1 to 2 percent

Reaction—slightly acid or neutral

Content of rock fragments—25 to 45 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR or 2.5Y dry and moist

Value—4 to 6 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—5 to 15 percent

Content of organic matter—1 to 2 percent

Reaction—slightly acid or neutral

Content of rock fragments—30 to 50 percent 2- to 75-millimeter pebbles, 0 to 3 percent 75- to 250-millimeter cobbles, and 0 to 3 percent 250- to 600-millimeter stones

Torriorthents, Stratified

Torriorthents, stratified, consist of very deep, well drained soils that formed in alluvium derived from mixed rock sources and/or lacustrine deposits. These soils are on dissected stream terraces and fan remnants. Slope is 9 to 50 percent.

Typical pedon

In map unit 177, Chanac-Torriorthents, stratified, association, 15 to 50 percent slopes; Kern County, California, about 2,450 feet (746.8 meters) west and 1,550 feet (472.4 meters) south of the northeast corner of sec. 25, T. 28 S., R. 27 E.; Mount Diablo Base and Meridian; latitude 35 degrees 27 minutes 57 seconds north and longitude 119 degrees 1 minute 11 seconds west; USGS Oildale, California, Quadrangle, NAD83.

This pedon is representative of the stratified Torriorthents in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

A—0 to 4 inches (0 to 10 centimeters); light brown (7.5YR 6/4) sandy loam, brown (7.5YR 5/4) moist; moderate fine and weak medium subangular blocky structure; hard, friable, moderately sticky and moderately plastic; common very fine roots; common very fine interstitial and tubular pores; common medium distinct relict redoximorphic depletions, light gray (10YR 7/2) and brown (10YR 5/3) moist; 10 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 7.9); clear wavy boundary.

Czn—4 to 54 inches (10 to 137 centimeters); very pale brown (10YR 8/4) loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; common very fine roots; few very fine interstitial and tubular pores; 10 percent 2- to 75-millimeter pebbles; strongly alkaline (pH 8.5); abrupt wavy boundary.

C—54 to 60 inches (137 to 152 centimeters); 80 percent yellowish brown (10YR 5/4) silty clay loam, brown (10YR 5/3) moist; moderate fine subangular blocky structure; hard, friable, very sticky and very plastic; few very fine interstitial pores; 10 percent redoximorphic concentrations, reddish yellow (7.5YR 6/6) and strong brown (7.5YR 5/6) moist, and 10 percent redoximorphic depletions, light olive brown (2.5Y 5/3), light olive brown (2.5Y 5/3) moist; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; strongly alkaline (pH 8.5).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

In all areas these soils are stratified with variations in color and texture. Relict redoximorphic concentrations and depletions occur in most areas. About 10 to 40 percent of the surface is covered by rock fragments of mixed mineralogy (2- to 75-millimeter pebbles).

A horizon:

Hue—7.5YR, 10YR, or 2.5Y dry and moist

Value—5 or 6 dry and moist

Chroma—4 dry and moist

Texture of the fine-earth fraction—coarse sandy loam, sandy loam, loam, or silt loam

Content of clay—8 to 20 percent

Content of organic matter—0.5 to 1 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles

C horizon:

Hue—7.5YR, 10YR, 2.5Y, or 5Y dry and moist

Value—5 to 8 dry and 5 or 6 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sand, loamy coarse sand, coarse sandy loam, sandy clay loam, loam, silt loam, silty clay loam, or clay

Content of clay—5 to 60 percent

Content of organic matter—0 to 0.5 percent

Reaction—moderately alkaline or strongly alkaline

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles

Trigo Series

The Trigo series consists of very shallow or shallow, well drained soils that formed in alluvium derived from mixed rock sources. These soils are on dissected fan remnants and stream terraces. Slope is 15 to 60 percent. Trigo soils are classified as loamy, mixed, superactive, nonacid, thermic shallow Typic Xerorthents.

Typical pedon

In map unit 205, Pleito-Trigo-Chanac complex, 15 to 50 percent slopes; Kern County, California, about 1,300 feet (396.2 meters) south and 1,420 feet (432.8 meters) east of the northwest corner of sec. 13, T. 26 S., R. 28 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 15 seconds north and longitude 118 degrees 55 minutes 2 seconds west; USGS Sand Canyon, California, Quadrangle, NAD83.

A1—0 to 2 inches (0 to 5 centimeters); grayish brown (2.5Y 5/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; weak thick and very thick platy and moderate medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine roots; few very fine interstitial and tubular pores; 2 percent 2- to 5-millimeter pebbles; neutral (pH 6.7); abrupt smooth boundary.

A2—2 to 6 inches (5 to 15 centimeters); grayish brown (2.5Y 5/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; moderate coarse subangular blocky

structure; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; few very fine tubular and interstitial pores; 2 percent 2- to 5-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

C—6 to 9 inches (15 to 23 centimeters); grayish brown (2.5Y 5/3) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; moderate coarse and very coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; few very fine tubular and interstitial pores; few fine gypsum crystals; 2 percent 2- to 5-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

Cr—9 to 19 inches (23 to 48 centimeters); light gray (10YR 7/2), weathered, partially consolidated sediments that crush to fine sandy loam.

Range in characteristics

The depth to weathered, partially consolidated sediments is 6 to 20 inches (15 to 51 centimeters). About 0 to 5 percent of the surface is covered by 2- to 5-millimeter pebbles of mixed mineralogy.

A horizon:

Hue—2.5Y or 10YR dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—2 dry and 2 or 3 moist

Texture of the fine-earth fraction—fine sandy loam

Content of clay—8 to 15 percent

Content of organic matter—0.5 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 3 percent 2- to 5-millimeter pebbles

C horizon:

Hue—2.5Y or 10YR dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—sandy loam, fine sandy loam, or loam

Content of clay—8 to 18 percent

Content of organic matter—0 to 0.5 percent

Reaction—moderately acid to slightly alkaline

Content of rock fragments—0 to 3 percent 2- to 5-millimeter pebbles

Tunawee Series

The Tunawee series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 15 to 50 percent. Tunawee soils are classified as mixed, frigid, shallow Torripsammentic Haploxerolls.

Typical pedon

In map unit 551, Tunawee bouldery loamy coarse sand, 15 to 50 percent slopes; Kern County, California, about 24 miles (38.6 kilometers) northeast of Onyx, California, and 6 miles (9.7 kilometers) southwest of Dunmovin, on the crest of the Sierra Nevada Mountains; 1,900 feet (579.1 meters) south and 1,200 feet (365.8 meters) east of the northwest corner of sec. 1, T. 22 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 36 degrees 2 minutes 28 seconds north and longitude 118 degrees 2 minutes 50 seconds west; USGS Long Canyon, California, Quadrangle, NAD83.

- A1—0 to 11 inches (0 to 28 centimeters); grayish brown (10YR 5/2) bouldery loamy coarse sand, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent, 250- to 600-millimeter stones, and 10 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); clear wavy boundary.
- A2—11 to 18 inches (28 to 46 centimeters); brown (10YR 5/3) bouldery loamy coarse sand, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles, 2 percent 75- to 250-millimeter cobbles, 2 percent, 250- to 600-millimeter stones, and 10 percent 600- to 3,000-millimeter boulders; neutral (pH 7.0); abrupt wavy boundary.
- Cr—18 to 28 inches (46 to 71 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). Some pedons have a C horizon. The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 20 percent by 2- to 75-millimeter pebbles, 1 to 5 percent by 75- to 250-millimeter cobbles, 1 to 10 percent by 250- to 600-millimeter stones, and 1 to 20 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 or 4 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—5 to 10 percent

Content of organic matter—0.3 to 2 percent

Reaction—neutral

Content of rock fragments—5 to 20 percent 2- to 75-millimeter pebbles, 1 to 10 percent 75- to 250-millimeter cobbles, 1 to 10 percent 250- to 600-millimeter stones, and 3 to 15 percent 600- to 3,000-millimeter boulders

Tunis Series

The Tunis series consists of shallow, somewhat excessively drained soils that formed in residuum weathered from granitoid or gneiss rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 75 percent. Tunis soils are classified as loamy, mixed, superactive, thermic, shallow Typic Haploxerolls.

Typical pedon

In map unit 268, Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes; Kern County, California; about 1 mile (1.6 kilometers) north of Hugh Mann Canyon; about 380 feet (115.8 meters) north and 200 feet (61 meters) east of the southwest corner of projected sec. 3, T. 30 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 20 minutes 57 seconds north and longitude 118 degrees 19 minutes 26 seconds west; USGS Emerald Mountain, California, Quadrangle, NAD83.

A—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear smooth boundary.

Bw1—3 to 12 inches (8 to 30 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear smooth boundary.

Bw2—12 to 16 inches (30 to 41 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine and few fine roots; few very fine interstitial pores; 13 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear wavy boundary.

Cr—16 to 26 inches (41 to 66 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 10 to 20 inches (25 to 51 centimeters). About 0 to 25 percent of the surface is covered by 2- to 75-millimeter pebbles of mixed mineralogy.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—3 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—8 to 18 percent

Content of organic matter—1 to 2 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles

Bw horizon:

Hue—10YR or 7.5YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—8 to 18 percent

Content of organic matter—0.9 to 1.2 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles

Tweedy Series

The Tweedy consists of moderately deep, well drained soils that formed in residuum weathered from granitoid and/or mica schist rocks. These soils are on mountain slopes. Slope is 9 to 75 percent. Tweedy soils are classified as fine-loamy, mixed, superactive, mesic Typic Argixerolls.

Typical pedon

In map unit 287, Tweedy-Strahle association, 40 to 75 percent slopes; Kern County, California, about 2,150 feet (655.3 meters) north and 1,360 feet (414.5 meters) west of the southeast corner of sec. 28, T. 30 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 17 minutes 45 seconds north and longitude 118 degrees 13 minutes 17 seconds west; USGS Cross Mountain, California, Quadrangle, NAD83.

A1—0 to 3 inches (0 to 8 centimeters); brown (10YR 4/3) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots;

common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); abrupt smooth boundary.

A2—3 to 11 inches (8 to 28 centimeters); brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; few very fine and fine roots; few very fine interstitial and tubular pores; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear smooth boundary.

Bt1—11 to 21 inches (28 to 53 centimeters); brown (7.5YR 4/4) sandy clay loam, dark brown (7.5YR 3/4) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine and common medium roots; few fine and common very fine pores; common moderately thick clay films on faces of peds and in pores; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); gradual smooth boundary.

Bt2—21 to 32 inches (53 to 81 centimeters); brown (7.5YR 4/4) sandy clay loam, dark brown (7.5YR 3/4) moist; moderate coarse subangular blocky structure; hard, friable, sticky and plastic; few very fine and fine and common medium roots; few fine and common very fine pores; common moderately thick clay films on faces of peds and in pores; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; neutral (pH 6.7); gradual smooth boundary.

BCt—32 to 38 inches (81 to 97 centimeters); brown (7.5YR 4/4) sandy clay loam, dark brown (7.5YR 3/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine and very fine roots; common very fine interstitial pores; common thin and few moderately thick clay films on faces of peds and in pores; 10 percent 2- to 75-millimeter pebbles and 2 percent 75- to 250-millimeter cobbles; slightly alkaline (pH 7.5); clear smooth boundary.

Cr—38 to 48 inches (97 to 122 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by rock fragments of mixed mineralogy is as follows: 40 to 70 percent by 2- to 75-millimeter pebbles and 1 to 10 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—3 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy loam or loam

Content of clay—12 to 20 percent

Content of organic matter—1 to 2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Bt horizon:

Hue—7.5YR dry and moist

Value—4 dry and 3 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sandy loam, sandy clay loam, or clay loam

Content of clay—12 to 35 percent

Content of organic matter—0.5 to 1.2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

BCt horizon:

Hue—7.5YR dry and moist
Value—4 dry and 3 moist
Chroma—3 or 4 dry and moist
Texture of the fine-earth fraction—sandy clay loam
Content of clay—12 to 20 percent
Content of organic matter—0.5 to 1 percent
Reaction—moderately neutral to moderately alkaline
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Typic Xeropsamments

Typic Xeropsamments consist of very deep, somewhat excessively drained soils that formed in alluvium derived from granitoid rocks. These soils are on alluvial fans and flood plains and in mountain valleys. Slope is 0 to 2 percent.

Typical pedon

In map unit 307, Typic Xeropsamments, 0 to 2 percent slopes; Kern County, California, about 2,200 feet (670.6 meters) northeast of Bowen Ranch; 1,100 feet (335.3 meters) east and 450 feet (137.2 meters) south of the northwest corner of sec. 12, T. 25 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 46 minutes 26 seconds north and longitude 118 degrees 42 minutes 20 seconds west; USGS Posey, California, Quadrangle, NAD83.

This pedon is representative of the Typic Xeropsamments in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 6 inches (0 to 15 centimeters); pale brown (10YR 6/3) loamy sand, brown (10YR 4/3) moist; weak very fine subangular blocky structure and single grained; slightly hard and loose; common very fine roots; common very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); gradual smooth boundary.
- C1—6 to 20 inches (15 to 51 centimeters); pale brown (10YR 6/3) loamy sand, brown (10YR 4/3) moist; single grained; loose; few very fine roots; few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); gradual smooth boundary.
- C2—20 to 60 inches (51 to 152 centimeters); pale brown (10YR 6/3) sand, brown (10YR 4/3) moist, single grained; loose; few very fine roots; few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.0).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

About 0 to 10 percent of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—6 or 7 dry and 4 or 5 moist
Chroma—2 to 4 dry and 3 moist
Texture of the fine-earth fraction—loamy sand
Content of clay—0 to 5 percent
Content of organic matter—0.5 to 1 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 10 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist

Value—5 to 7 dry and 4 to 6 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sand, loamy sand, or fine sand

Content of clay—0 to 5 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 14 percent 2- to 75-millimeter pebbles

Vista Series

The Vista series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 9 to 60 percent. Vista soils are classified as coarse-loamy, mixed, superactive, thermic Typic Haploxerepts.

Typical pedon

In map unit 267, Cieneba-Vista-Rock outcrop complex, 30 to 60 percent slopes; Kern County, California, about 5,000 feet (1524.0 meters) south of Mt. Adelaide; 1,960 feet (597.4 meters) east and 1,110 feet (335.3 meters) north of the southwest corner of sec. 10, T. 29 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 35 degrees 25 minutes 2 seconds north and longitude 118 degrees 44 minutes 51 seconds west; USGS Mt. Adelaide, California, Quadrangle, NAD83.

- A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate very fine and fine subangular blocky and weak thin platy structure; loose when dry and when moist, nonsticky and nonplastic when wet; common very fine roots; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); clear smooth boundary.
- A2—2 to 4 inches (5 to 10 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; loose when dry and when moist, nonsticky and nonplastic when wet; common very fine roots; common very fine interstitial pores; 12 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); clear smooth boundary.
- Bw—4 to 12 inches (10 to 30 centimeters); brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; few very fine interstitial and tubular pores; few thin clay films bridging sand grains; 12 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); gradual smooth boundary.
- C1—12 to 19 inches (30 to 48 centimeters); brown (10YR 5/3) sandy loam, dark grayish brown (10YR 4/2) moist; massive; loose when dry and when moist, nonsticky and nonplastic when wet; few very fine roots; few very fine interstitial and tubular pores; 12 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); gradual smooth boundary.
- C2—19 to 27 inches (48 to 69 centimeters); brown (10YR 5/3) sandy loam, dark grayish brown (10YR 4/2) moist; single grained; loose when dry and when moist, nonsticky and nonplastic when wet; few very fine roots; few very fine interstitial and tubular pores; 12 percent 2- to 75-millimeter pebbles; slightly acid (pH 6.5); clear smooth boundary.

Cr—27 to 37 inches (69 to 94 centimeters); weathered granitoid bedrock.

Range in characteristics

Some pedons do not have a C horizon. The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). About 0 to 55 of the surface is covered by granitoid rock fragments (2- to 75-millimeter pebbles).

A horizon:

Hue—10YR dry and moist
Value—5 dry and 3 or 4 moist
Chroma—2 or 3 dry and moist
Texture of the fine-earth fraction—sandy loam
Content of clay—7 to 15 percent
Content of organic matter—0.5 to 1 percent
Reaction—slightly acid or neutral
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles

Bw horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and 2 to 4 moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—7 to 15 percent
Content of organic matter—0.1 to 1 percent
Reaction—slightly acid or neutral
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles

C horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 or 4 dry and 2 or 3 moist
Texture of the fine-earth fraction—coarse sandy loam or sandy loam
Content of clay—7 to 15 percent
Content of organic matter—0.1 to 1 percent
Reaction—slightly acid or neutral
Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles

Walong Series

The Walong series consists of moderately deep, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 15 to 75 percent. Walong soils are classified as coarse-loamy, mixed, superactive, thermic Typic Haploxerolls.

Typical pedon

In map unit 264, Arujo-Walong-Tunis association, 9 to 30 percent slopes; Kern County, California, about 2,200 feet (670.6 meters) south and 2,200 feet (670.6 meters) east of the northwest corner of sec. 20, T. 30 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 18 minutes 47 seconds north and longitude 118 degrees 14 minutes 40 seconds west; USGS Cross Mountain, California, Quadrangle, NAD83.

A1—0 to 2 inches (0 to 5 centimeters); dark grayish brown (10YR 4/2) gravelly sandy loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots;

common very fine interstitial pores; 15 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); clear smooth boundary.

A2—2 to 13 inches (5 to 33 centimeters); dark grayish brown (10YR 4/2) gravelly sandy loam, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine and few medium roots; few very fine interstitial and few fine tubular pores; 15 percent 2- to 75-millimeter pebbles; neutral (pH 7.2); gradual wavy boundary.

Bw—13 to 25 inches (33 to 64 centimeters); dark grayish brown (10YR 4/2) gravelly coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium and coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common very fine and coarse roots; few very fine interstitial and few fine tubular pores; 15 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear wavy boundary.

Cr—25 to 35 inches (64 to 89 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 5 to 80 percent by 2- to 75-millimeter pebbles, 0 to 5 percent by 75- to 250-millimeter cobbles, 0 to 5 percent by 250- to 600-millimeter stones, and 0 to 2 percent by 600- to 3,000-millimeter boulders.

A horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 2 or 3 moist

Chroma—2 to 4 dry and 2 or 3 moist

Texture of the fine-earth fraction—sandy loam

Content of clay—7 to 18 percent

Content of organic matter—1 to 2 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—0 to 30 percent 2- to 75-millimeter pebbles, 0 to 9 percent 75- to 250-millimeter cobbles, 0 to 3 percent 250- to 600-millimeter stones, and 0 to 3 percent 600- to 3,000-millimeter boulders

Bw horizon:

Hue—10YR dry and moist

Value—4 or 5 dry and 3 moist

Chroma—1 to 3 dry and moist

Texture of the fine-earth fraction—coarse sandy loam or sandy loam

Content of clay—7 to 18 percent

Content of organic matter—0.3 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—0 to 37 percent 2- to 75-millimeter pebbles, 0 to 9 percent 75- to 250-millimeter cobbles, 0 to 3 percent 250- to 600-millimeter stones, and 0 to 3 percent 600- to 3,000-millimeter boulders

Whitewolf Series

The Whitewolf series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from mixed rock sources. These soils are on alluvial fans and flood plains. Slope is 0 to 5 percent. Whitewolf soils are classified as mixed, thermic Xeric Torripsamments.

Typical pedon

In map unit 209, Whitewolf loamy sand, 0 to 2 percent slopes, occasionally flooded; Kern County, California, 2,250 feet (685.8 meters) north and 95 feet (29.0 meters) west of the southeast corner of sec. 36, T. 30 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 16 minutes 25 seconds north and longitude 118 degrees 48 minutes 27 seconds west; USGS Edison, California, Quadrangle, NAD83.

- Ap—0 to 15 inches (0 to 38 centimeters); brown (10YR 5/3) loamy sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few coarse and medium and common fine and very fine roots; common very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); abrupt wavy boundary.
- A—15 to 25 inches (38 to 64 centimeters); brown (10YR 5/3) loamy sand, dark brown (10YR 3/3) moist; single grained; soft, very friable, nonsticky and nonplastic; few fine and very fine roots; few very fine interstitial pores; 5 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); clear wavy boundary.
- C1—25 to 31 inches (64 to 79 centimeters); pale brown (10YR 6/3) sand, dark brown (10YR 3/3) moist; single grained; loose, nonsticky and nonplastic; few very fine roots; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); abrupt irregular boundary.
- C2—31 to 41 inches (79 to 104 centimeters); pale brown (10YR 6/3) sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; few very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 7.3); abrupt smooth boundary.
- C3—41 to 60 inches (104 to 152 centimeters); pale brown (10YR 6/3) sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; common very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; slightly effervescent; disseminated carbonates; neutral (pH 7.3).

Range in characteristics

The content of carbonates is 0 to 1 percent. The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 80 percent by 2- to 75-millimeter pebbles and 0 to 5 percent by 75- to 250-millimeter cobbles.

A horizon:

- Hue—10YR dry and moist
- Value—5 dry and 3 moist
- Chroma—2 to 4 dry and 2 or 3 moist
- Texture of the fine-earth fraction—loamy coarse sand or loamy sand
- Content of clay—0 to 8 percent
- Content of organic matter—0 to 1 percent
- Reaction—slightly acid to moderately alkaline
- Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 5 percent 75- to 250-millimeter cobbles

C horizon:

- Hue—10YR dry and moist
- Value—5 or 6 dry and 3 or 4 moist
- Chroma—3 or 4 dry and 3 moist
- Texture of the fine-earth fraction—sand, loamy coarse sand, or loamy sand
- Content of clay—0 to 8 percent
- Content of organic matter—0 to 0.75 percent
- Reaction—slightly acid to moderately alkaline
- Content of rock fragments—0 to 25 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Wingap Series

The Wingap series consists of deep, well drained soils that formed in colluvium and residuum derived from granite. These soils are on hills and mountains. Slope is 4 to 30 percent. Wingap soils are classified as coarse-loamy, mixed, superactive, thermic Typic Haplargids.

Typical pedon

In map unit 5201, Wingap-Pinyonpeak association, 8 to 30 percent slopes; Kern County, California, about 26.7 miles (43 kilometers) north and 1.2 miles (2 kilometers) east of Mojave, California, in the extreme southern Sierra Nevada mountains; about 2.0 miles (3.2 kilometers) southwest of Dove Spring on Road SC 176, within the BLM's Jawbone-Butterbrecht OHV-ACEC; 2,198 feet (670 meters) south and 3,200 feet (975 meters) west of the northeast corner of sec. 4, T. 29 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees, 26 minutes and 23.4 seconds north and longitude 118 degrees, 07 minutes and 14.5 seconds west; UTM 11S, 0398283E, 3922397N; USGS Dove Springs, California, Quadrangle, NAD83.

- A—0 to 3 inches (0 to 8 centimeters); brown (10YR 5/3) loamy coarse sand, brown (10YR 4/3) moist; weak thin platy structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.8); abrupt smooth boundary.
- Bt1—3 to 14 inches (8 to 35 centimeters); pale brown (10YR 6/3) loamy sand, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine interstitial pores; 3 percent faint clay bridges between sand grains; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.8); clear wavy boundary.
- Bt2—14 to 24 inches (35 to 60 centimeters); light yellowish brown (10YR 6/4) gravelly coarse sandy loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure; moderately hard, very friable, slightly sticky and nonplastic; common fine and medium roots; common very fine interstitial pores; 25 percent distinct clay bridges between sand grains; 18 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); clear wavy boundary.
- Bt3—24 to 41 inches (60 to 104 centimeters); light yellowish brown (10YR 6/4) gravelly coarse sandy loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine and fine interstitial roots; few very fine interstitial pores; 10 percent distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; 18 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); clear wavy boundary.
- C—41 to 54 inches (104 to 137 centimeters); light yellowish brown (10YR 6/4) gravelly loamy coarse sand, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common fine roots; common very fine interstitial pores; 25 percent 2- to 75-millimeter pebbles; neutral (pH 6.6); clear wavy boundary.
- Cr—54 to 60 inches (137 to 152 centimeters); soft, weathered granite; moderate excavation difficulty; slightly hard, friable, nonsticky and nonplastic.

Range in characteristics

The depth to weathered bedrock is 40 to 60 inches (102 to 152 centimeters). About 45 to 65 percent of the surface is covered by granite rock fragments (2- to 75-millimeter pebbles). The soils have a typic-aridic moisture regime. Depth to the upper boundary of the argillic horizon is 3 to 16 inches (8 to 40 centimeters).

A horizon:

Hue—10YR dry and moist
Value—5 or 6 dry and 3 or 4 moist
Chroma—3 dry and moist
Texture of the fine-earth fraction—loamy coarse sand or loamy sand
Content of clay—4 to 10 percent
Content of organic matter—0.25 to 0.6 percent
Reaction—neutral
Content of rock fragments—5 to 15 percent 2- to 75-millimeter pebbles

Bt horizon:

Hue—7.5YR or 10YR dry and moist
Value—5 or 6 dry and 4 or 5 moist
Chroma—3 to 6 dry and 3, 4, or 6 moist
Texture of the fine-earth fraction—loamy coarse sand, loamy sand, coarse sandy loam, or sandy loam
Content of clay—10 to 18 percent
Content of organic matter—0 to 0.5 percent
Reaction—neutral
Content of rock fragments—20 to 35 percent 2- to 75-millimeter pebbles

C horizon:

Hue—7.5YR or 10YR dry and moist
Value—6 dry and 4 or 5 moist
Chroma—4 dry and moist
Texture of the fine-earth fraction—loamy coarse sand or loamy sand
Content of clay—4 to 8 percent
Content of organic matter—0 to 0.25 percent
Reaction—neutral
Content of rock fragments—15 to 35 percent 2- to 75-millimeter pebbles

Wortley Series

The Wortley series consists of very shallow or shallow, well drained soils that formed in residuum weathered from granitoid and/or gabbro rocks. These soils are on hillslopes and mountain slopes. Slope is 5 to 60 percent. Wortley soils are classified as loamy, mixed, superactive, mesic, shallow Torriorthentic Haploxerolls.

Typical pedon

In map unit 560, Sacatar-Wortley-Calpine complex, 5 to 30 percent slopes; Kern County, California, about 26 miles (41.8 kilometers) northeast of Lake Isabella and 2.25 miles (3.6 kilometers) southeast of Kennedy Peak; about 220 feet (67.1 meters) south and 1,200 feet (365.8 meters) west of the northeast corner of sec. 4, T. 23 S., R. 36 E.; Mount Diablo Base and Meridian; latitude 35 degrees 57 minutes 25 seconds north and longitude 118 degrees 5 minutes 26 seconds west; USGS Sacatar Canyon, California, Quadrangle, NAD83.

A1—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure parting to single grained; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear smooth boundary.

A2—2 to 8 inches (5 to 20 centimeters); brown (10YR 5/3) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine and medium roots; common very fine

interstitial and few very fine tubular pores; 10 percent 2- to 75-millimeter pebbles; neutral (pH 6.7); clear wavy boundary.
Cr—8 to 18 inches (20 to 46 centimeters); weathered granitoid bedrock.

Range in characteristics

The depth to weathered bedrock is 8 to 20 inches (20 to 51 centimeters). The percentage of the surface covered by granitoid and/or gabbro rock fragments is as follows: 0 to 10 percent by 2- to 75-millimeter pebbles and 0 to 20 percent by 75- to 250-millimeter cobbles.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—2 to 3 dry or moist

Texture of the fine-earth fraction—coarse sandy loam

Content of clay—7 to 12 percent

Content of organic matter—1 to 3 percent

Reaction—slightly acid or neutral

Content of rock fragments—0 to 20 percent 2- to 75-millimeter pebbles and 0 to 11 percent 75- to 250-millimeter cobbles

Xeric Haplargids

Xeric Haplargids consist of deep, well drained soils that formed in a thin layer of alluvium derived from metasedimentary rocks over residuum weathered from metasedimentary rocks. These soils are on alluvial fans and in mountain valleys. Slope is 5 to 30 percent. The soils are classified as coarse-loamy, mixed, mesic Xeric Haplargids.

Typical pedon

In map unit 544, Xeric Haplargids-Lithic Xeric Haplargids complex, mesic, 5 to 30 percent slopes; Kern County, California, about 2.25 miles (3.6 kilometers) east-northeast of Rockhouse Meadow; 1,960 feet (597.4 meters) south and 2,690 feet (819.9 meters) east of the northwest corner of sec. 25, T. 23 S., R. 35 E.; Mount Diablo Base and Meridian; latitude 35 degrees 54 minutes 5 seconds north and longitude 118 degrees 9 minutes 25 seconds west; USGS Rockhouse Basin, California, Quadrangle, NAD83.

This pedon is representative of the Xeric Haplargids in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

A1—0 to 3 inches (0 to 5 centimeters); brown (10YR 5/3) cobbly loamy sand, very dark brown (10YR 3/2) moist; weak medium and fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine and few medium roots; few very fine interstitial and tubular pores; neutral (pH 7.0); clear smooth boundary.

A2—3 to 8 inches (5 to 20 centimeters); brown (10YR 5/3) cobbly sandy loam, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, fine, and medium roots; common very fine interstitial and few very fine tubular pores; neutral (pH 7.0); clear wavy boundary.

A3—8 to 24 inches (20 to 61 centimeters); brown (10YR 5/3) cobbly sandy loam, dark yellowish brown (10YR 3/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine and few medium roots; few very fine

interstitial and tubular pores; 20 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, and 1 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear wavy boundary.

Bt1—24 to 38 inches (61 to 97 centimeters); yellowish brown (10YR 5/4) cobbly sandy loam, dark yellowish brown (10YR 3/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; common very fine, fine, and medium roots; common very fine interstitial and few very fine tubular pores; few thin clay films bridging mineral grains; 20 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, and 1 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear wavy boundary.

Bt2—38 to 40 inches (97 to 102 centimeters); yellowish brown (10YR 5/4) very stony sandy clay loam, dark yellowish brown (10YR 4/4) moist; massive; very hard, friable, sticky and plastic; common very fine, fine, and medium roots; common very fine interstitial and few very fine tubular pores; many thin and few moderately thick clay films bridging mineral grains and lining pores; 20 percent 2- to 75-millimeter pebbles, 10 percent 75- to 250-millimeter cobbles, and 5 percent 250- to 600-millimeter stones; neutral (pH 7.0); clear wavy boundary.

R—40 to 50 inches (102 to 127 centimeters); fractured, hard metasedimentary bedrock; fractures spaced 0.5 inch to 2 inches (1.3 to 5.1 centimeters) apart.

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to hard bedrock is 20 to 40 inches (51 to 102 centimeters). The percentage of the surface covered by metasedimentary rock fragments is as follows: 10 to 35 percent by 2- to 75-millimeter pebbles, 5 to 10 percent by 75- to 250-millimeter cobbles, and 5 to 10 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 dry and 3 moist

Chroma—3 or 4 dry and 2 to 4 moist

Texture of the fine-earth fraction—loamy sand or sandy loam

Content of clay—5 to 10 percent

Content of organic matter—0.1 to 1 percent

Reaction—neutral

Content of rock fragments—15 to 25 percent 2- to 75-millimeter pebbles, 5 to 15 percent 75- to 250-millimeter cobbles, and 5 to 15 percent 250- to 600-millimeter stones

Bt horizon:

Hue—10YR dry and moist

Value—5 dry and 3 or 4 moist

Chroma—4 dry and 3 or 4 moist

Texture of the fine-earth fraction—sandy loam or sandy clay loam

Content of clay—10 to 25 percent

Content of organic matter—0 to 0.5 percent

Reaction—neutral or slightly alkaline

Content of rock fragments—5 to 25 percent 2- to 75-millimeter pebbles, 5 to 20 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Xeric Torriorthents

Xeric Torriorthents consist of very deep, well drained soils that formed in alluvium derived from mixed rock sources. These soils are on fan remnants and stream terraces. Slope is 15 to 60 percent. The soils are classified as fine-silty, mixed, superactive, thermic Xeric Torriorthents.

Typical pedon

In map unit 174, Xeric Torriorthents-Calcic Haploxerepts association, 15 to 60 percent slopes; Kern County, California, on the west side of Round Mountain Road, 0.2 mile (0.3 kilometer) south of cattle gap; 850 feet (259.1 meters) south and 250 feet (76.2 meters) west of the northeast corner of sec. 29, T. 28 S., R. 29 E.; Mount Diablo Base and Meridian; latitude 35 degrees 28 minutes 6 seconds north and longitude 118 degrees 52 minutes 14 seconds west; USGS Rio Bravo Ranch, California, Quadrangle, NAD83.

This pedon is representative of the Xeric Torriorthents in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- Ak—0 to 15 inches (0 to 38 centimeters); light yellowish brown (2.5Y 6/3) silt loam, olive brown (2.5Y 4/3) moist; weak coarse prismatic and moderate medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine roots; few fine and common very fine interstitial and common very fine tubular pores; common fine threads of carbonate; strongly effervescent in root channels and/or pores; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); clear smooth boundary.
- Ck—15 to 20 inches (38 to 51 centimeters); 60 percent light gray (2.5Y 7/2) and 40 percent brownish yellow (10YR 6/6) silt loam, 60 percent grayish brown (2.5Y 5/2) and 40 percent yellowish brown (10YR 5/6) moist; weak coarse subangular blocky structure; soft, very friable, moderately sticky and moderately plastic; common very fine roots; common very fine interstitial pores; few fine threads and soft masses of carbonate; strongly effervescent in root channels and/or pores; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.
- Cnyz1—20 to 28 inches (51 to 71 centimeters); 65 percent light gray (2.5Y 7/2) and 35 percent light olive brown (2.5Y 5/6) silt loam, 65 percent grayish brown (2.5Y 5/2) and 35 percent yellowish brown (10YR 5/6) moist; weak medium platy and strong medium subangular blocky structure; very hard, friable, moderately sticky and moderately plastic; few very fine roots; few very fine interstitial and few very fine tubular pores; few medium platy gypsum crystals throughout; slightly effervescent throughout; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.
- Cnyz2—28 to 33 inches (71 to 84 centimeters); 60 percent light yellowish brown (2.5Y 6/4) and 40 percent light brownish gray (2.5Y 6/2) silt loam, 60 percent olive brown (2.5Y 4/4) and 40 percent light olive brown (2.5Y 5/3) moist; moderate coarse angular blocky structure; very hard, friable, moderately sticky and moderately plastic; few very fine roots; few very fine tubular pores; few thin platy gypsum crystals throughout; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.
- Cnyz3—33 to 50 inches (84 to 127 centimeters); 50 percent light gray (2.5Y 7/2) and 50 percent light olive brown (2.5Y 5/6) silty clay loam, 50 percent grayish brown (2.5Y 5/2) and 50 percent light olive brown (2.5Y 5/6) moist; moderate fine and strong medium and coarse angular blocky structure; extremely hard, friable, very sticky and very plastic; few very fine roots; few very fine interstitial pores; few

medium platy gypsum crystals throughout; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); gradual smooth boundary.

Cnyz4—50 to 64 inches (127 to 163 centimeters); 70 percent light gray (2.5Y 7/2) and 30 percent light olive brown (2.5Y 5/6) silty clay, 70 percent grayish brown (2.5Y 5/2) and 30 percent light olive brown (2.5Y 5/6) moist; moderate medium and strong coarse angular blocky structure; extremely hard, friable, very sticky and very plastic; few very fine tubular pores; common medium platy gypsum crystals throughout; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.

Cnyz5—64 to 70 inches (163 to 178 centimeters); 90 percent light gray (2.5Y 7/2) and 10 percent light olive brown (2.5Y 5/6) silty clay, 90 percent light olive brown (2.5Y 5/3) and 10 percent yellowish brown (10YR 5/6) moist; strong medium and coarse angular blocky structure; extremely hard, firm, very sticky and very plastic; few very fine tubular pores; common medium platy gypsum crystals throughout; 2 percent 2- to 75-millimeter pebbles; moderately alkaline (pH 8.0).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The parent material has crossbedded veins of gypsum crystals that are not pedogenic. It also has relict redoximorphic colors. The moisture regime is aridic bordering on xeric; the distribution of precipitation is sufficient for xeric, but salts limit the availability of moisture to plants. About 10 to 50 percent of the surface of covered by 2- to 75-millimeter pebbles of mixed mineralogy.

Ak horizon:

Hue—2.5Y dry and moist

Value—6 or 7 dry and 4 or 5 moist

Chroma—3 dry and moist

Texture of the fine-earth fraction—silt loam

Content of clay—15 to 30 percent

Content of organic matter—0.1 to 1 percent

Reaction—slightly alkaline or moderately alkaline

Content of rock fragments—0 to 6 percent 2- to 25-millimeter pebbles

Ck horizon:

Hue—10YR or 2.5Y dry and moist

Value—4 to 7 dry and 3 to 5 moist

Chroma—3 to 6 dry and moist

Texture of the fine-earth fraction—silt loam

Content of clay—15 to 30 percent

Content of organic matter—0.1 to 0.5 percent

Reaction—slightly alkaline to strongly alkaline

Content of rock fragments—0 to 6 percent 2- to 25-millimeter pebbles

Cnyz horizon:

Hue—10YR or 2.5Y dry and 10YR moist

Value—4 to 7 dry and 4 or 5 moist

Chroma—1 to 6 dry and moist

Texture of the fine-earth fraction—silt loam, silty clay loam, or silty clay

Content of clay—25 to 45 percent

Content of organic matter—0 to 0.2 percent

Reaction—moderately alkaline or strongly alkaline

Content of rock fragments—0 to 6 percent 2- to 75-millimeter pebbles and 0 to 3 percent 75- to 250-millimeter cobbles

Xerofluvents

Xerofluvents consist of very deep, somewhat poorly drained soils that formed in alluvium derived from mixed rock sources. These soils are on flood plains. Slope is 0 to 5 percent.

Typical pedon

In map unit 306, Xerofluvents, occasionally flooded-Riverwash complex, 0 to 5 percent slopes; Kern County, California, about 2,430 feet (740.7 meters) east and 2,620 feet (798.6 meters) south of the northwest corner of sec. 32, T. 27 S., R. 28 E.; Mount Diablo Base and Meridian; latitude 35 degrees 32 minutes 14 seconds north and longitude 118 degrees 59 minutes 12 seconds west; USGS Knob Hill, California, Quadrangle, NAD83.

This pedon is representative of the Xerofluvents in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

- A—0 to 6 inches (0 to 15 centimeters); brown (10YR 5/3 loam, dark brown (10YR 3/3) moist; few fine soft light brownish gray (2.5Y 6/2) redoximorphic depletions, grayish brown (2.5Y 5/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine interstitial and tubular pores; 5 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- C1—6 to 12 inches (15 to 30 centimeters); light brownish gray (2.5Y 6/2) loam, dark grayish brown (2.5Y 4/2) moist; few fine soft yellowish brown (10YR 5/8) redoximorphic concentrations, dark yellowish brown (10YR 4/6) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common fine interstitial and tubular pores; 14 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear wavy boundary.
- C2—12 to 19 inches (30 to 48 centimeters); dark grayish brown (10YR 4/2) clay loam, very dark brown (10YR 2/2) moist; common fine yellowish brown (10YR 5/8) redoximorphic concentrations, dark yellowish brown (10YR 4/6) moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; few very fine, fine, and medium roots; few very fine tubular and interstitial and few fine tubular pores; 14 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); clear smooth boundary.
- C3—19 to 25 inches (48 to 64 centimeters); brown (10YR 5/3) loamy sand, dark grayish brown (10YR 4/2) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few medium roots; few very fine tubular and interstitial and few fine tubular pores; slightly effervescent; 14 percent 2- to 75-millimeter pebbles; slightly alkaline; (pH 7.5); abrupt wavy boundary.
- C4—25 to 28 inches (64 to 71 centimeters); grayish brown (10YR 5/2) and light olive gray (5Y 6/2) sandy clay loam, very dark grayish brown (10YR 3/2) and olive gray (5Y 4/2) moist; common fine soft yellowish brown (10YR 5/6) redoximorphic concentrations, dark yellowish brown (10YR 4/6) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; few medium roots; common very fine and fine tubular pores; slightly effervescent; 14 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); abrupt wavy boundary.
- C5—28 to 50 inches (71 to 127 centimeters); light gray (2.5Y 7/2) sand, light brownish gray (2.5Y 6/2) moist; single grained; loose, nonsticky and nonplastic; few fine and medium roots; slightly effervescent; 14 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5); gradual wavy boundary.

C6—50 to 60 inches (127 to 152 centimeters); light brownish gray (10YR 6/2) coarse sand, dark grayish brown (10YR 4/2) moist; single grained; loose, nonsticky and nonplastic; slightly effervescent; 14 percent 2- to 75-millimeter pebbles; slightly alkaline (pH 7.5).

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to a water table is 2 to 6 feet (0.6 to 1.8 meters). Redoximorphic accumulations with hue of 7.5YR, 10YR, or 2.5Y occur within 6 inches (15 centimeters) of the surface.

A horizon:

Hue—10YR or 2.5Y dry and moist

Value—5 or 6 dry and 3 to 5 moist

Chroma—2 or 3 dry and moist

Texture of the fine-earth fraction—loamy sand, sandy loam, loam, sandy clay loam, clay loam, or clay

Content of clay—5 to 40 percent

Content of organic matter—0.5 to 3 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—0 to 10 percent 2- to 75-millimeter pebbles

C horizon:

Hue—7.5YR, 10YR, 2.5Y, 5Y, or 5GY dry and moist

Value—4 to 7 dry and 2 to 6 moist

Chroma—1 to 4 dry and 1 to 3 moist

Texture of the fine-earth fraction—coarse sand, sand, loamy sand, sandy loam, loam, sandy clay loam, or clay loam

Content of clay—2 to 40 percent

Content of organic matter—0 to 0.2 percent

Reaction—neutral to moderately alkaline

Content of rock fragments—5 to 20 percent 2- to 75-millimeter pebbles

Xerorthents

Xerorthents consist of very shallow or shallow, well drained soils that formed in residuum weathered from granitoid rocks. These soils are on hillslopes and mountain slopes. Slope is 30 to 75 percent.

Typical pedon

In map unit 311, Xerorthents-Rock outcrop complex, 30 to 75 percent slopes; Kern County, California, about 50 feet (15.2 meters) east and 570 feet (173.7 meters) south of the projected northwest corner of sec. 35, T. 30 S., R. 30 E.; Mount Diablo Base and Meridian; latitude 36 degrees 16 minutes 40 seconds north and longitude 118 degrees 44 minutes 4 seconds west; USGS Bena, California, Quadrangle, NAD83.

This pedon is representative of the Xerorthents in this survey area. Because of the high variability of the soils, however, the pedon is not completely typical.

A—0 to 5 inches (0 to 13 centimeters); brown (10YR 5/3), gravelly sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate fine and medium subangular blocky structure; friable, hard, slightly sticky and slightly plastic; common very fine roots throughout; common very fine interstitial and few very fine tubular pores; 20 percent 2- to 75-millimeter pebbles, 5 percent 75- to 250-millimeter cobbles, and

5 percent 250- to 600-millimeter stones; noneffervescent; neutral (pH 7.2); clear wavy boundary.

Cr—5 to 15 inches (13 to 38 centimeters); weathered, fractured granite bedrock.

Range in characteristics

This map unit component occurs at a taxonomic level higher than series because of the variability of the landscape at the scale of mapping.

The depth to weathered bedrock is 5 to 20 inches (13 to 51 centimeters).

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—sand, loamy sand, sandy loam, or sandy clay loam

Content of clay—5 to 25 percent

Content of organic matter—0.02 to 0.75 percent

Reaction—neutral

Content of rock fragments—8 to 50 percent 2- to 75-millimeter pebbles, 3 to 15 percent 75- to 250-millimeter cobbles, and 3 to 15 percent 250- to 600-millimeter stones

Xyno Series

The Xyno series consists of very shallow or shallow, somewhat excessively drained soils that formed in colluvium derived from granitoid rocks and/or residuum weathered from granitoid rocks. These soils are on mountain slopes. Slope is 9 to 75 percent. Xyno soils are classified as mixed, thermic, shallow Xeric Torripsamments.

Typical pedon

In map unit 510, Xyno-Canebrake-Pilotwell association, 30 to 60 percent slopes; Kern County, California, about 1,800 feet (548.6 meters) east and 800 feet (243.8 meters) north of the southwest corner of sec. 8, T. 26 S., R. 34 E.; Mount Diablo Base and Meridian; latitude 35 degrees 40 minutes 36 seconds north and longitude 118 degrees 21 minutes 16 seconds west; USGS Weldon, California, Quadrangle, NAD83.

A—0 to 2 inches (0 to 5 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; 20 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); clear smooth boundary.

C—2 to 11 inches (5 to 28 centimeters); brown (10YR 5/3) gravelly loamy coarse sand, dark brown (10YR 3/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; 18 percent 2- to 75-millimeter pebbles; neutral (pH 7.0); abrupt wavy boundary.

Cr—11 to 21 inches (28 to 53 centimeters); weathered granodiorite bedrock.

Range in characteristics

The depth to weathered bedrock is 8 to 20 inches (20 to 51 centimeters). The percentage of the surface covered by granitoid rock fragments is as follows: 10 to 80 percent by 2- to 75-millimeter pebbles, 0 to 10 percent by 75- to 250-millimeter cobbles, and 0 to 5 percent by 250- to 600-millimeter stones.

A horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—2 to 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—0 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—15 to 25 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

C horizon:

Hue—10YR dry and moist

Value—5 or 6 dry and 3 or 4 moist

Chroma—3 or 4 dry and moist

Texture of the fine-earth fraction—loamy coarse sand

Content of clay—4 to 10 percent

Content of organic matter—0 to 1 percent

Reaction—slightly acid to slightly alkaline

Content of rock fragments—15 to 25 percent 2- to 75-millimeter pebbles, 0 to 5 percent 75- to 250-millimeter cobbles, and 0 to 10 percent 250- to 600-millimeter stones

Formation of the Soils

The following paragraphs describe the key conditions and processes that created the soils in this survey area. Soils are classified, mapped, and interpreted on the basis of field verification of various kinds of soil horizons and their arrangement. This process often follows the preliminary delineation of soil map units based on landforms, predicted soil characteristics, and knowledge of the area gained by the soil scientist involved in soil mapping.

Soil is a dynamic three-dimensional body consisting of mineral material, living organisms, decomposing organic matter, and pores that contain either air or water. The water contains myriad suspended and dissolved substances. Soils have unique vertical distributions of properties and characteristics called horizons. The degree of expression of the soil horizons is a reflection of the extent of the interaction of soil-forming factors with one or more soil-forming processes, including additions, removals, transfers, and transformations (Simonson, 1959). Important diagnostic surface horizons in this survey area include mollic epipedons, and the significant diagnostic subsurface horizons include argillic, calcic, and cambic horizons. The Glossary defines these diagnostic horizons.

The upper limit of soil is the boundary between soil and air, shallow water, live plants, or plant materials that have not begun to decompose. Areas are not considered to have soil if the surface is permanently covered by water too deep (typically more than 2.5 meters) for the growth of rooted plants.

Defining the lower boundary that separates soil from the nonsoil underneath is more difficult. Soil consists of horizons near the earth's surface that, in contrast to the underlying parent material, have been altered by the interactions of climate, relief, and living organisms over time. Commonly, soil grades at its lower boundary to hard rock or to earthy material virtually devoid of animals, roots, or other marks of biological activity. For purposes of classification, the lower boundary of soil described in this soil survey is set at 200 centimeters (Soil Survey Staff, 2006).

Common additions include water and entrained nutrients from rainfall, snowmelt, or subsurface flow; gases, including oxygen, from the above-ground atmosphere; organic matter from plants and animals; soil eroded from higher elevations or blown in by the wind; volcanic ash from local or distant eruptions; energy from the sun, fire, and other sources; and contaminants primarily from human activity.

Losses include water to the atmosphere by evaporation and transpiration and to depth by percolation; gases, notably carbon dioxide and methane, to the above-ground atmosphere; organic matter by decomposition, fire, or harvesting; soil by erosional loss; and energy that escapes primarily by convection and radiation.

Transfers, initiated primarily by biological activity, gravity, and energy gradients, redistribute soil solutions, nutrients and contaminants, gases, organic matter, fine mineral material (especially clay), and energy vertically and laterally throughout the soil.

Transformations can be physical, chemical, or biological. They include rock and mineral weathering, which disintegrates rocks into smaller fragments and decomposes primary minerals into clay minerals. They also include decomposition of

organic matter and other biogeochemical processes that are vital in cycling nutrients and maintaining ecosystems. In this soil survey, fire is an important agent of transformation.

The characteristics and properties of soil are determined by physical and chemical processes that result from the interaction of five soil-forming factors. These factors are:

1. Climate, mainly the temperature and kind and amount of precipitation since the accumulation or exposure of the parent material;
2. Living organisms, mainly the plant cover and the organisms living in and on the soil (including humans);
3. The length of time that the soil-forming factors have been operating;
4. Parent material, including the texture and structure of the material and its mineralogical and chemical composition; and
5. Topography, mainly as it affects internal and external soil properties, such as drainage, aeration, susceptibility to erosion, and exposure to the sun and wind (Jenny, 1941).

The influence of any one of these factors varies at each locality, and the soils may differ accordingly from place to place or within short distances.

Climate

This survey area has a Mediterranean climate that is characterized by hot, dry summers and cool, moist winters. Most of the precipitation falls in the period November through April. The warm temperatures and moist soil conditions in spring are conducive to rapid chemical reactions. During periods of rainfall, water carrying dissolved or suspended solids moves through the soil. Weathering is generally limited in the cool winter months, but leaching processes become active with the onset of seasonal rainfall. In the absence of fire, weathering is most active in spring and least active in summer and late fall. In soils that have a high water table, weathering can occur in summer and fall. Soils kept moist by applications of irrigation water may have increased weathering rates.

The growth of plants in the hills and mountains of the survey area is rapid early in spring but almost ceases in June or July because of a lack of moisture in conjunction with increased air temperature.

Topography and relief affect present-day climate variations. Soils on slopes with north or northeast aspects are less insulated, tend to be cooler, moister, and deeper, and have more organic matter than soils on the more southerly aspects at the same elevation. In map unit 297, for example, the Walong soil, a Mollisol, occurs on northerly aspects and the Blasingame soil, an Alfisol, occurs on the more southerly aspects.

As elevation increases, temperature decreases and the amount of precipitation generally increases. As the amount of precipitation increases, the extent of leaching and the amount of vegetation generally increase, resulting in an increased content of organic matter and the cycling of bases. Fluctuations in temperature and moisture affect the rate at which organic matter decomposes and accumulates and the weathering of minerals. Soils on the older landforms, such as Alberti soils on hills and mountains, have been affected by climatic conditions different from the current climatic conditions. In the past these "paleosols" formed on a landscape with distinctive morphological features resulting from a soil-forming environment that no longer exists at the site.

Living Organisms

The activities of living organisms, including soil flora, fauna, and humans, all influence the formation and morphology of soils. Fungi and bacteria help to decompose organic matter and release nutrients needed by plants. Some microorganisms convert unavailable nitrogen gas from the soil atmosphere into forms that are available to plants. Bacteria, earthworms, small insects, and rodents mix soil material through burrowing and tunneling. Abandoned tunnels commonly are filled with loose material from the overlying horizons and transmit water more readily than the surrounding undisturbed soil material.

Time

The influence of time on soil formation is expressed by soil characteristics displayed in soil horizons. Premier soils on alluvial fans and other young soils have few distinctive characteristics and no diagnostic subsurface horizons. Delvar and other soils that have argillic and calcic subsurface horizons are examples of soils on stable fan remnants that have had the time to develop distinctive profile characteristics.

Parent Material

The type of parent material has a major impact on the mineralogy and particle-size class of soils. Inorganic parent materials can be either residual or transported. If the material is residual, the soil formed through the direct (in-place) weathering of bedrock. If the material is transported, the soil formed in unconsolidated deposits laid down by gravity, ice, flowing water, still water, or the wind. These deposits are called colluvium, till, alluvium, lacustrine material, and eolian material, respectively. Most of soils in this survey area formed in material weathered from granitoid rocks. Scodie soils are an example. Kiscove soils are examples of soils that formed material weathered from metamorphic rocks.

Although one weathering process can dominate in a given area, physical and chemical weathering processes simultaneously break down rocks. Rocks that formed under intense temperature and pressure and cool rapidly form crystalline structures in minerals that are less stable when exposed to low temperatures and pressures at earth's surface, so they weather more rapidly. Rocks that formed under intense temperature and pressure but cool more slowly and later in the volcanic magma cooling process are more stable when exposed to the low temperatures and pressures at the earth's surface. Bonds holding atoms together determine mineral hardness. Rocks that have cooled more slowly have had time to build stronger bonds, so they are more resistant to the forces of weathering.

Topography and Landforms

The overall landscape in the survey area is made up of mountains, hills, and valleys. It is the result of erosional and constructional processes. These processes occurred in response to changes in climate, fluctuating sea levels, and tectonic activities. Figure 19 illustrates alluvial fans in map unit 242 and mountain slopes in map units 507, 515, and 516. Figure 20 shows Chollawell soils in map units 245, 246, and 505. These soils formed in alluvium on fan remnants and fan piedmonts. Soils that formed in colluvium, such as Xyno, Canebrake, and Pilotwell soils in map units 509, 510, and 610, are on the mountain slopes at higher elevations in the background. On this same landscape, soils that formed in residuum, such as Faycreek, Hyte, and Erskine soils, also are on mountain slopes. Many of the soils on



Figure 19.—Map units in Short Canyon. Soil formation is affected by erosion from the mountains and deposition onto alluvial fans in map unit 242 (Inyo gravelly loamy coarse sand, 5 to 15 percent slopes).

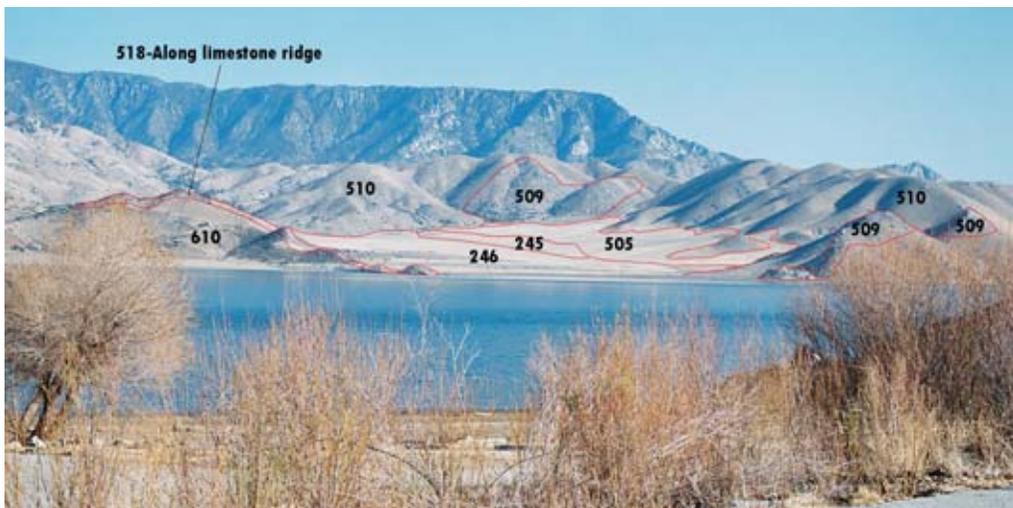


Figure 20.—Chollawell soils in map units 245, 246, and 505.

the hills and mountains in this survey area formed in residuum, but some formed in various combinations of deposits. Xyno soils, for example, formed in both residuum and colluvium.

The youngest geomorphic surfaces in the survey area are flood plains associated with the major rivers and streams. The soils on these flood plains occur at the lowest elevations on the landscape. They formed primarily in alluvium derived from granitoid rocks from the Sierra Nevada Mountains. One common soil on flood plains associated with outflow from the Kern River is the Kernfork soil in map unit 210.

Kernfork soils have a mollic epipedon that is more than 23 inches (58 centimeters) thick, redoximorphic features, and segregated and disseminated carbonates. The content of organic matter is 1 to 6 percent.

Stream terraces are the next landform to occur as elevation increases. They are old riverbeds or streambeds that are being dissected by rivers and streams. A common soil on this landform is the Cuyama soil in map unit 185. The soils on stream terraces in this survey area formed in alluvium, have sandy or coarse-loamy particle-size class textures, and are very deep. They may have up to 60 percent rock fragments ranging from 2 to 3,000 millimeters in diameter. They may be saline-sodic and/or have segregated and disseminated carbonates. They commonly have rock fragments of mixed mineralogy in their parent material.

The next landforms in the sequence are fan remnants and fan piedmonts. The soils on these landforms are Alfisols, Inceptisols, or Mollisols in the Central Valley and Aridisols or Entisols in the drier areas. The Southlake and Goodale soils in map unit 517 are examples. The Southlake soils, which are Aridisols, are on fan piedmonts, have an argillic horizon, and are older than the Goodale soils, which are Entisols. Both the Southlake and Goodale soils are very deep, have coarse-loamy or sandy textures, have a thermic soil temperature regime, and are on southeast to southwest aspects.

Most of the remaining landforms are hillslopes and mountain slopes. These landforms are generally at higher elevations than the fan remnants and fan piedmonts (Peterson, 1981). Mollisols, Alfisols, Entisols, and Aridisols occur on the hillslopes and mountain slopes. These soils have a frigid, mesic, or thermic soil temperature regime, depending on elevation and aspect.

On about 60 percent of the acreage used as rangeland in the survey area, the soils have a mollic epipedon. About half of the soils with a mollic epipedon have a thermic soil temperature regime. The other half have a mesic soil temperature regime. The soils generally have a northwest to northeast aspect. Thermic soil temperature regimes in this survey area generally occur at elevations of 400 to 5,000 feet (122 to 1,524 meters), mesic soil temperature regimes generally occur at elevations of 2,500 to 6,500 feet (762 to 1,981 meters), and frigid soil temperature regimes generally occur at elevations of more than 6,500 feet (1,981 meters). In the soils that have a mollic epipedon, the content of organic matter in the top 10 inches (25 centimeters) is 1 to 3 percent in areas of a thermic soil temperature regime and 3 to more than 6 percent in areas of a mesic or frigid soil temperature regime. The dark color and high organic matter content in soils that have a mesic or frigid soil temperature regime occur because the lower soil temperatures help to preserve the organic matter by decreasing microbe activity in the soils. The Inceptisols and Mollisols that have a mesic or frigid soil temperature regime may be considerably older than the Inceptisols and Mollisols that have a thermic temperature regime and are at lower elevations. The rest of the soils in the survey area generally are Entisols and Alfisols. They are generally shallower than the other soils in the area, are steeper, support less vegetation, and have less organic matter. Their aspect is generally southeast to southwest.

Fire

Although fire is common in the forested areas throughout the Western part of the United States, it is not commonly regarded as a soil-forming factor. Nonetheless, fire functions as a soil-forming factor by significantly altering physical, chemical, and biological soil properties. The heat from fires cracks and exfoliates rocks by rapidly expanding trapped water vapor. The exfoliation process increases the amount of rock surface exposed to other weathering agents.

Fires also cause a rapid and dramatic pH increase in topsoil. This increased alkalinity, or decreased acidity, can be three pH units in surface and near-surface horizons, a 1,000-fold increase. The increased alkalinity generates significant changes in the solubility of metallic elements, rendering some more available to plants and microbes and others less available. It also increases the solubility of silica and alumina and thus stimulates the weathering of silicate minerals. Basic ions gradually leach to greater depths in the years following a fire, and the residual effects can persist for a decade or more. Fire also tends to make the upper part of the soil temporarily hydrophobic (water repellent). This hydrophobicity causes accelerated runoff and erosion in upland areas and increased deposition in downstream areas.

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Glossary

- AASHTO classification.** A system for classifying soils specifically for geotechnical engineering purposes that is related to highway and airfield construction. It is based on particle-size distribution and Atterberg limits.
- AASHTO group index (GI).** An empirical index number used to evaluate clayey and silty clay material.
- ABC soil.** A soil having an A, a B, and a C horizon.
- Ablation till.** A general term for loose, relatively permeable material deposited during the downwasting of nearly static glacial ice. The material is either contained within the glacier or accumulated on the surface of the glacier.
- AC soil.** A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.
- Aeration, soil.** The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- Aggregate, soil.** Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- Alkali (sodic) soil.** A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.
- Alluvial cone.** See Alluvial fan.
- Alluvial fan.** A low, outspread mass of loose material and/or rock material washed down the sides of mountains and hills. It commonly has gentle slopes and is shaped like an open fan or a segment of a cone. It is deposited by a stream at the place where the stream issues from a narrow mountain valley or where a tributary stream is near or at its junction with the main stream. An alluvial fan is steepest near its apex that points upstream, and it slopes gently and convexly outward with a gradual decrease in gradient.
- Alluvium.** Material, such as sand, silt, or clay, deposited on land by streams.
- Alpha,alpha-dipyridyl.** A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.
- Animal unit month (AUM).** The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.
- Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- Argillic horizon.** A subsoil horizon characterized by an accumulation of illuvial clay.
- Aridic moisture regime.** Soils that have an aridic moisture regime are dry for at least one-half of the year. They commonly occur in areas that have an aridic climate. A few are in areas that have a semiarid climate, but they either have physical properties that keep them dry, such as a crusty surface that virtually precludes the infiltration of water, or have steep slopes with a high rate of runoff. Little, if any, leaching occurs in the soils in this moisture regime, and soluble salts accumulate in the soils if there is a source of salts.

Arroyo. The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in unconsolidated material. It is sometimes called a wash. It usually is dry, but it can be transformed into a temporary watercourse or short-lived torrent after a period of heavy rain in the watershed. Where it intersects an area of ground-water discharge, it is more properly classified as an intermittent stream channel.

Aspect. The direction in which a slope faces. For a range, such as “south to west,” the direction between the first aspect and the second is clockwise.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (AWC) (available moisture capacity). The volume of water that should be available to plants if the soil, inclusive of fragments, were at field capacity. It is commonly estimated as the difference between the amount of water at field capacity and the amount at wilting point with adjustments for salinity, fragments, and rooting depth. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 2.5
Low	2.5 to 5.0
Moderate	5.0 to 7.5
High	7.5 to 10.0
Very high	more than 10.0

AWC. See Available water capacity.

Backslope. The hillslope profile position that forms the steepest and generally linear, middle portion of the slope. In profile, backslopes commonly are bounded by a convex shoulder above and a concave footslope below. They may or may not include cliff segments, or free faces. Backslopes are commonly erosional forms produced by mass movement, colluvial action, and running water.

Badland. A landscape that is intricately dissected and is characterized by a very fine drainage network with high drainage density and short, steep slopes with narrow interfluves. Badland develops on surfaces that have little, if any, vegetative cover, are underlain by unconsolidated or poorly cemented material (clay, silt, or sand), and in some areas have soluble minerals, such as gypsum and halite.

Bajada. A broad, gently inclined piedmont slope extending from the base of a mountain range out into a basin. It is formed by the lateral coalescence of a series of alluvial fans. Typically, it has a broadly undulating transverse profile parallel to the mountain front, resulting from the convexity of the component fans. The term generally refers to the constructional slopes of intermontane basins.

Bar (coast). A generic term for any of the various elongated offshore ridges, banks, or mounds of sand, gravel, or other unconsolidated material submerged at least at high tide and built up by the action of waves or currents, especially at the mouth of a river or estuary or offshore a short distance from the beach.

Bar (microfeature). A small, sinuous or arcuate, ridgelike lineation separated from others similar to it by small channels. It is caused by fluvial processes and is common on flood plains and young alluvial terraces. It is a constituent of bar-and-channel topography.

Bar (streams). A general term for a ridgelike accumulation of sand, gravel, or other alluvial material in the channel, along the banks, or at the mouth of a stream where a decrease in velocity induces deposition. Examples are channel bars and meander bars.

Bar-and-channel topography. A local topography of recurring, small, sinuous or arcuate ridges separated by shallow troughs irregularly spaced across low-relief flood plains (with slopes generally of 2 to 6 percent). The effect is a subdued,

sinuously undulating surface that is common on active flood plains. Micro differences in elevation generally range from less than 1 meter to less than 2 meters. The differences in elevation between the bars and channels are largely controlled by the competency of the stream. The ridgelike bars commonly consist of sediment that is coarser textured than the finer textured sediment of the low-lying areas.

Basal till. Compact glacial till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope. A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Basin. Nearly level to gently sloping bottom surface of a wide structural depression between mountain ranges.

Basin floor. A general term for the nearly level, lowermost part of intermontane basins, or bolsons and semibolsons. The floor includes all of the alluvial, eolian, and erosional landforms below the piedmont slope.

Batholith. A large body of igneous intrusive (plutonic) rock, commonly regional in extent, such as the Sierra Nevada batholith.

Beach terrace. A landform that consists of a wave-cut scarp and wave-built terrace of well sorted marine and lacustrine sand and gravel. Colloquially, in the Western part of the United States, relict shoreline from pluvial lakes, generally restricted to the sides of valleys.

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedrock. A general term for the solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Blowout. A shallow depression from which all or most of the soil material has been removed by the wind. A blowout has a flat or irregular floor formed by a resistant layer or by an accumulation of pebbles or cobbles. In some blowouts the water table is exposed.

Bolson. An internally drained (closed) intermontane basin into which drainageways from surrounding mountains converge inward toward a central depression.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Bulk density. A measurement of the oven-dry weight of the soil material that is less than 2 millimeters in diameter per unit volume. Common measurements are taken at $1/3$ -, $1/10$ -, or 15-bar moisture tension. Bulk density influences plant growth and engineering applications. It is used to convert measurements from a weight basis to a volume basis. Within a family particle-size class, bulk density is an indicator of how well plant roots are able to extend into the soil. Bulk density is used to calculate porosity.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

- Calciic horizon.** A mineral soil horizon of secondary carbonate enrichment that is more than 15 centimeters thick, has a calcium carbonate equivalent of more than 15 percent, and has a calcium carbonate equivalent at least 5 percent higher than the underlying horizon.
- Calcium carbonate equivalent.** The amount of calcium carbonate in a soil measured by treating the soil sample with hydrochloric acid (HCL). The evolved carbon dioxide (CO₂) is measured, and the amount of carbonate is then calculated as calcium carbonate (CaCO₃).
- Cambic horizon.** A mineral soil horizon that has the texture of loamy very fine sand or finer, has soil structure rather than rock structure, and contains some weatherable minerals. It is characterized by the alteration or removal of mineral material as indicated by mottling or gray color, stronger chroma or redder hue than the underlying horizons, or the removal of carbonates. The cambic horizon lacks cementation or induration and has too little evidence of illuviation to meet the requirements for an argillic horizon.
- Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- Canyon.** A long, deep, narrow, very steep sided valley with high, precipitous walls in an area of high local relief.
- Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
- Catena.** A sequence of soils on a landscape that are about the same age and formed in similar kinds of parent material under similar climatic conditions but have different characteristics as a result of differences in relief and drainage.
- Cathodic protection.** Control of the electrolytic corrosion of an underground or underwater metallic structure, such as a pipeline, by the application of an electrical current in such a way that the structure acts as the cathode rather than the anode of an electrolytic cell. (See Coatings for pipelines.)
- Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity (CEC).** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
- CEC.** See Cation-exchange capacity.
- Channery soil material.** Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a chanter.
- Chemical treatment.** Control of unwanted vegetation through the use of chemicals.
- Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.
- Clay.** As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
- Clay depletions.** Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.
- Clay film.** A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.
- Clayey.** Sandy clay, silty clay, and clay soil textures.
- Claypan.** A dense, compact, slowly permeable layer in the subsoil that has a much higher content of clay than the overlying material. A claypan commonly is hard when dry and plastic or sticky when wet.

- Climax plant community.** The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same
- Coarse fragments.** See Rock fragments.
- Coarse textured soil.** Sand or loamy sand.
- Coatings for pipelines.** Coatings used as a barrier to the flow of electricity and moisture, thereby preventing the formation of corrosion cells.
- Cobble (or cobblestone).** A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.
- Cobbly soil material.** Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.
- COLE (coefficient of linear extensibility).** See Linear extensibility.
- Colluvium.** Unconsolidated, unsorted earth material transported or deposited on side slopes and/or at the base of slopes by mass movement, or direct gravitational action, and by local unconcentrated runoff.
- Compaction.** The process by which the soil grains are rearranged to decrease void space and bring them into closer contact with one another, thereby increasing bulk density.
- Complex slope.** Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.
- Complex, soil.** A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.
- Concretions.** Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.
- Congeliturbate.** See Cryoturbation.
- Conglomerate.** A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter, commonly with a matrix of sand and finer textured material. Cementing agents include silica, calcium carbonate, and iron oxide. Conglomerate is the consolidated equivalent of gravel.
- Conservation cropping system.** Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.
- Conservation tillage.** A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.
- Consistence, soil.** Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when

subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

- Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.
- Control section.** The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.
- Coppice dune.** A small dune of fine grained soil material stabilized around shrubs or small trees.
- Corrosion.** Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- Cropping system.** Growing crops according to a planned system of rotation and management practices.
- Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.
- Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Cryoturbation.** A collective term used to describe all soil movement as a result of frost action, including the folding, breaking, and dislocating of beds and lenses of unconsolidated material.
- Debris flow (mass movement).** The process, associated sediment (debris flow deposit), or resultant landform characterized by a very rapid type of flow dominated by sudden downslope movement of a mass of rock, soil, and mud (more than 50 percent particles that are more than 2 millimeters in size) that behaves much like viscous fluid whether it is saturated or relatively dry.
- Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.
- Deep soil.** See Depth, soil.
- Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period.
- Delta.** A body of alluvium having a surface that is nearly flat and fan shaped; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.
- Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.
- Depth to bedrock (in tables).** Bedrock is too near the surface for the specified use.
- Desert pavement.** A natural, residual concentration of wind-polished, closely packed gravel, boulders, and other rock fragments that mantle a desert surface where wind action and sheetwash have removed the smaller particles. It commonly protects the underlying finer grained material from further deflation. The coarse fragments commonly are cemented with mineral material.
- Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.
- Drainage class (natural).** Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a

consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained*. These classes are defined in the “Soil Survey Manual.”

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area.

Draw. A small stream channel that generally is more open and has a broader floor than a ravine or gulch.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A low mound, ridge, bank, or hill of loose, windblown, granular material (generally sand), either barren or covered with vegetation, that is capable of movement from place to place but always retains its characteristic shape.

Duripan. A subsurface soil horizon that is cemented with illuvial silica, commonly opal or microcrystalline forms, to the degree that less than 50 percent of the volume of air-dry fragments will slake in water or hydrochloric acid.

EC. See Electrical conductivity.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Electrical conductivity (EC). The electrolytic conductivity of an extract from saturated soil paste.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian material. Material transported and deposited by wind, including earth material, such as dune sand, sand sheets, loess, and clay.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion pavement. A concentration of gravel or coarser fragments that remains on the soil surface after finer particles have been removed by running water or wind.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or

faulting. The term is most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Extrusive. Pertaining to igneous rock and sediment derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface, including lava flows and tephra deposits.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Family, soil. The most specific hierarchical category in soil taxonomy.

Fan piedmont. The most extensive landform on piedmont slopes that is formed either by the lateral downslope coalescence of mountain-front alluvial fans into one generally smooth slope with or without the transverse undulations of the semiconical alluvial fans or by the accretion of fan aprons.

Fan remnant. A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, fan aprons, inset fans, and fan skirts, that either have been dissected (erosional fan remnants) or partially buried (nonburied fan remnants). An erosional fan remnant has a relatively flat summit that is a relict fan surface. A nonburied fan remnant is a relict surface in its entirety.

Fan terrace. See Fan remnant.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. Area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to inundation under floodstage conditions unless protected artificially. It is commonly a constructional landform consisting of sediment deposited during overflow and lateral migration of a stream.

Fluvial. Of or pertaining to rivers; produced by river action.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

- Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- Forest type.** A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.
- Fragments.** Unattached cemented pieces of bedrock, bedrocklike material, durinodes, concretions, and nodules 2 millimeters in diameter or larger in mineral soils; woody material 20 millimeters in diameter or larger in organic soils.
- Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- Gilgai.** The microrelief of soils produced by expansion and contraction with changes in moisture content. It is characteristic of soils containing large amounts of smectitic clay and that swell and shrink considerably with wetting and drying. Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel to the slope. Also referred to, in part or in total, as crabhole, Bay of Biscay, or hushabye in older literature.
- Glacial.** Of or pertaining to the presence and activity of ice and glaciers, such as glacial erosion; pertaining to distinctive features and material produced by or derived from glaciers and ice sheets, such as glacial lakes; or pertaining to an ice age or region of glaciation.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- Graded stripcropping.** Growing crops in strips that grade toward a protected waterway.
- Granite.** A felsic igneous intrusive rock containing quartz and orthoclase with smaller amounts of sodic plagioclase and commonly muscovite.
- Granitic.** A textural term commonly pertaining to an igneous intrusive rock of felsic to intermediate composition. Referring to granitelike rock, but not necessarily true granite. Commonly applied to granite, quartz monzonite, granodiorite, and diorite.
- Granitoid.** In the IUGS (International Union of Geological Sciences) classification, a preliminary field use term for a plutonic rock with 20 to 40 percent quartz. A general term for all phaneritic igneous rocks (with mineral crystals visible unaided and all about the same size) dominated by quartz and feldspars.
- Granodiorite.** An igneous intrusive rock that is intermediate between felsic and mafic in composition and contains quartz and somewhat more plagioclase than orthoclase.
- Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- Gravelly soil material.** Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.
- Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Gully.** A small channel with steep sides cut by the concentrated, but intermittent, flow of water commonly during and immediately following heavy rainfall or following icemelt or snowmelt. A gully generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Gypsum content. The percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size.

Halophytic. Pertaining to vegetation that is adapted to salty soils.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head out. To form a flower head.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A generic term for an area of the land surface that rises as much as 1,000 feet (300 meters) above surrounding lowlands, commonly has restricted summit area relative to surrounding surfaces, and has a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and commonly is dependent on local usage.

Hogwallow. See Mound-intermound microrelief.

Holocene. The epoch of the Quaternary period of geologic time that extends from the end of the Pleistocene (about 10 to 12 thousand years ago) to the present.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Hummock. Rounded or conical mound or other small rise.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water

table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Inset fan. Specific name for the flood plain of an ephemeral stream that is confined between fan remnants, ballenas, basin floor remnants, or closely opposed fan toeslopes of a basin.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Intermittent stream. A stream, or reach of a stream, that does not flow year-round (commonly is dry for 3 months or more annually). Its channel generally is below the local water table. The stream flows only when it receives baseflow during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Intrusive. Pertaining to igneous rock derived from molten matter (magma) that invaded pre-existing rock and cooled below the surface of the earth.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Level basin (or paddy).—Water is applied to a level plain surrounded by levees or dikes.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

K factor. A measurement of potential soil erodibility caused by detachment of soil particles by water.

Karst (topography). The relief of an area formed by the dissolution of limestone, gypsum, or other soluble rock and characterized by sinkholes and caves and underground drainage.

Knoll. A small, low, rounded hill rising above adjacent landforms.

Lacustrine deposit. Clastic sediment and chemical precipitates deposited in lakes.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Leaching. The removal of soluble material from soil or other material by percolating water.

LEP. See Linear extensibility percent.

Limestone. A sedimentary rock consisting mainly of calcium carbonate (more than 50 percent) dominantly in the form of calcite. Limestone is commonly formed by a combination of organic and inorganic processes and includes chemical and clastic (soluble and insoluble) constituents. Fossils are common in limestone.

Linear extensibility percent (LEP). The linear expression of the volume difference between the water content of the natural soil fabric at $\frac{1}{3}$ -bar or $\frac{1}{10}$ -bar and oven dryness. The volume change is reported as a percent for the whole soil.

Liquid limit (LL). The moisture content at which the soil passes from a plastic to a liquid state.

LL. See Liquid limit.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loamy. Coarse sandy loam, sandy loam, fine sandy loam, very fine sandy loam, loam, silt loam, silt, clay loam, sandy clay loam, and silty clay loam soil textures.

Loess. Material transported and deposited by wind that consists dominantly of silt-sized clastics.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Low strength. The soil is not strong enough to support loads.

Magma. Molten rock material that originates deep in the earth and solidifies to form igneous rock.

Marl. An earthy, unconsolidated deposit consisting mainly of calcium carbonate mixed with clay in approximately equal amounts (35 to 65 percent of each). It is formed primarily under freshwater lacustrine conditions, but some is associated with a more saline environment.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mesa. A broad, nearly flat topped and commonly isolated land mass that is bounded by steep slopes or precipitous cliffs and has a nearly horizontal summit that consists of layers of resistant rock and is wider than the height of bounding escarpments. Also used to designate broad structural benches and alluvial terraces at intermediate levels in stepped sequences of platforms bordering canyons and valleys.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement in the earth's crust. Nearly all such rocks are crystalline. Examples are schist, gneiss, quartzite, slate, and marble.

Metasediment. A sediment or sedimentary rock that shows evidence of having been subjected to metamorphism.

Metavolcanic. A volcanic rock that shows evidence of metamorphism but has not been fully metamorphosed into metamorphic rock.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately deep soil. See Depth, soil.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Moraine (landform). A general term for a landform composed mainly of till deposited by either an active or extinct glacier. Some types are disintegration, end, lateral, recessional, and terminal.

Morainic material. A mound, ridge, or other distinct accumulation of unsorted, unstratified glacial drift, dominantly till, primarily from glacial ice.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

- Mottling, soil.** Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few*, *common*, and *many*; size—*fine*, *medium*, and *coarse*; and contrast—*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).
- Mound-intermound microrelief.** Circular or oval domes, generally 1 to 3 feet in height and 115 to 100 feet in diameter, with intervening basin-shaped depressions that commonly do not have external drainage. Also referred to as hogwallow or mima mounds in the Western part of the United States.
- Mountain.** A natural elevation of the land surface that rises more than 1,000 feet (300 meters) above surrounding lowlands, commonly has limited summit area relative to surrounding surfaces, and generally has steep sides (slopes of more than 25 percent) with or without considerable bare-rock surface. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic and/or volcanic activity and by differential erosion.
- Mountain flank.** The side area of mountains, characterized by very long, complex backslopes with comparatively high slope gradients, highly diverse mantles of colluvial sediment, complex near-surface hydrology, and mass-movement processes and features (e.g., creep and landslides). Rock outcrops or structural benches may occur. The mountain flank can be subdivided by the general location along the mountainside (i.e., upper third, middle third, and lower third).
- Mountain slope.** A part of a mountain between the summit and the foot. Compare to Mountain flank.
- Mountain valley.** a) Any small, externally drained, V-shaped depression (in cross-section) cut or deepened by a stream and floored with alluvium or a broader, U-shaped depression modified by an alpine glacier and floored with either till or alluvium, that occurs on a mountain or within mountains. Several types of mountain valleys can be recognized on the basis of their form and valley floor sediments (i.e., V-shaped valley and U-shaped valley). b) A relatively small structural depression within a mountain range that is partly filled with alluvium and commonly drains externally to an intermontane basin, bolson, or semibolson.
- Mudstone.** A blocky or massive, fine grained sedimentary rock indurated by clay and silt in approximately equal amounts. Also, a general term for clay, silt, claystone, siltstone, shale, and argillite that is used only when the amounts of clay and silt are not known or cannot be precisely determined.
- Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- Natric horizon.** A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.
- Neutral soil.** A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)
- Nodules.** Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.
- Nose slope.** A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.
- Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium,

sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

OM. See Organic matter.

Organic matter (OM). Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Paleosol. A soil that formed in a particular area with distinctive morphological features resulting from a soil-forming environment that no longer exists in the area. The pedogenic process was either altered as a result of external environmental changes or interrupted by burial. A paleosol (or component horizon) is classified as relict if it has persisted without major alteration of morphology by the prevailing pedogenic environment. An exhumed paleosol is one that was buried and has been re-exposed by erosion of the mantle. Most paleosols have been affected by some subsequent modification of the morphology of diagnostic horizons and truncation of the profile.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.

Parent material. The unconsolidated and chemically weathered mineral and organic material in which the solum of a soil is formed as a result of pedogenic processes.

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pediment. A gently sloping erosional surface at the foot of a receding hill or mountain slope. The surface may be essentially bare, having exposed earth material that extends beneath the adjacent uplands, or it may have a thin mantle of alluvium and colluvium, ultimately in transit from the upland front to the basin or valley lowland. On hill footslope terrain, the mantle is designated "pedisediment." The term "pediment" is used in several geomorphic contexts: (1) landscape positions, for example, intermontane basin piedmont or valley border footslope surfaces, or respectively, apron and terrace pediments; (2) type of material eroded, either bedrock or regolith; or (3) a combination of these.

Pedisediment. A layer of sediment eroded from the shoulder and backslope of an erosional slope that is being transported or was transported across a pediment.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Perched water table. The upper surface of unconfined ground water separated from an underlying main body of ground water by an unsaturated zone.

Percolation. The downward movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as

“permeability.” Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow	0.0 to 0.01 inch
Very slow	0.01 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

PI. See Plasticity index.

Piedmont (adjective). Lying or formed at the base of a mountain or mountain range; for example, a piedmont terrace or a piedmont pediment.

Piedmont (noun). An area, plain, slope, glacier, or other feature at the base of a mountain, for example, a foothill or bajada. In the United States, the Piedmont is a low plateau that extends from New Jersey to Alabama and lies east of the Appalachian Mountains.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index (PI). The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau. A comparatively flat area of great extent and elevation. Specifically, an extensive land region considerably elevated (more than 100 meters) above adjacent lower lying terrain that is commonly limited on at least one side by an abrupt descent and has a flat or nearly level surface. A relatively large part of a plateau surface is near summit level.

Playa. The generally dry and nearly level lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff. Playas consist of fine grained deposits and may or may not have a high water table and may or may not be saline.

Pleistocene. The epoch of the Quaternary period of geologic time following the Pliocene and preceding the Holocene (approximately 2 million to 10,000 years ago). Also refers to the corresponding (time-stratigraphic) “series” of earth material.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Range condition. The present composition of the plant community on a range site in relation to the potential natural plant community for that site. Range condition is expressed as excellent, good, fair, or poor on the basis of how much the present plant community differs from the potential.

Range site. An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other range sites in kind, proportion, and total production.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Red beds. Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes

after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Regolith. All unconsolidated earth material above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits. Soil scientists regard as soil only that part of the regolith that has been modified by organisms and soil-forming processes.

Most engineers describe the entire regolith, even to a great depth, as "soil."

Relief. The elevations or inequalities of a land surface, considered collectively.

Remnant. The remaining part of a larger landform or land surface that has been dissected or partially buried.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rhyolite. Extrusive igneous rock, generally porphyritic and exhibiting flow texture, with phenocrysts of quartz and alkali feldspar in a glassy cryptocrystalline ground mass. The extrusive equivalent of granite.

Rill. A small steep-sided channel resulting from erosion. It is cut by a concentrated, but intermittent, flow of water, usually during and immediately following moderate rains or following icemelt or snowmelt. Generally, a rill is not an obstacle to wheeled vehicles and is shallow enough to be obliterated by ordinary tillage.

Riverwash. Barren alluvial areas of unstabilized sand, silt, clay, or gravel reworked frequently by stream activity.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock outcrop. Exposures of bedrock, excluding lava and rock-lined pits.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium. Salinity is expressed as the electrical conductivity of a saturation extract at 25 degrees C. Salinity classes, expressed in millimhos per centimeter, are as follows:

Nonsaline	0 to 2
Very slightly saline	2 to 4
Slightly saline	4 to 8
Moderately saline	8 to 16
Strongly saline	more than 16

Saline-sodic soil. A soil that contains sufficient exchangeable sodium to interfere with the growth of most crops and appreciable quantities of soluble salts. The exchangeable sodium ratio is greater than 0.15; the conductivity of the soil solution, when saturated, is greater than 4 decisiemens per meter (at 25 degrees C); and the pH is commonly 8.5 or less when the soil is saturated.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy. Sand and loamy sand soil textures.

Saprolite. Soft, friable, isovolumetrically weathered bedrock that retains the fabric and structure of the parent rock and exhibits extensive intercrystal and intracrystal weathering. In pedology, saprolite has been used to refer to any

unconsolidated residual material that underlies the soil and grades to hard bedrock below.

SAR. See Sodium adsorption ratio.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic matter accumulated at or near the surface of the earth under "normal" low temperature and pressure conditions. Sedimentary rock includes the consolidated equivalents of alluvial, colluvial, drift, eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock that formed as a result of the induration of a clay, silty clay, or silty clay loam deposit and has the tendency to split into thin layers (fissility).

Shallow soil. See Depth, soil.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A closed depression formed either by the solution of the surficial material, such as limestone, gypsum, and salt, or by the collapse of underlying caves. Complexes of sinkholes in carbonate-rich terrain are the main components of karst topography.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Site index (pinyon and juniper). A designation of the quality of a pinyon or juniper stand based on the basal area in square feet when the stand averages 5 inches in diameter 1 foot above the ground. A site index of 50 means that the stand will have a basal area of 50 square feet.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Level	0 percent
Nearly level	0 to 2 percent
Gently sloping	2 to 5 percent
Moderately sloping	5 to 9 percent
Strongly sloping	9 to 15 percent
Moderately steep	15 to 30 percent
Steep	30 to 50 percent
Very steep	more than 50 percent

Classes for complex slopes are as follows:

Level	0 percent
Nearly level	0 to 2 percent
Undulating	2 to 5 percent
Gently rolling	5 to 9 percent
Rolling	9 to 15 percent
Hilly	15 to 30 percent
Steep	30 to 50 percent
Very steep	more than 50 percent

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^+ to $\text{Ca}^{++} + \text{Mg}^{++}$. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil erodibility factors. The Kw and Kf factors quantify the susceptibility of soil to detachment by water. These factors predict the long-term average soil loss that results from sheet and rill erosion when various cropping systems and conservation techniques are used. The whole soil is considered in the Kw factor, but only the fine-earth fraction, which is the material less than 2 millimeters in diameter, is considered in the Kf factor.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A sheetlike lag concentration of coarse fragments in surficial sediment. In cross section, the line may be marked only by scattered fragments or it may be a discrete layer of fragments. The fragments are more commonly pebbles or cobbles than stones. A stone line generally overlies material that was subject to weathering, soil formation, and erosion before deposition of the overlying material. Many stone lines appear to be buried erosion pavement originally formed by running water on the land surface and concurrently covered by surficial sediment.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stratified. Referring to geologic deposits that were formed, arranged, or laid down in layers. Layers in soils that are a result of the processes of soil formation are called horizons; those inherited from the parent material are called strata.

Stream terrace. One of a series of platforms in a stream valley that flanks and is more or less parallel to the stream channel, originally formed near the level of the stream, and represents the dissected remnants of an abandoned flood plain, streambed, or valley floor produced during an earlier period of erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsidence. The decrease in surface elevation as a result of the drainage of wet soils that have organic layers or semifluid mineral layers.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

T factor. The soil loss tolerance, which is defined as the maximum amount of erosion at which the quality of a soil as a medium for plant growth can be maintained. Maintaining the quality of the soil includes maintaining the surface soil as a seedbed for plants, maintaining the atmosphere-soil interface to allow the entry of air and water into the soil and still protect the underlying soil from wind and water erosion, and maintaining the total soil volume as a reservoir for water and plant nutrients, which is preserved by minimizing soil loss.

Talus. Rock fragments of any size or shape (commonly coarse and angular) at the base of a cliff or very steep rock slope; the accumulated mass of such loose, broken rock formed mainly by falling, rolling, or sliding.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Temperature regime, soil. A system that, for taxonomic purposes, categorizes general, long-term soil temperature conditions at the standard depth of 20 inches or at the surface of bedrock within a depth of 20 inches. The various regimes are defined according to the freezing point of water or according to the high and low extremes for significant biological activity. The regimes, which are defined in “Keys to Soil Taxonomy,” are as follows:

Pergellic.—Soils that have a mean annual temperature of less than 32 degrees F and have permafrost.

Cryic.—Soils that have a mean annual temperature of 32 to 47 degrees F and remain cold in summer.

Frigid.—Soils that have a mean annual temperature similar to that of the cryic regime but have a mean summer temperature at least 9 degrees warmer.

Mesic.—Soils that have a mean annual temperature of 47 to 59 degrees F, and the difference between the mean summer and mean winter temperatures is more than 9 degrees.

Thermic.—Soils that have a mean annual temperature of 59 to 72 degrees F, and the difference between the mean summer and mean winter temperatures is more than 9 degrees.

Hyperthermic.—Soils that have a mean annual temperature of more than 72 degrees F, and the difference between the mean summer and mean winter temperatures is more than 9 degrees.

Terrace (conservation practice). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a

prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Terrace (geomorphologic). A steplike surface bordering a valley floor or shoreline that represents the former position of a flood plain, lake, or seashore. The term is commonly applied to both the relatively flat summit surface (tread) that has been cut or built up by stream or wave action and the steeper descending slope (scarp or riser) that grades to a lower base level of erosion. Practically, terraces are considered to be generally flat alluvial areas above the 100-year flood stage.

Terracette. A small, irregular steplike area on steep hillslopes, especially in pasture, that formed as a result of creep or erosion of surficial material that may or may not have been induced by trampling of livestock such as sheep or cattle.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand*, *loamy sand*, *sandy loam*, *loam*, *silt loam*, *silt*, *sandy clay loam*, *clay loam*, *silty clay loam*, *sandy clay*, *silty clay*, and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine." Abbreviations for the texture terms are *C*—clay, *CL*—clay loam, *COS*—coarse sand, *COSL*—coarse sandy loam, *FS*—fine sand, *FSL*—fine sandy loam, *L*—loam, *LCOS*—loamy coarse sand, *LFS*—loamy fine sand, *LS*—loamy sand, *LVFS*—loamy very fine sand, *S*—sand, *SC*—sandy clay, *SCL*—sandy clay loam, *SI*—silt, *SIC*—silty clay, *SICL*—silty clay loam, *SIL*—silt loam, *SL*—sandy loam, *VFS*—very fine sand, and *VFSL*—very fine sandy loam.

Terms used in lieu of texture descriptions are *BR*—bedrock, *BY*—boulders, *CB*—cobbles, *CN*—channers, *FL*—flagstones, *G*—gravel, *HPM*—highly decomposed plant material, *MAT*—material, *MPM*—moderately decomposed plant material, *MUCK*—muck, *MPT*—mucky peat, *PBY*—paraboulders, *PCB*—paracobbles, *PCN*—parachanners, *PEAT*—peat, *PFY*—paraflagstones, *PG*—paragravel, *PST*—parastones, *SPM*—slightly decomposed plant material, *ST*—stones, *VAR*—variable, and *W*—water.

The texture modifiers that may apply to textural classes are *ASHY*—ashy, *BY*—bouldery, *BYV*—very bouldery, *BYX*—extremely bouldery, *CB*—cobbly, *CBV*—very cobbly, *CBX*—extremely cobbly, *CEM*—cemented, *CN*—channery, *CNV*—very channery, *CNX*—extremely channery, *COP*—coprogenous, *DIA*—diatomaceous, *FL*—flaggy, *FLV*—very flaggy, *FLX*—extremely flaggy, *GR*—gravelly, *GRC*—coarse gravelly, *GRF*—fine gravelly, *GRM*—medium gravelly, *GRV*—very gravelly, *GRX*—extremely gravelly, *GS*—grassy, *GYP*—gypsiferous, *HB*—herbaceous, *HYDR*—hydrous, *MEDL*—medial, *MK*—mucky, *MR*—marly, *MS*—mossy, *PBY*—parabouldery, *PBYV*—very parabouldery, *PBYX*—extremely parabouldery, *PCB*—paracobbly, *PCBV*—very paracobbly, *PCBX*—extremely paracobbly, *PCN*—parachannery, *PCNV*—very parachannery, *PCNX*—extremely parachannery, *PF*—permanently frozen, *PFY*—paraflaggy, *PFYV*—very paraflaggy, *PFYX*—extremely paraflaggy, *PG*—paragravelly, *PGV*—very paragravelly, *PGX*—extremely paragravelly, *PST*—parastony, *PSTV*—very parastony, *PSTX*—extremely parastony, *PT*—peaty, *ST*—stony, *STV*—very stony, *STX*—extremely stony, and *WD*—woody.

Thermic temperature regime. See Temperature regime, soil.

Till. Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

- Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- Toeslope.** The outermost inclined surface at the base of a hill; part of a footslope.
- Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- Torric moisture regime.** See Aridic moisture regime.
- Trace elements.** Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.
- Tuff.** A generic term for any consolidated or cemented deposit that is 50 percent volcanic ash (less than 2 millimeters in size). Various types of tuff can be recognized by their composition; acidic tuff is dominantly acidic particles and basic tuff is dominantly basic particles.
- Unified soil classification.** A system for classifying mineral and organic soils for engineering purposes based on particle-size characteristics, liquid limit, and plasticity index.
- Upland (geomorphologic).** A general term for the higher land of a region in contrast to the low-lying, adjacent land, such as a valley or plain; land at a higher elevation than the flood plain or low stream terrace; or land above the footslope zone of the hillslope continuum.
- Valley fill.** The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) that fills or partly fills a valley.
- Variiegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.
- Varve.** A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.
- Vegetative cover.** The crown cover of all live plants in relation to the ground surface.
- Vernal pool.** A shallow surficial depression that is temporarily filled with water during periods of rain in winter and spring and is desiccated during the dry summer months. It occurs as a small poorly drained depression perched above an impermeable or very slowly permeable soil horizon or bedrock.
- Very deep soil.** See Depth, soil.
- Very shallow soil.** See Depth, soil.
- Water bars.** Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.
- Water table.** The upper surface of ground water or the level below which the soil is saturated by water. Also, the top of an aquifer.
- Weathering.** All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.
- WEG.** See Wind erodibility group.
- Well graded.** Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.
- Wilting point (or permanent wilting point).** The moisture content of soil, on an oven-dry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.
- Wind erodibility group (WEG).** A grouping of soils that have similar properties affecting their resistance to wind erosion in cultivated areas.

Windthrow. The uprooting and tipping over of trees by the wind.

Xeric moisture regime. The typical moisture regime in areas of Mediterranean climates, where it is moist and cool in winter and warm and dry in summer. The moisture, which falls during winter, when potential evapotranspiration is at a minimum, is particularly effective in leaching. The mean annual soil temperature is less than 22 degrees C, and the difference between the mean summer and mean winter soil temperatures is 6 degrees or more.

Xerophytic. Pertaining to vegetation that is adapted to dry areas.

Tables

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 1.--Temperature and Precipitation

(Recorded in the period 1971-2000)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have--		Average number of growing degree days*	Average	2 years in 10 will have--		Average number of days with 0.10 inch or more	Average snowfall In
				Maximum temperature higher than--	Minimum temperature lower than--			Less than--	More than--		
°F	°F	°F	°F	°F	Units	In	In	In		In	
BAKERSFIELD:											
January----	57.3	39.3	48.3	77	26	56	1.18	0.31	2.08	3	0.0
February---	64.2	43.0	53.6	81	30	125	1.21	.31	1.93	3	.0
March-----	68.9	46.2	57.6	86	34	240	1.41	.52	2.18	3	.1
April-----	76.2	49.6	62.9	96	37	388	.45	.00	.85	1	.0
May-----	84.4	56.8	70.6	104	43	639	.24	.00	.30	0	.0
June-----	92.3	63.7	78.0	109	50	840	.11	.00	.15	0	.0
July-----	97.9	69.2	83.5	110	56	1,040	.00	.00	.00	0	.0
August-----	96.5	68.4	82.4	110	57	1,006	.08	.00	.01	0	.0
September---	90.7	63.9	77.3	106	51	819	.15	.00	.19	0	.0
October----	80.9	54.9	67.9	99	40	555	.30	.00	.48	0	.0
November---	66.5	44.1	55.3	85	31	179	.61	.10	1.12	1	.0
December---	57.4	38.2	47.8	76	25	47	.76	.24	1.23	2	.0
Yearly:											
Average---	77.8	53.1	65.4	---	---	---	---	---	---	---	---
Extreme---	114	19	---	111	24	---	---	---	---	---	---
Total-----	---	---	---	---	---	5,934	6.50	4.53	8.22	13	.1
GLENNVILLE:											
January----	56.8	29.3	43.0	75	14	10	3.88	0.89	7.16	6	2.6
February---	58.2	31.5	44.9	77	16	20	3.54	1.14	5.82	5	1.2
March-----	59.6	33.4	46.5	77	20	29	3.76	1.25	6.28	6	2.3
April-----	65.7	35.4	50.5	84	23	85	1.57	.38	2.74	3	.9
May-----	73.8	40.2	57.0	92	28	232	.74	.03	1.20	1	.0
June-----	83.3	45.5	64.4	98	32	431	.15	.00	.24	0	.0
July-----	89.6	50.9	70.3	100	39	623	.05	.00	.08	0	.0
August-----	88.8	50.2	69.5	100	39	604	.17	.00	.10	0	.0
September---	83.2	46.3	64.7	97	34	442	.54	.00	.69	0	.0
October----	73.4	38.8	56.1	91	26	212	.92	.00	1.55	1	.0
November---	61.9	31.9	46.9	82	17	37	2.20	.58	3.77	3	.9
December---	56.9	28.2	42.5	75	12	6	2.53	.75	4.29	4	1.1
Yearly:											
Average---	70.9	38.5	54.7	---	---	---	---	---	---	---	---
Extreme---	103	1	---	101	9	---	---	---	---	---	---
Total-----	---	---	---	---	---	2,731	20.05	13.74	24.28	29	9.0

See footnote at end of table

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 1.--Temperature and Precipitation--Continued

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have--		Average number of growing degree days*	Average	2 years in 10 will have--		Average number of days with 0.10 inch or more	Average snowfall
				Maximum temperature higher than--	Minimum temperature lower than--			Less than--	More than--		
°F	°F	°F	°F	°F	Units	In	In	In		In	
INYOKERN:											
January----	60.2	30.9	45.5	75	15	22	0.87	0.02	1.58	2	0.5
February---	65.7	35.1	50.4	82	19	79	1.04	.00	1.80	1	.0
March-----	71.3	39.5	55.4	87	24	188	.76	.02	1.34	1	.1
April-----	78.6	44.7	61.6	95	29	351	.16	.00	.31	0	.0
May-----	87.1	53.0	70.0	103	35	614	.10	.00	.15	0	.0
June-----	96.9	60.3	78.6	109	45	827	.02	.00	.02	0	.0
July-----	102.6	66.1	84.4	113	52	1,048	.13	.00	.16	0	.0
August-----	101.1	64.9	83.0	111	51	1,017	.35	.00	.33	0	.0
September--	94.0	58.3	76.2	106	42	775	.25	.00	.41	0	.0
October----	83.1	48.2	65.7	99	30	478	.07	.00	.10	0	.0
November---	69.2	36.9	53.0	85	20	137	.28	.00	.50	0	.0
December---	60.3	30.4	45.4	75	14	21	.57	.00	1.27	1	.3
Yearly:											
Average---	80.8	47.3	64.1	---	---	---	---	---	---	---	---
Extreme---	119	5	---	114	12	---	---	---	---	---	---
Total-----	---	---	---	---	---	5,557	4.60	1.85	6.54	5	.9
KERN RIVER:											
January----	59.8	33.3	46.6	76	20	35	2.93	0.69	5.03	5	0.2
February---	63.2	35.9	49.6	81	23	68	2.83	.73	4.73	4	.1
March-----	66.5	38.8	52.6	84	27	130	2.40	.70	3.82	4	.0
April-----	72.8	43.5	58.1	92	30	261	.68	.04	1.30	2	.0
May-----	81.0	51.0	66.0	98	36	497	.30	.00	.50	0	.0
June-----	90.4	58.6	74.5	104	43	734	.13	.00	.15	0	.0
July-----	97.1	64.3	80.7	108	50	951	.13	.00	.11	0	.0
August-----	96.5	63.6	80.1	107	51	932	.19	.00	.28	0	.0
September--	90.4	58.2	74.3	103	44	728	.42	.00	.61	1	.0
October----	79.9	48.3	64.1	97	31	441	.44	.04	.80	1	.0
November---	66.8	37.7	52.3	85	25	119	1.23	.12	2.29	2	.0
December---	60.4	32.5	46.5	77	19	33	1.74	.34	3.09	3	.0
Yearly:											
Average---	77.1	47.1	62.1	---	---	---	---	---	---	---	---
Extreme---	112	10	---	109	17	---	---	---	---	---	---
Total-----	---	---	---	---	---	4,929	13.42	8.75	16.74	22	.3

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (50 degrees F).

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1971-2000)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
BAKERSFIELD:			
Last freezing temperature in spring:			
1 year in 10 later than--	Jan. 1	Jan. 26	Feb. 24
2 years in 10 later than--	---	Jan. 17	Feb. 13
5 years in 10 later than--	---	Dec. 27	Jan. 25
First freezing temperature in fall:			
1 year in 10 earlier than--	Jan. 1	Dec. 7	Nov. 15
2 years in 10 earlier than--	---	Dec. 15	Nov. 23
5 years in 10 earlier than--	---	Jan. 1	Dec. 9
GLENNVILLE:			
Last freezing temperature in spring:			
1 year in 10 later than--	Apr. 21	May 15	June 14
2 years in 10 later than--	Apr. 9	May 4	June 6
5 years in 10 later than--	Mar. 16	Apr. 12	May 21
First freezing temperature in fall:			
1 year in 10 earlier than--	Oct. 29	Oct. 17	Sept. 26
2 years in 10 earlier than--	Nov. 5	Oct. 23	Oct. 3
5 years in 10 earlier than--	Nov. 18	Nov. 3	Oct. 16

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 2.--Freeze Dates in Spring and Fall--Continued

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
INYOKERN:			
Last freezing temperature in spring:			
1 year in 10 later than--	Mar. 13	Apr. 1	Apr. 24
2 years in 10 later than--	Mar. 2	Mar. 21	Apr. 14
5 years in 10 later than--	Feb. 10	Mar. 1	Mar. 27
First freezing temperature in fall:			
1 year in 10 earlier than--	Nov. 12	Nov. 6	Oct. 25
2 years in 10 earlier than--	Nov. 19	Nov. 11	Oct. 30
5 years in 10 earlier than--	Dec. 3	Nov. 22	Nov. 8
KERN RIVER:			
Last freezing temperature in spring:			
1 year in 10 later than--	Feb. 18	Apr. 4	Apr. 21
2 years in 10 later than--	Feb. 7	Mar. 23	Apr. 12
5 years in 10 later than--	Jan. 17	Feb. 28	Mar. 28
First freezing temperature in fall:			
1 year in 10 earlier than--	Nov. 20	Nov. 4	Oct. 27
2 years in 10 earlier than--	Nov. 29	Nov. 9	Nov. 1
5 years in 10 earlier than--	Dec. 18	Nov. 19	Nov. 10

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 3.--Growing Season
(Recorded in the period 1971-2000)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
BAKERSFIELD:			
9 years in 10	>365	320	275
8 years in 10	>365	334	289
5 years in 10	>365	>365	318
2 years in 10	>365	>365	346
1 year in 10	>365	>365	360
GLENNVILLE:			
9 years in 10	203	167	115
8 years in 10	217	178	126
5 years in 10	243	200	146
2 years in 10	270	221	167
1 year in 10	283	232	177
INYOKERN:			
9 years in 10	257	227	194
8 years in 10	270	240	205
5 years in 10	295	264	225
2 years in 10	319	288	245
1 year in 10	332	301	256

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 3.--Growing Season--Continued

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
KERN RIVER:			
9 years in 10	283	227	197
8 years in 10	300	239	206
5 years in 10	336	261	225
2 years in 10	>365	284	244
1 year in 10	>365	296	253

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
115	Chanac clay loam, 15 to 30 percent slopes-----	3,361	0.4
128	Pits-Delano-Oil waste land complex, 1 to 9 percent slopes-----	534	*
136	Hesperia sandy loam, 2 to 9 percent slopes-----	6	*
138	Hesperia sandy loam, 0 to 2 percent slopes-----	2,047	0.2
139	Riverwash-----	233	*
143	Calicreek loamy coarse sand, 0 to 2 percent slopes, rarely flooded-----	420	*
144	Calicreek sandy loam, 0 to 2 percent slopes, occasionally flooded-----	1,559	0.2
145	Delano loamy sand, 0 to 2 percent slopes-----	5,189	0.6
146	Delano sandy loam, 1 to 5 percent slopes-----	2,442	0.3
147	Chanac clay loam, 2 to 9 percent slopes-----	362	*
148	Delano sandy clay loam, 0 to 2 percent slopes-----	360	*
149	Delano sandy loam, 5 to 9 percent slopes-----	429	*
150	Pits and dumps-----	52	*
152	Pleito gravelly sandy clay loam, 2 to 5 percent slopes-----	2,771	0.3
153	Chanac clay loam, 9 to 15 percent slopes-----	401	*
154	Dam-----	56	*
166	Delano-Urban land complex, 0 to 2 percent slopes-----	293	*
174	Xeric Torriorthents-Calcic Haploxerepts association, 15 to 60 percent slopes-----	15,933	1.7
176	Elkhills sandy loam, 9 to 50 percent slopes, eroded-----	117	*
177	Chanac-Torriorthents, stratified, association, 15 to 50 percent slopes---	5,087	0.6
178	Delano-Cuyama-Premier complex, 5 to 30 percent slopes-----	2,041	0.2
179	Torriorthents, stratified, eroded-Elkhills complex, 9 to 50 percent slopes-----	1,039	0.1
184	Cuyama sandy loam, 2 to 5 percent slopes-----	976	0.1
185	Brecken-Cuyama-Pleito complex, 15 to 60 percent slopes-----	12,633	1.4
186	Cuyama loam, 9 to 15 percent slopes-----	20	*
187	Trigo-Chanac association, 15 to 60 percent slopes-----	7,799	0.9
188	Tweedy-Tollhouse-Locobill complex, 9 to 30 percent slopes-----	1,904	0.2
189	Tweedy-Walong association, 30 to 50 percent slopes-----	14,877	1.6
192	Chanac-Pleito complex, 5 to 30 percent slopes-----	42,700	4.7
193	Chanac-Pleito complex, 2 to 5 percent slopes-----	4,380	0.5
194	Pleito-Delvar complex, 2 to 15 percent slopes-----	2,498	0.3
195	Centerville-Delvar complex, 9 to 30 percent slopes-----	5,025	0.6
196	Exeter sandy loam, 2 to 9 percent slopes-----	802	*
197	Nord fine sandy loam, 0 to 2 percent slopes, rarely flooded-----	469	*
198	Centerville-Delvar complex, 2 to 9 percent slopes-----	147	*
199	Exeter sandy loam, 0 to 2 percent slopes-----	184	*
200	Urban land-Delano complex, 0 to 2 percent slopes-----	13	*
201	Pleito-Chanac-Raggulch complex, 5 to 30 percent slopes-----	14,907	1.6
205	Pleito-Trigo-Chanac complex, 15 to 50 percent slopes-----	20,246	2.2
207	Whitewolf loamy sand, 0 to 2 percent slopes, rarely flooded-----	231	*
209	Whitewolf loamy sand, 0 to 2 percent slopes, occasionally flooded-----	1,592	0.2
210	Kernfork fine sandy loam, 0 to 2 percent slopes, occasionally flooded---	4,320	0.5
212	Kernfork fine sandy loam, 0 to 2 percent slopes, frequently flooded-----	1,158	0.1
213	Calicreek loamy coarse sand, 0 to 2 percent slopes, occasionally flooded	2,200	0.2
215	Kelval loamy sand, 0 to 2 percent slopes, occasionally flooded-----	633	*
216	Inyo-Riverwash complex, 0 to 5 percent slopes, frequently flooded-----	1,689	0.2
217	Whitewolf-Riverwash complex, 0 to 5 percent slopes, frequently flooded--	1,064	0.1
220	Aquents-Aquolls-Riverwash complex, 0 to 5 percent slopes, flooded-----	3,409	0.4
222	Kelval fine sandy loam, 0 to 2 percent slopes, occasionally flooded-----	2,070	0.2
223	Kelval stony sandy loam, 0 to 2 percent slopes, occasionally flooded-----	1,238	0.1
224	Inyo gravelly loamy coarse sand, 0 to 9 percent slopes, occasionally flooded-----	5,648	0.6
238	Cinco gravelly loamy sand, 50 to 75 percent slopes-----	561	*
240	Dune land-----	441	*
241	Inyo gravelly loamy coarse sand, 0 to 5 percent slopes-----	3,300	0.4
242	Inyo gravelly loamy coarse sand, 5 to 15 percent slopes-----	6,721	0.7
243	Kernfork loam, saline-sodic, 0 to 2 percent slopes, occasionally flooded	395	*
245	Chollawell gravelly loamy coarse sand, 2 to 5 percent slopes-----	3,955	0.4
246	Chollawell gravelly loamy coarse sand, 5 to 15 percent slopes-----	5,651	0.6
247	Inyo-Tips-Rock outcrop complex, 5 to 30 percent slopes-----	383	*
249	Hoffman-Rock outcrop complex, 30 to 50 percent slopes-----	727	*

See footnote at end of table.

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
250	Hoffman-Tips-Pilotwell association, 15 to 50 percent slopes-----	7,424	0.8
253	Sorrell-Martee-Rock outcrop complex, 30 to 60 percent slopes-----	10,333	1.1
254	Martee-Rock outcrop complex, 30 to 60 percent slopes-----	3,097	0.3
255	Kernfork complex, 0 to 5 percent slopes-----	254	*
257	Hoffman-Tips-Rock outcrop association, 20 to 45 percent slopes-----	3,701	0.4
259	Cowspring gravelly loamy coarse sand, 15 to 50 percent slopes-----	899	*
260	Cowspring-Tips-Rock outcrop complex, 30 to 50 percent slopes-----	262	*
261	Blasingame-Arujo-Cieneba association, 15 to 45 percent slopes-----	10,943	1.2
264	Arujo-Walong-Tunis association, 9 to 30 percent slopes-----	26,791	2.9
265	Arujo sandy loam, 9 to 15 percent slopes-----	4,045	0.4
266	Tunis-Rock outcrop complex, 30 to 50 percent slopes-----	1,524	0.2
267	Cieneba-Vista-Rock outcrop complex, 30 to 60 percent slopes-----	22,369	2.5
268	Tunis-Tollhouse-Sorrell association, 30 to 75 percent slopes-----	14,394	1.6
269	Tollhouse-Sorrell-Rock outcrop complex, 30 to 60 percent slopes-----	8,207	0.9
270	Locobill-Backcanyon-Sesame complex, 20 to 60 percent slopes-----	9,642	1.1
271	Walong-Tunis-Rock outcrop association, 30 to 60 percent slopes-----	12,344	1.4
272	Tollhouse-Edmundston-Sorrell association, 15 to 50 percent slopes-----	5,880	0.6
274	Sesame-Tweedy-Rock outcrop association, 30 to 60 percent slopes-----	9,604	1.1
275	Strahle-Sesame-Tweedy association, 30 to 75 percent slopes-----	8,809	1.0
276	Tips-Hoffman-Cinco association, 30 to 60 percent slopes-----	2,201	0.2
277	Feethill-Vista-Walong association, 15 to 60 percent slopes-----	25,365	2.8
279	Strahle-Rock outcrop-Sesame association, 30 to 60 percent slopes-----	3,160	0.3
280	Tollhouse-Martee-Edmundston association, 30 to 50 percent slopes-----	5,312	0.6
281	Havala-Walong-Kernfork association, 1 to 20 percent slopes-----	5,998	0.7
282	Tollhouse-Sesame-Friant association, 30 to 60 percent slopes-----	5,945	0.7
283	Tollhouse-Martee-Rock outcrop complex, 30 to 75 percent slopes-----	5,029	0.6
284	Tollhouse-Rock outcrop complex, 30 to 60 percent slopes-----	4,209	0.5
285	Inyo-Kelval complex, 0 to 5 percent slopes, occasionally flooded-----	4,585	0.5
286	Tollhouse-Tweedy-Locobill association, 30 to 60 percent slopes-----	8,252	0.9
287	Tweedy-Strahle association, 40 to 75 percent slopes-----	8,897	1.0
288	Sorrell-Arujo-Rock outcrop association, 9 to 50 percent slopes-----	7,693	0.8
289	Erskine-Hyte-Rock outcrop association, 30 to 60 percent slopes-----	8,339	0.9
294	Edmundston-Tweedy-Walong association, 30 to 60 percent slopes-----	9,824	1.1
295	Tweedy-Tunis-Rankor association, 30 to 75 percent slopes-----	24,414	2.7
296	Arujo-Walong-Tunis association, 30 to 75 percent slopes-----	22,587	2.5
297	Walong-Blasingame-Rock outcrop association, 30 to 60 percent slopes-----	20,312	2.2
298	Arujo-Feethill-Sesame association, 15 to 45 percent slopes-----	31,130	3.4
299	Arujo-Feethill-Sesame association, 30 to 60 percent slopes-----	6,269	0.7
300	Stineway-Kiscove association, 30 to 60 percent slopes-----	6,797	0.7
301	Feethill-Vista-Rock outcrop complex, 9 to 30 percent slopes-----	3,304	0.4
302	Feethill-Cibo-Cieneba complex, 15 to 30 percent slopes-----	3,674	0.4
303	Steuber sandy loam, 0 to 5 percent slopes-----	1,749	0.2
304	Cibo clay, 30 to 50 percent slopes-----	970	0.1
305	Chanac-Pleito-Premier association, 20 to 60 percent slopes-----	38,804	4.3
306	Xerofluvents, occasionally flooded-Riverwash complex, 0 to 5 percent slopes-----	2,306	0.3
307	Typic Xeropsamments, 0 to 2 percent slopes-----	484	*
308	Rankor-Edmundston-Tweedy complex, 5 to 30 percent slopes-----	981	0.1
309	Rankor-Edmundston-Tweedy complex, 30 to 60 percent slopes-----	1,484	0.2
310	Stineway-Kiscove association, 5 to 30 percent slopes-----	932	0.1
311	Xerorthents-Rock outcrop complex, 30 to 75 percent slopes-----	204	*
312	Havala sandy loam, 2 to 5 percent slopes-----	207	*
313	Dumps-----	246	*
314	Premier-Haplodurids complex, 9 to 30 percent slopes-----	4,480	0.5
315	Premier-Haplodurids complex, 2 to 9 percent slopes-----	150	*
316	Premier coarse sandy loam, 5 to 9 percent slopes-----	363	*
317	Premier coarse sandy loam, 2 to 5 percent slopes-----	982	0.1
320	Southlake gravelly sandy loam, 2 to 15 percent slopes-----	1,894	0.2
325	Walong sandy loam, 15 to 30 percent slopes-----	74	*
326	Walong sandy loam, 30 to 50 percent slopes-----	92	*

See footnote at end of table.

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
330	Kernville-Faycreek-Rock outcrop complex, 30 to 75 percent slopes-----	13,233	1.4
350	Southlake-Goodale complex, 5 to 15 percent slopes-----	1,118	0.1
352	Goodale-Riverwash complex, 0 to 5 percent slopes-----	578	*
360	Kernville-Hogeye-Southlake complex, 5 to 30 percent slopes-----	519	*
380	Delvar-Pleito complex, 9 to 30 percent slopes-----	6,855	0.8
407	Centerville clay, 2 to 5 percent slopes-----	194	*
410	Stineway-Kiscove-Urban land complex, 0 to 30 percent slopes-----	127	*
411	Delvar clay loam, 2 to 9 percent slopes-----	2	*
412	Chollawell-Urban land complex, 0 to 15 percent slopes-----	288	*
417	Southlake-Southlake, gravelly-Goodale-Urban land complex, 0 to 15 percent slopes-----	83	*
420	Southlake-Urban land complex, 0 to 15 percent slopes-----	506	*
422	Kelval-Urban land complex, 0 to 2 percent slopes-----	321	*
423	Auberry-Crouch-Rock outcrop complex, 15 to 50 percent slopes-----	736	*
424	Inyo-Urban land complex, 0 to 9 percent slopes-----	237	*
430	Friant-Rock outcrop complex, 15 to 75 percent slopes-----	324	*
432	Alberti-Urban land complex, 0 to 30 percent slopes-----	145	*
441	Inyo-Urban land complex, 0 to 5 percent slopes-----	460	*
442	Inyo-Urban land complex, 0 to 15 percent slopes-----	180	*
445	Chollawell-Urban land complex, 0 to 5 percent slopes-----	831	*
450	Southlake-Goodale-Urban land complex, 0 to 15 percent slopes-----	776	*
460	Kernville-Hogeye-Southlake-Urban land complex, 0 to 30 percent slopes----	386	*
465	Arujo-Urban land complex, 0 to 15 percent slopes-----	120	*
485	Inyo-Kelval-Urban land complex, 0 to 5 percent slopes-----	199	*
488	Tweedy-Tollhouse-Locobill-Urban land complex, 0 to 30 percent slopes----	218	*
501	Hyte-Erskine-Sorrell association, 30 to 60 percent slopes-----	5,879	0.6
503	Tips-Erskine-Rock outcrop association, 30 to 60 percent slopes-----	6,602	0.7
505	Chollawell gravelly loamy coarse sand, 5 to 20 percent slopes-----	3,069	0.3
507	Xyno-Canebrake-Pilotwell association, dry, 30 to 60 percent slopes-----	9,392	1.0
508	Pilotwell-Xyno-Rock outcrop association, 30 to 60 percent slopes-----	4,795	0.5
509	Xyno-Faycreek-Rock outcrop complex, 30 to 60 percent slopes-----	15,521	1.7
510	Xyno-Canebrake-Pilotwell association, 30 to 60 percent slopes-----	4,413	0.5
512	Chollawell, cobbly substratum-Chollawell, gravelly, complex, 2 to 15 percent slopes-----	2,601	0.3
514	Chollawell-Inyo complex, 5 to 15 percent slopes-----	5,491	0.6
515	Scodie-Canebrake-Xyno association, 30 to 60 percent slopes-----	6,075	0.7
516	Xyno-Rock outcrop-Canebrake association, 30 to 60 percent slopes-----	8,611	0.9
517	Southlake-Southlake, gravelly-Goodale complex, 5 to 15 percent slopes----	3,236	0.4
518	Backcanyon-Rock outcrop complex, 15 to 50 percent slopes-----	625	*
520	Kernville-Hogeye-Rock outcrop complex, 15 to 30 percent slopes-----	2,654	0.3
523	Kernville-Faycreek-Rock outcrop association, 30 to 60 percent slopes----	5,104	0.6
525	Hungrygulch-Kernville-Hogeye association, 30 to 60 percent slopes-----	794	*
530	Alberti complex, 15 to 50 percent slopes-----	2,229	0.2
531	Tweedy-Erskine-Alberti association, 30 to 60 percent slopes-----	451	*
532	Alberti gravelly loam, 5 to 30 percent slopes-----	37	*
540	Canebrake-Lachim complex, 30 to 60 percent slopes-----	7,800	0.9
541	Canebrake-Lachim-Rock outcrop complex, 30 to 60 percent slopes-----	5,878	0.6
543	Wortley-Indiano-Rock outcrop complex, 30 to 60 percent slopes-----	6,657	0.7
544	Xeric Haplargids-Lithic Xeric Haplargids complex, mesic, 5 to 30 percent slopes-----	966	0.1
545	Sacatar-Canebrake complex, 5 to 30 percent slopes-----	2,114	0.2
549	Tunawee-Rock outcrop complex, 15 to 40 percent slopes-----	4,168	0.5
550	Kenypeak-Rubble land-Rock outcrop complex, 60 to 100 percent slopes-----	1,303	0.1
551	Tunawee bouldery loamy coarse sand, 15 to 50 percent slopes-----	4,311	0.5
552	Kenypeak-Torriorthentic Haploxerolls association, skeletal, 30 to 60 percent slopes-----	7,160	0.8
553	Tibbcreek gravelly loam, 5 to 30 percent slopes-----	1,180	0.1
554	Deerspring fine sandy loam, 0 to 5 percent slopes-----	676	*
555	Cumulic Endoaquolls, frigid, 0 to 5 percent slopes-----	431	*
556	Toll loamy coarse sand, 2 to 9 percent slopes-----	3,443	0.4
557	Scodie-Canebrake-Deadfoot complex, 30 to 60 percent slopes-----	29,360	3.2
558	Indiano-Wortley complex, 30 to 60 percent slopes-----	1,802	0.2
560	Sacatar-Wortley-Calpine complex, 5 to 30 percent slopes-----	15,817	1.7

See footnote at end of table.

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
561	Scodie-Sacatar-Canebrake complex, 5 to 30 percent slopes-----	2,742	0.3
562	Deerspring loam, partially drained, 0 to 5 percent slopes-----	85	*
570	Deadfoot-Scodie-Rock outcrop complex, 30 to 60 percent slopes-----	11,567	1.3
590	Xyno-Canebrake-Pilotwell complex, 5 to 30 percent slopes-----	2,283	0.3
591	Xyno-Canebrake-Rock outcrop association, 30 to 60 percent slopes-----	2,263	0.2
599	Rock outcrop-----	66	*
610	Hyte-Erskine complex, 5 to 30 percent slopes-----	314	*
650	Stineway-Kiscove-Rock outcrop association, 30 to 75 percent slopes-----	6,843	0.7
3250	Jawbone association, 30 to 60 percent slopes-----	568	*
4432	Koehn association, 2 to 4 percent slopes-----	43	*
5201	Wingap-Pinyonpeak association, 8 to 30 percent slopes-----	4,007	0.4
5210	Grandora-Pinyonpeak association, 8 to 60 percent slopes-----	2,275	0.2
6001	Goldpeak-Pinyonpeak-Wingap complex, 2 to 30 percent slopes-----	151	*
W	Water-----	8,794	1.0
	Total-----	913,000	100.0

* Less than 0.1 percent.

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification

(The land capability system groups soils primarily on the basis of their ability to produce the commonly grown cultivated crops and pasture plants over a long period of time without deteriorating. Absence of an entry indicates that no land capability classification is assigned. N represents nonirrigated areas, and I represents irrigated areas)

Map symbol and component name	Land capability	
	N	I
115: Chanac-----	4e-1	4e-1
128: Pits-----	8	---
Delano-----	6e	2e-1
Oil waste land-----	8	---
136: Hesperia-----	6e	2e-1
138: Hesperia-----	6e	2s-1
139: Riverwash-----	7w	---
143: Calicreek-----	6e	3s-2
144: Calicreek-----	6w	3w-4
145: Delano-----	6e	3s-1
146: Delano-----	6e	2e-1
147: Chanac-----	4e-1	3e-1
148: Delano-----	6c	1
149: Delano-----	6e	3s-1
150: Pits-----	8	---
Dumps-----	8	---
152: Pleito-----	4e-3	2e-3
153: Chanac-----	4e-1	4e-1
154: Dam-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
166:		
Delano-----	6c	1
Urban land-----	8	---
174:		
Xeric Torriorthents, silty-----	7e	---
Calcic Haploxerepts-----	7e	---
176:		
Elkhills, eroded-----	7e	---
177:		
Chanac-----	6e	6e
Torriorthents, stratified-----	7e	---
178:		
Delano-----	6e	4e-1
Cuyama-----	6e	4e-1
Premier-----	6e	4e-1
179:		
Torriorthents, stratified, eroded-----	7e	---
Elkhills-----	7e	---
184:		
Cuyama-----	6e	2e-1
185:		
Brecken-----	6e	6e
Cuyama-----	6e	6e
Pleito-----	6e	6e
186:		
Cuyama-----	6e	4e-1
187:		
Trigo-----	7e	---
Chanac-----	6e	6e
188:		
Tweedy-----	4e	4e-1
Tollhouse-----	7e	---
Locobill-----	4e	4e-1
189:		
Tweedy-----	6e	6e
Walong-----	6e	6e
192:		
Chanac-----	4e-1	4e-1
Pleito-----	4e-1	4e-1

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
193:		
Chanac-----	4e-1	2e-1
Pleito-----	4e-1	2e-1
194:		
Pleito-----	4e-1	2e-1
Delvar-----	4e-3	2e-3
195:		
Centerville-----	4e-3	4e-3
Delvar-----	4e-3	4e-3
196:		
Exeter-----	4e-8	3e-8
197:		
Nord-----	4c-4	1
198:		
Centerville-----	4e-3	3e-3
Delvar-----	4e-3	2e-3
199:		
Exeter-----	4s-8	3s-8
200:		
Urban land-----	8	8
Delano-----	6e	2e-1
201:		
Pleito-----	4e-1	4e-1
Chanac-----	4e-1	4e-1
Raggulch-----	4e-8	4e-8
205:		
Pleito-----	6e	6e
Trigo-----	6e	6e
Chanac-----	6e	6e
207:		
Whitewolf-----	6e	3s-4
209:		
Whitewolf-----	6e	3s-4
210:		
Kernfork-----	6w	4w-2
212:		
Kernfork-----	7w	---
213:		
Calicreek-----	6w	3w-2

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
215: Kelval-----	6w	2w-4
216: Inyo-----	6w	4w-4
Riverwash-----	7w	---
217: Whitewolf-----	6w	4w-4
Riverwash-----	7w	---
220: Aquents-----	6w	4w-2
Aquolls-----	6w	4w-2
Riverwash-----	7w	---
222: Kelval-----	6w	2w-2
223: Kelval-----	6w	4w-2
224: Inyo-----	7e	---
238: Cinco-----	7e	---
240: Dune land-----	8	---
241: Inyo-----	7e	---
242: Inyo-----	7e	---
243: Kernfork, saline-sodic, occasionally flooded----	6w	4w-6
245: Chollawell-----	6e	6e
246: Chollawell-----	6e	6e
247: Inyo-----	6e	6e
Tips-----	8	---
Rock outcrop-----	8	---
249: Hoffman-----	7e	6e
Rock outcrop-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
250:		
Hoffman-----	7e	---
Tips-----	8	---
Pilotwell-----	6e	6e
253:		
Sorrell-----	7e	---
Martee-----	8	---
Rock outcrop-----	8	---
254:		
Martee-----	8	---
Rock outcrop-----	8	---
255:		
Kernfork, occasionally flooded-----	6w	2w-2
Kernfork, frequently flooded-----	6w	2w-2
257:		
Hoffman-----	7e	---
Tips-----	8	---
Rock outcrop-----	8	---
259:		
Cowspring-----	7e	---
260:		
Cowspring-----	7e	---
Tips-----	8	---
Rock outcrop-----	8	---
261:		
Blasingame-----	6e	6e
Arujo-----	6e	6e
Cieneba-----	7e	---
264:		
Arujo-----	4e-1	4e-1
Walong-----	6e	6e
Tunis-----	7e	---
265:		
Arujo-----	4e-1	3e-1
266:		
Tunis-----	7e	---
Rock outcrop-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
267:		
Cieneba-----	7e	---
Vista-----	7e	---
Rock outcrop-----	8	---
268:		
Tunis-----	8	---
Tollhouse-----	8	---
Sorrell-----	8	---
269:		
Tollhouse-----	7e	---
Sorrell-----	7e	---
Rock outcrop-----	8	---
270:		
Locobill-----	6e	6e
Backcanyon-----	7e	---
Sesame-----	7e	---
271:		
Walong-----	7e	---
Tunis-----	7e	---
Rock outcrop-----	8	---
272:		
Tollhouse-----	7e	---
Edmundston-----	7e	---
Sorrell-----	7e	---
274:		
Sesame-----	6e	---
Tweedy-----	6e	---
Rock outcrop-----	8	---
275:		
Strahle-----	7e	---
Sesame-----	8	---
Tweedy-----	8	---
276:		
Tips-----	7e	---
Hoffman-----	7e	---
Cinco-----	7e	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
277:		
Feethill-----	7e	---
Vista-----	7e	---
Walong-----	7e	---
279:		
Strahle-----	6e	6e
Rock outcrop-----	8	---
Sesame-----	7e	---
280:		
Tollhouse-----	7e	---
Martee-----	7e	---
Edmundston-----	7e	---
281:		
Havala-----	4e-2	4e-2
Walong-----	6e	6e
Kernfork-----	4w-2	4w-2
282:		
Tollhouse-----	7e	---
Sesame-----	7e	---
Friant-----	7e	---
283:		
Tollhouse-----	7e	---
Martee-----	7e	---
Rock outcrop-----	8	---
284:		
Tollhouse-----	7e	---
Rock outcrop-----	8	---
285:		
Inyo-----	6w	4w-2
Kelval-----	6w	4w-2
286:		
Tollhouse-----	7e	---
Tweedy-----	7e	---
Locobill-----	7e	---
287:		
Tweedy-----	7e	---
Strahle-----	7e	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
288:		
Sorrell-----	7e	---
Arujo-----	6e	6e
Rock outcrop-----	8	---
289:		
Erskine-----	7e	---
Hyte-----	7e	---
Rock outcrop-----	8	---
294:		
Edmundston-----	7e	---
Tweedy-----	6e	---
Walong-----	7e	---
295:		
Tweedy-----	7e	---
Tunis-----	7e	---
Rankor-----	7e	---
296:		
Arujo-----	7e	---
Walong-----	7e	---
Tunis-----	7e	---
297:		
Walong-----	7e	---
Blasingame-----	7e	---
Rock outcrop-----	8	---
298:		
Arujo-----	6e	6e
Feethill-----	7e	---
Sesame-----	7e	---
299:		
Arujo-----	7e	---
Feethill-----	7e	---
Sesame-----	7e	---
300:		
Stineway-----	6e	6e
Kiscove-----	6e	6e

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
301:		
Feethill-----	6e	6e
Vista-----	6e	6e
Rock outcrop-----	8	---
302:		
Feethill-----	6e	6e
Cibo-----	6e	6e
Cieneba-----	7e	---
303:		
Steuber-----	4w-2	3w-2
304:		
Cibo-----	7e	---
305:		
Chanac-----	6e	6e
Pleito-----	6e	6e
Premier-----	7e	---
306:		
Xerofluvents, occasionally flooded-----	4w-2	2w-2
Riverwash-----	8	---
307:		
Typic Xeropsamments-----	4w-2	4w-2
308:		
Rankor-----	4e-1	4e-1
Edmundston-----	6e	6e
Tweedy-----	4e-1	4e-1
309:		
Rankor-----	7e	---
Edmundston-----	7e	---
Tweedy-----	7e	---
310:		
Stineway-----	7e	---
Kiscove-----	7e	---
311:		
Xerorthents-----	8	---
Rock outcrop-----	8	---
312:		
Havala-----	4e-1	2e-1

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
313: Dumps-----	8	---
314: Premier-----	6e	4e-1
Haplodurids-----	6e	4e-8
315: Premier-----	6e	3e-1
Haplodurids-----	6e	4e-8
316: Premier-----	6e	4e-1
317: Premier-----	6e	4e-1
320: Southlake-----	4e-7	3e-7
325: Walong-----	6e	6e
326: Walong-----	7e	---
330: Kernville-----	8	---
Faycreek-----	8	---
Rock outcrop-----	8	---
350: Southlake, stony-----	6e	4e-7
Goodale-----	7s	---
352: Goodale-----	7s	---
Riverwash-----	7w	---
360: Kernville, bouldery-----	8	---
Hogeye-----	6e	6e
Southlake-----	6e	6e
380: Delvar-----	4e-3	4e-3
Pleito-----	4e-1	4e-1
407: Centerville-----	4e-3	3e-3

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
410:		
Stineway-----	7e	---
Kiscove-----	7e	---
Urban land-----	8	---
411:		
Delvar-----	4e-3	2e-3
412:		
Chollawell-----	6e	3e-1
Urban land-----	8	---
417:		
Southlake-----	6e	4e-7
Southlake, gravelly-----	6e	4e-7
Goodale-----	7s	7s
Urban land-----	8	---
420:		
Southlake-----	4e-7	4e-7
Urban land-----	8	---
422:		
Kelval-----	6w	2w-2
Urban land-----	8	---
423:		
Auberry-----	7e	---
Crouch-----	7e	---
Rock outcrop-----	8	---
424:		
Inyo-----	7e	3e-1
Urban land-----	8	---
430:		
Friant-----	7e	---
Rock outcrop-----	8	---
432:		
Alberti, gravelly-----	6e	6e
Urban land-----	8	---
441:		
Inyo-----	7e	3e-1
Urban land-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
442:		
Inyo-----	7e	3e-1
Urban land-----	8	---
445:		
Chollawell-----	6e	3e-1
Urban land-----	8	---
450:		
Southlake, stony-----	6e	4e-7
Goodale-----	7s	---
Urban land-----	8	---
460:		
Kernville, bouldery-----	8	---
Hogeye-----	6e	6e
Southlake-----	6e	6e
Urban land-----	8	---
465:		
Arujo-----	4e-1	4e-1
Urban land-----	8	---
485:		
Inyo-----	6w	4w-2
Kelval-----	6w	4w-2
Urban land-----	8	---
488:		
Tweedy-----	4e-1	4e-1
Tollhouse-----	7e	---
Locobill-----	4e-1	4e-1
Urban land-----	8	---
501:		
Hyte-----	7e	---
Erskine-----	7e	---
Sorrell-----	7e	---
503:		
Tips-----	7e	---
Erskine-----	7e	---
Rock outcrop-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
505: Chollawell-----	6e	6e
507: Xyno-----	8	---
Canebrake-----	8	---
Pilotwell-----	7e	---
508: Pilotwell-----	7e	---
Xyno-----	8	---
Rock outcrop-----	8	---
509: Xyno-----	8	---
Faycreek-----	8	---
Rock outcrop-----	8	---
510: Xyno-----	8	---
Canebrake-----	8	---
Pilotwell, bouldery-----	7e	---
512: Chollawell, cobbly substratum-----	6e	4e-1
Chollawell, gravelly-----	6e	4e-1
514: Chollawell-----	6e	4e-1
Inyo-----	6e	4e-1
515: Scodie-----	8	---
Canebrake-----	8	---
Xyno-----	8	---
516: Xyno-----	8	---
Rock outcrop-----	8	---
Canebrake-----	8	---
517: Southlake-----	6e	4e-7
Southlake, gravelly-----	6e	4e-1
Goodale-----	7s	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
518:		
Backcanyon-----	8	---
Rock outcrop-----	8	---
520:		
Kernville-----	7e	---
Hogeye-----	6e	6e
Rock outcrop-----	8	---
523:		
Kernville, bouldery-----	7e	---
Faycreek-----	8	---
Rock outcrop-----	8	---
525:		
Hungrygulch-----	7e	---
Kernville-----	7e	---
Hogeye-----	7e	---
530:		
Alberti, cobbly-----	6e	6e
Alberti, gravelly-----	6e	6e
531:		
Tweedy-----	6e	6e
Erskine-----	7e	---
Alberti, gravelly-----	6e	6e
532:		
Alberti, gravelly-----	6e	6e
540:		
Canebrake-----	8	---
Lachim-----	7e	---
541:		
Canebrake-----	8	---
Lachim-----	7e	---
Rock outcrop-----	8	---
543:		
Wortley-----	8	---
Indiano-----	7e	---
Rock outcrop-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
544:		
Xeric Haplargids-----	6e	6e
Lithic Xeric Haplargids-----	7e	---
545:		
Sacatar-----	6e	6e
Canebrake-----	8	---
549:		
Tunawee-----	8	---
Rock outcrop-----	8	---
550:		
Kenypeak-----	8	---
Rubble land-----	8	---
Rock outcrop-----	8	---
551:		
Tunawee-----	7e	---
552:		
Kenypeak-----	8	---
Torriorthetic Haploxerolls-----	7e	---
553:		
Tibbcreek-----	6e	6e
554:		
Deerspring-----	6e	6e
555:		
Cumulic Endoaquolls, frigid-----	6w	6w
556:		
Toll-----	6s	6s
557:		
Scodie-----	8	---
Canebrake-----	8	---
Deadfoot-----	7e	---
558:		
Indiano-----	7e	---
Wortley-----	8	---
560:		
Sacatar-----	6e	6e
Wortley-----	7e	---
Calpine-----	6e	6e

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
561:		
Scodie-----	8	---
Sacatar-----	6e	6e
Canebrake-----	8	---
562:		
Deerspring, partially drained-----	6w	6w
570:		
Deadfoot-----	7e	---
Scodie-----	8	---
Rock outcrop-----	8	---
590:		
Xyno-----	8	---
Canebrake-----	8	---
Pilotwell-----	7e	---
591:		
Xyno-----	8	---
Canebrake-----	8	---
Rock outcrop-----	8	---
599:		
Rock outcrop-----	8	---
610:		
Hyte-----	7e	---
Erskine-----	7e	---
650:		
Stineway-----	7e	---
Kiscove-----	7e	---
Rock outcrop-----	8	---
3250:		
Jawbone-----	8	---
Jawbone, moderately deep-----	8	---
4432:		
Koehn, occasionally flooded-----	7e	---
Koehn, frequently flooded-----	7e	---
5201:		
Wingap-----	6e	---
Pinyonpeak-----	8	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 5.--Land Capability Classification--Continued

Map symbol and component name	Land capability	
	N	I
5210:		
Grandora-----	8	---
Grandora, warm-----	7e	---
Pinyonpeak-----	8	---
6001:		
Goldpeak-----	6e	6e
Pinyonpeak-----	8	---
Wingap-----	6e	6e
W.		
Water		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 6.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Map unit name
136	Hesperia sandy loam, 2 to 9 percent slopes (where irrigated)
138	Hesperia sandy loam, 0 to 2 percent slopes (where irrigated)
145	Delano loamy sand, 0 to 2 percent slopes (where irrigated)
146	Delano sandy loam, 1 to 5 percent slopes (where irrigated)
147	Chanac clay loam, 2 to 9 percent slopes (where irrigated)
148	Delano sandy clay loam, 0 to 2 percent slopes (where irrigated)
149	Delano sandy loam, 5 to 9 percent slopes (where irrigated)
152	Pleito gravelly sandy clay loam, 2 to 5 percent slopes (where irrigated)
166	Delano-Urban land complex, 0 to 2 percent slopes (where irrigated)
193	Chanac-Pleito complex, 2 to 5 percent slopes (where irrigated)
197	Nord fine sandy loam, 0 to 2 percent slopes, rarely flooded (where irrigated)
198	Centerville-Delvar complex, 2 to 9 percent slopes (where irrigated)
200	Urban land-Delano complex, 0 to 2 percent slopes (where irrigated)
210	Kernfork fine sandy loam, 0 to 2 percent slopes, occasionally flooded (where irrigated and drained)
222	Kelval fine sandy loam, 0 to 2 percent slopes, occasionally flooded (where irrigated and drained)
265	Arujo sandy loam, 9 to 15 percent slopes (where irrigated)
281	Havala-Walong-Kernfork association, 1 to 20 percent slopes (where irrigated)
303	Steuber sandy loam, 0 to 5 percent slopes (where irrigated)
312	Havala sandy loam, 2 to 5 percent slopes (where irrigated)
316	Premier coarse sandy loam, 5 to 9 percent slopes (where irrigated)
317	Premier coarse sandy loam, 2 to 5 percent slopes (where irrigated)
422	Kelval-Urban land complex, 0 to 2 percent slopes (where irrigated)
465	Arujo-Urban land complex, 0 to 15 percent slopes (where irrigated)
554	Deerspring fine sandy loam, 0 to 5 percent slopes (where irrigated)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 7.--Farmland of Statewide Importance

(Urban or built-up areas of the map units listed are not considered farmland of statewide importance)

Map symbol	Map unit name
143	Calicreek loamy coarse sand, 0 to 2 percent slopes, rarely flooded
184	Cuyama sandy loam, 2 to 5 percent slopes
194	Pleito-Delvar complex, 2 to 15 percent slopes
196	Exeter sandy loam, 2 to 9 percent slopes
199	Exeter sandy loam, 0 to 2 percent slopes
213	Calicreek loamy coarse sand, 0 to 2 percent slopes, occasionally flooded
246	Chollawell gravelly loamy coarse sand, 5 to 15 percent slopes
315	Premier-Haplodurids complex, 2 to 9 percent slopes
407	Centerville clay, 2 to 5 percent slopes
411	Delvar clay loam, 2 to 9 percent slopes
505	Chollawell gravelly loamy coarse sand, 5 to 20 percent slopes
514	Chollawell-Inyo complex, 5 to 15 percent slopes

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index

(The California Storie Index expresses numerically the relative degree of suitability of a soil for general intensive agricultural uses at the time of evaluation. The rating is based on soil characteristics only and is obtained by evaluating such factors as soil depth, texture of the surface soil, subsoil characteristics, and surface relief. The ratings shown are for soils that are used to produce the commonly grown crops or for livestock grazing)

Map symbol and component name	Storie index	Storie grade
115: Chanac-----	74	Grade two (good)
128: Pits.		
Delano-----	81	Grade one (excellent)
Oil waste land.		
136: Hesperia-----	86	Grade one (excellent)
138: Hesperia-----	93	Grade one (excellent)
139. Riverwash		
143: Calicreek-----	70	Grade two (good)
144: Calicreek-----	69	Grade two (good)
145: Delano-----	70	Grade two (good)
146: Delano-----	83	Grade one (excellent)
147: Chanac-----	86	Grade one (excellent)
148: Delano-----	83	Grade one (excellent)
149: Delano-----	77	Grade two (good)
150: Pits.		
Dumps.		
152: Pleito-----	69	Grade two (good)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
153: Chanac-----	82	Grade one (excellent)
154. Dam		
166: Delano-----	83	Grade one (excellent)
Urban land.		
174: Xeric Torriorthents, silty-----	17	Grade five (very poor)
Calcic Haploxerepts-----	30	Grade four (poor)
176: Elkhills, eroded-----	50	Grade three (fair)
177: Chanac-----	62	Grade two (good)
Torriorthents, stratified-----	28	Grade four (poor)
178: Delano-----	86	Grade one (excellent)
Cuyama-----	55	Grade three (fair)
Premier-----	70	Grade two (good)
179: Torriorthents, stratified, eroded-----	28	Grade four (poor)
Elkhills-----	50	Grade three (fair)
184: Cuyama-----	56	Grade three (fair)
185: Brecken-----	31	Grade four (poor)
Cuyama-----	52	Grade three (fair)
Pleito-----	49	Grade three (fair)
186: Cuyama-----	59	Grade three (fair)
187: Trigo-----	15	Grade five (very poor)
Chanac-----	61	Grade two (good)
188: Tweedy-----	53	Grade three (fair)
Tollhouse-----	21	Grade four (poor)
Locobill-----	52	Grade three (fair)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
189:		
Tweedy-----	38	Grade four (poor)
Walong-----	17	Grade five (very poor)
192:		
Chanac-----	78	Grade two (good)
Pleito-----	62	Grade two (good)
193:		
Chanac-----	89	Grade one (excellent)
Pleito-----	71	Grade two (good)
194:		
Pleito-----	66	Grade two (good)
Delvar-----	62	Grade two (good)
195:		
Centerville-----	40	Grade three (fair)
Delvar-----	57	Grade three (fair)
196:		
Exeter-----	24	Grade four (poor)
197:		
Nord-----	88	Grade one (excellent)
198:		
Centerville-----	45	Grade three (fair)
Delvar-----	62	Grade two (good)
199:		
Exeter-----	35	Grade four (poor)
200:		
Urban land.		
Delano-----	83	Grade one (excellent)
201:		
Pleito-----	62	Grade two (good)
Chanac-----	76	Grade two (good)
Raggulch-----	26	Grade four (poor)
205:		
Pleito-----	49	Grade three (fair)
Trigo-----	15	Grade five (very poor)
Chanac-----	65	Grade two (good)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
207: Whitewolf-----	66	Grade two (good)
209: Whitewolf-----	66	Grade two (good)
210: Kernfork-----	48	Grade three (fair)
212: Kernfork-----	57	Grade three (fair)
213: Calicreek-----	77	Grade two (good)
215: Kelval-----	63	Grade two (good)
216: Inyo-----	17	Grade five (very poor)
Riverwash.		
217: Whitewolf-----	66	Grade two (good)
Riverwash.		
220: Aguents.		
Aquolls.		
Riverwash.		
222: Kelval-----	79	Grade two (good)
223: Kelval-----	75	Grade two (good)
224: Inyo-----	12	Grade five (very poor)
238: Cinco-----	19	Grade five (very poor)
240. Dune land		
241: Inyo-----	12	Grade five (very poor)
242: Inyo-----	10	Grade five (very poor)
243: Kernfork, saline-sodic, occasionally flooded----	25	Grade four (poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
245: Chollawell-----	23	Grade four (poor)
246: Chollawell-----	23	Grade four (poor)
247: Inyo-----	10	Grade five (very poor)
Tips-----	1	Grade six (nonagricultural)
Rock outcrop.		
249: Hoffman-----	16	Grade five (very poor)
Rock outcrop.		
250: Hoffman-----	16	Grade five (very poor)
Tips-----	1	Grade six (nonagricultural)
Pilotwell-----	16	Grade five (very poor)
253: Sorrell-----	1	Grade six (nonagricultural)
Martee-----	1	Grade six (nonagricultural)
Rock outcrop.		
254: Martee-----	1	Grade six (nonagricultural)
Rock outcrop.		
255: Kernfork, occasionally flooded-----	66	Grade two (good)
Kernfork, frequently flooded-----	28	Grade four (poor)
257: Hoffman-----	16	Grade five (very poor)
Tips-----	1	Grade six (nonagricultural)
Rock outcrop.		
259: Cowspring-----	16	Grade five (very poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
260:		
Cowspring-----	16	Grade five (very poor)
Tips-----	1	Grade six (nonagricultural)
Rock outcrop.		
261:		
Blasingame-----	28	Grade four (poor)
Arujo-----	63	Grade two (good)
Cieneba-----	21	Grade four (poor)
264:		
Arujo-----	72	Grade two (good)
Walong-----	34	Grade four (poor)
Tunis-----	22	Grade four (poor)
265:		
Arujo-----	79	Grade two (good)
266:		
Tunis-----	15	Grade five (very poor)
Rock outcrop.		
267:		
Cieneba-----	10	Grade five (very poor)
Vista-----	24	Grade four (poor)
Rock outcrop.		
268:		
Tunis-----	13	Grade five (very poor)
Tollhouse-----	8	Grade six (nonagricultural)
Sorrell-----	1	Grade six (nonagricultural)
269:		
Tollhouse-----	7	Grade six (nonagricultural)
Sorrell-----	1	Grade six (nonagricultural)
Rock outcrop.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
270:		
Locobill-----	37	Grade four (poor)
Backcanyon-----	11	Grade five (very poor)
Sesame-----	35	Grade four (poor)
271:		
Walong-----	32	Grade four (poor)
Tunis-----	15	Grade five (very poor)
Rock outcrop.		
272:		
Tollhouse-----	13	Grade five (very poor)
Edmundston-----	55	Grade three (fair)
Sorrell-----	1	Grade six (nonagricultural)
274:		
Sesame-----	24	Grade four (poor)
Tweedy-----	22	Grade four (poor)
Rock outcrop.		
275:		
Strahle-----	10	Grade six (nonagricultural)
Sesame-----	21	Grade four (poor)
Tweedy-----	21	Grade four (poor)
276:		
Tips-----	1	Grade six (nonagricultural)
Hoffman-----	16	Grade five (very poor)
Cinco-----	19	Grade five (very poor)
277:		
Feethill-----	34	Grade four (poor)
Vista-----	26	Grade four (poor)
Walong-----	32	Grade four (poor)
279:		
Strahle-----	11	Grade five (very poor)
Rock outcrop.		
Sesame-----	32	Grade four (poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
280:		
Tollhouse-----	11	Grade five (very poor)
Martee-----	1	Grade six (nonagricultural)
Edmundston-----	42	Grade three (fair)
281:		
Havala-----	66	Grade two (good)
Walong-----	31	Grade four (poor)
Kernfork-----	63	Grade two (good)
282:		
Tollhouse-----	7	Grade six (nonagricultural)
Sesame-----	26	Grade four (poor)
Friant-----	11	Grade five (very poor)
283:		
Tollhouse-----	6	Grade six (nonagricultural)
Martee-----	1	Grade six (nonagricultural)
Rock outcrop.		
284:		
Tollhouse-----	10	Grade six (nonagricultural)
Rock outcrop.		
285:		
Inyo-----	11	Grade five (very poor)
Kelval-----	62	Grade two (good)
286:		
Tollhouse-----	10	Grade six (nonagricultural)
Tweedy-----	29	Grade four (poor)
Locobill-----	32	Grade four (poor)
287:		
Tweedy-----	25	Grade four (poor)
Strahle-----	6	Grade six (nonagricultural)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
288:		
Sorrell-----	1	Grade six (nonagricultural)
Arujo-----	57	Grade three (fair)
Rock outcrop.		
289:		
Erskine-----	10	Grade five (very poor)
Hyte-----	10	Grade six (nonagricultural)
Rock outcrop.		
294:		
Edmundston-----	36	Grade four (poor)
Tweedy-----	28	Grade four (poor)
Walong-----	16	Grade five (very poor)
295:		
Tweedy-----	21	Grade four (poor)
Tunis-----	11	Grade five (very poor)
Rankor-----	37	Grade four (poor)
296:		
Arujo-----	38	Grade four (poor)
Walong-----	19	Grade five (very poor)
Tunis-----	11	Grade five (very poor)
297:		
Walong-----	20	Grade four (poor)
Blasingame-----	29	Grade four (poor)
Rock outcrop.		
298:		
Arujo-----	67	Grade two (good)
Feethill-----	48	Grade three (fair)
Sesame-----	38	Grade four (poor)
299:		
Arujo-----	44	Grade three (fair)
Feethill-----	34	Grade four (poor)
Sesame-----	27	Grade four (poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
300: Stineway-----	8	Grade six (nonagricultural)
Kiscove-----	7	Grade six (nonagricultural)
301: Feethill-----	36	Grade four (poor)
Vista-----	39	Grade four (poor)
Rock outcrop.		
302: Feethill-----	41	Grade three (fair)
Cibo-----	34	Grade four (poor)
Cieneba-----	22	Grade four (poor)
303: Steuber-----	61	Grade two (good)
304: Cibo-----	19	Grade five (very poor)
305: Chanac-----	56	Grade three (fair)
Pleito-----	42	Grade three (fair)
Premier-----	63	Grade two (good)
306: Xerofluvents, occasionally flooded-----	66	Grade two (good)
Riverwash.		
307: Typic Xeropsamments-----	63	Grade two (good)
308: Rankor-----	62	Grade two (good)
Edmundston-----	57	Grade three (fair)
Tweedy-----	54	Grade three (fair)
309: Rankor-----	38	Grade four (poor)
Edmundston-----	35	Grade four (poor)
Tweedy-----	33	Grade four (poor)
310: Stineway-----	15	Grade five (very poor)
Kiscove-----	10	Grade five (very poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
311: Xerorthents----- Rock outcrop.	1	Grade six (nonagricultural)
312: Havala-----	74	Grade two (good)
313: Dumps		
314: Premier----- Haplodurids-----	77 50	Grade two (good) Grade three (fair)
315: Premier----- Haplodurids-----	86 56	Grade one (excellent) Grade three (fair)
316: Premier-----	81	Grade one (excellent)
317: Premier-----	84	Grade one (excellent)
320: Southlake-----	43	Grade three (fair)
325: Walong-----	27	Grade four (poor)
326: Walong-----	20	Grade five (very poor)
330: Kernville----- Faycreek----- Rock outcrop.	9 9	Grade six (nonagricultural) Grade six (nonagricultural)
350: Southlake, stony----- Goodale-----	47 22	Grade three (fair) Grade four (poor)
352: Goodale----- Riverwash.	22	Grade four (poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
360: Kernville, bouldery-----	15	Grade five (very poor)
Hogeye-----	36	Grade four (poor)
Southlake-----	47	Grade three (fair)
380: Delvar-----	61	Grade two (good)
Pleito-----	60	Grade three (fair)
407: Centerville-----	40	Grade three (fair)
410: Stineway-----	15	Grade five (very poor)
Kiscove-----	10	Grade five (very poor)
Urban land.		
411: Delvar-----	62	Grade two (good)
412: Chollawell-----	45	Grade three (fair)
Urban land.		
417: Southlake-----	47	Grade three (fair)
Southlake, gravelly-----	41	Grade three (fair)
Goodale-----	22	Grade four (poor)
Urban land.		
420: Southlake-----	43	Grade three (fair)
Urban land.		
422: Kelval-----	79	Grade two (good)
Urban land.		
423: Auberry-----	62	Grade two (good)
Crouch-----	58	Grade three (fair)
Rock outcrop.		
424: Inyo-----	15	Grade five (very poor)
Urban land.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
430: Friant-----	11	Grade five (very poor)
Rock outcrop.		
432: Alberti, gravelly-----	18	Grade five (very poor)
Urban land.		
441: Inyo-----	16	Grade five (very poor)
Urban land.		
442: Inyo-----	15	Grade five (very poor)
Urban land.		
445: Chollawell-----	23	Grade four (poor)
Urban land.		
450: Southlake, stony-----	47	Grade three (fair)
Goodale-----	22	Grade four (poor)
Urban land.		
460: Kernville, bouldery-----	15	Grade five (very poor)
Hogeye-----	36	Grade four (poor)
Southlake-----	47	Grade three (fair)
Urban land.		
465: Arujo-----	79	Grade two (good)
Urban land.		
485: Inyo-----	13	Grade five (very poor)
Kelval-----	63	Grade two (good)
Urban land.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
488:		
Tweedy-----	53	Grade three (fair)
Tollhouse-----	21	Grade four (poor)
Locobill-----	52	Grade three (fair)
Urban land.		
501:		
Hyte-----	10	Grade five (very poor)
Erskine-----	12	Grade five (very poor)
Sorrell-----	1	Grade six (nonagricultural)
503:		
Tips-----	1	Grade six (nonagricultural)
Erskine-----	15	Grade five (very poor)
Rock outcrop.		
505:		
Chollawell-----	23	Grade four (poor)
507:		
Xyno-----	11	Grade five (very poor)
Canebrake-----	9	Grade six (nonagricultural)
Pilotwell-----	16	Grade five (very poor)
508:		
Pilotwell-----	16	Grade five (very poor)
Xyno-----	11	Grade five (very poor)
Rock outcrop.		
509:		
Xyno-----	11	Grade five (very poor)
Faycreek-----	9	Grade six (nonagricultural)
Rock outcrop.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
510: Xyno-----	11	Grade five (very poor)
Canebrake-----	9	Grade six (nonagricultural)
Pilotwell, bouldery-----	16	Grade five (very poor)
512: Chollawell, cobbly substratum-----	45	Grade three (fair)
Chollawell, gravelly-----	23	Grade four (poor)
514: Chollawell-----	23	Grade four (poor)
Inyo-----	11	Grade five (very poor)
515: Scodie-----	9	Grade six (nonagricultural)
Canebrake-----	9	Grade six (nonagricultural)
Xyno-----	11	Grade five (very poor)
516: Xyno-----	11	Grade five (very poor)
Rock outcrop.		
Canebrake-----	9	Grade six (nonagricultural)
517: Southlake-----	47	Grade three (fair)
Southlake, gravelly-----	41	Grade three (fair)
Goodale-----	22	Grade four (poor)
518: Backcanyon-----	9	Grade six (nonagricultural)
Rock outcrop.		
520: Kernville-----	16	Grade five (very poor)
Hogeye-----	34	Grade four (poor)
Rock outcrop.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
523: Kernville, bouldery-----	9	Grade six (nonagricultural)
Faycreek-----	9	Grade six (nonagricultural)
Rock outcrop.		
525: Hungrygulch-----	23	Grade four (poor)
Kernville-----	9	Grade six (nonagricultural)
Hogeye-----	22	Grade four (poor)
530: Alberti, cobbly-----	11	Grade five (very poor)
Alberti, gravelly-----	10	Grade five (very poor)
531: Tweedy-----	30	Grade four (poor)
Erskine-----	14	Grade five (very poor)
Alberti, gravelly-----	9	Grade six (nonagricultural)
532: Alberti, gravelly-----	18	Grade five (very poor)
540: Canebrake-----	9	Grade six (nonagricultural)
Lachim-----	18	Grade five (very poor)
541: Canebrake-----	9	Grade six (nonagricultural)
Lachim-----	18	Grade five (very poor)
Rock outcrop.		
543: Wortley-----	8	Grade six (nonagricultural)
Indiano-----	15	Grade five (very poor)
Rock outcrop.		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
544: Xeric Haplargids-----	25	Grade four (poor)
Lithic Xeric Haplargids-----	16	Grade five (very poor)
545: Sacatar-----	19	Grade five (very poor)
Canebrake-----	15	Grade five (very poor)
549: Tunawee-----	15	Grade five (very poor)
Rock outcrop.		
550: Kenypeak-----	4	Grade six (nonagricultural)
Rubble land.		
Rock outcrop.		
551: Tunawee-----	15	Grade five (very poor)
552: Kenypeak-----	8	Grade six (nonagricultural)
Torriorthentic Haploxerolls-----	17	Grade five (very poor)
553: Tibbcreek-----	19	Grade five (very poor)
554: Deerspring-----	79	Grade two (good)
555: Cumulic Endoaquolls, frigid-----	45	Grade three (fair)
556: Toll-----	22	Grade four (poor)
557: Scodie-----	9	Grade six (nonagricultural)
Canebrake-----	9	Grade six (nonagricultural)
Deadfoot-----	11	Grade five (very poor)

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
558:		
Indiano-----	15	Grade five (very poor)
Wortley-----	7	Grade six (nonagricultural)
560:		
Sacatar-----	19	Grade five (very poor)
Wortley-----	15	Grade five (very poor)
Calpine-----	22	Grade four (poor)
561:		
Scodie-----	12	Grade five (very poor)
Sacatar-----	19	Grade five (very poor)
Canebrake-----	14	Grade five (very poor)
562:		
Deerspring, partially drained-----	61	Grade two (good)
570:		
Deadfoot-----	11	Grade five (very poor)
Scodie-----	9	Grade six (nonagricultural)
Rock outcrop.		
590:		
Xyno-----	11	Grade five (very poor)
Canebrake-----	15	Grade five (very poor)
Pilotwell-----	16	Grade five (very poor)
591:		
Xyno-----	11	Grade five (very poor)
Canebrake-----	9	Grade six (nonagricultural)
Rock outcrop.		
599.		
Rock outcrop		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 8.--Storie Index--Continued

Map symbol and component name	Storie index	Storie grade
610: Hyte-----	16	Grade five (very poor)
Erskine-----	27	Grade four (poor)
650: Stineway-----	8	Grade six (nonagricultural)
Kiscove-----	7	Grade six (nonagricultural)
Rock outcrop.		
3250: Jawbone-----	7	Grade six (nonagricultural)
Jawbone, moderately deep-----	27	Grade four (poor)
4432: Koehn, occasionally flooded-----	48	Grade three (fair)
Koehn, frequently flooded-----	40	Grade four (poor)
5201: Wingap-----	65	Grade two (good)
Pinyonpeak-----	10	Grade six (nonagricultural)
5210: Grandora-----	23	Grade four (poor)
Grandora, warm-----	36	Grade four (poor)
Pinyonpeak-----	9	Grade six (nonagricultural)
6001: Goldpeak-----	58	Grade three (fair)
Pinyonpeak-----	8	Grade six (nonagricultural)
Wingap-----	65	Grade two (good)
W. Water		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
115: Chanac-----	85	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Slow water movement	1.00 0.37
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	Somewhat limited Slow water movement Filtering capacity	0.41 0.01	Somewhat limited Flooding Slow water movement Filtering capacity	0.40 0.31 0.01
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	Not limited		Not limited	
138: Hesperia-----	85	Not limited		Not limited	
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	Very limited Filtering capacity Droughty	1.00 0.21	Very limited Filtering capacity Flooding Droughty	1.00 0.40 0.21
144: Calicreek-----	85	Somewhat limited Flooding Droughty Filtering capacity	0.60 0.56 0.01	Very limited Flooding Droughty Filtering capacity	1.00 0.56 0.01
145: Delano-----	85	Somewhat limited Slow water movement Too acid Filtering capacity	0.41 0.22 0.01	Somewhat limited Too acid Flooding Slow water movement Filtering capacity	0.77 0.40 0.31 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
146: Delano-----	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Flooding	0.40
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
147: Chanac-----	80	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slow water movement	0.37
148: Delano-----	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Flooding	0.40
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
149: Delano-----	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Flooding	0.40
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
				Flooding	0.40
153: Chanac-----	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Slow water movement	0.50	Slow water movement	0.37
154: Dam-----	100	Not rated		Not rated	
166: Delano-----	60	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Flooding	0.40
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Urban land-----	20	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
174: Xeric Torriorthents, silty-----	45	Very limited Slope Slow water movement Droughty	1.00 1.00 0.02	Very limited Slope Slow water movement Droughty	1.00 1.00 0.02
Calcic Haploxerepts	40	Very limited Slope Slow water movement Sodium content Salinity	1.00 0.43 0.02 0.01	Very limited Slope Slow water movement Sodium content	1.00 0.32 0.02
176: Elkhills, eroded----	75	Very limited Slope Sodium content Filtering capacity Salinity	1.00 0.02 0.01 0.01	Very limited Slope Sodium content Filtering capacity	1.00 0.02 0.01
177: Chanac-----	55	Very limited Slope Slow water movement Sodium content	1.00 0.41 0.04	Very limited Slope Slow water movement Sodium content	1.00 0.31 0.04
Torriorthents, stratified-----	25	Very limited Slope Sodium content Salinity Slow water movement Droughty	1.00 1.00 0.78 0.74 0.05	Very limited Sodium content Slope Slow water movement Droughty Filtering capacity	1.00 1.00 0.60 0.05 0.01
178: Delano-----	40	Very limited Low adsorption Slow water movement	1.00 0.41	Very limited Low adsorption Slow water movement	1.00 0.31
Cuyama-----	25	Very limited Slope Slow water movement Filtering capacity	1.00 0.41 0.01	Very limited Slope Slow water movement Filtering capacity	1.00 0.31 0.01
Premier-----	15	Very limited Slope	1.00	Very limited Slope	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
179: Torriorthents, stratified, eroded	50	Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00
		Slope	1.00	Slope	1.00
		Salinity	0.78	Slow water	0.60
		Slow water movement	0.74	movement	
		Droughty	0.05	Droughty	0.05
				Filtering capacity	0.01
Elkhills-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
184: Cuyama-----	85	Somewhat limited		Somewhat limited	
		Droughty	0.01	Flooding	0.40
				Droughty	0.01
185: Brecken-----	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Slow water movement	0.31
		Slow water movement	0.41	Filtering capacity	0.01
		Filtering capacity	0.01		
Cuyama-----	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Pleito-----	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00
186: Cuyama-----	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Slow water movement	0.41	Slow water movement	0.31
187: Trigo-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Chanac-----	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
188:					
Tweedy-----	50	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Droughty	0.06	Slow water movement	0.31
		Depth to bedrock	0.01	Droughty	0.06
		Filtering capacity	0.01	Depth to bedrock	0.01
Tollhouse-----	20	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Runoff	0.40	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Locobill-----	15	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.55	Slope	1.00
		Slow water movement	0.41	Droughty	0.55
		Depth to bedrock	0.10	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.10
189:					
Tweedy-----	40	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Walong-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.84	Slope	1.00
		Filtering capacity	0.01	Depth to bedrock	0.84
				Filtering capacity	0.01
192:					
Chanac-----	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
Pleito-----	30	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Slope	1.00	Slope	1.00
193:					
Chanac-----	50	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Slow water movement	0.31

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
193: Pleito-----	30	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
194: Pleito-----	40	Very limited Slow water movement Slope	1.00 0.04	Very limited Slow water movement Slope	1.00 0.04
Delvar-----	40	Very limited Slow water movement Slope Sodium content Salinity	1.00 0.04 0.02 0.01	Very limited Slow water movement Slope Sodium content	1.00 0.04 0.02
195: Centerville-----	60	Very limited Slow water movement Slope Runoff	1.00 1.00 0.40	Very limited Slow water movement Slope	1.00 1.00
Delvar-----	20	Very limited Slow water movement Slope Sodium content	1.00 1.00 0.02	Very limited Slow water movement Slope Sodium content	1.00 1.00 0.02
196: Exeter-----	75	Somewhat limited Depth to cemented pan Droughty Sodium content	0.84 0.79 0.02	Very limited Low adsorption Depth to cemented pan Droughty Sodium content	1.00 0.84 0.79 0.02
197: Nord-----	85	Not limited		Somewhat limited Flooding	0.40
198: Centerville-----	65	Very limited Slow water movement Runoff	1.00 0.40	Very limited Slow water movement	1.00
Delvar-----	20	Very limited Slow water movement	1.00	Very limited Slow water movement	1.00
199: Exeter-----	80	Somewhat limited Droughty Depth to cemented pan	0.08 0.01	Very limited Low adsorption Droughty Depth to cemented pan	1.00 0.08 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
200: Urban land-----	60	Not rated		Not rated	
Delano-----	25	Somewhat limited		Somewhat limited	
		Slow water movement	0.41	Flooding	0.40
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
201: Pleito-----	30	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Slope	1.00	Slope	1.00
Chanac-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
Raggulch-----	30	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Content of large stones	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
205: Pleito-----	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
Trigo-----	25	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Chanac-----	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
207: Whitewolf-----	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.84	Droughty	0.84
		Leaching	0.45	Flooding	0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
209: Whitewolf-----	85	Very limited Filtering capacity Droughty Flooding Leaching	 1.00 0.75 0.60 0.45	Very limited Filtering capacity Flooding Droughty	 1.00 1.00 0.75
210: Kernfork-----	85	Very limited Filtering capacity Depth to saturated zone Flooding Runoff Sodium content	 1.00 0.99 0.60 0.40 0.08	Very limited Filtering capacity Flooding Depth to saturated zone Sodium content	 1.00 1.00 0.99 0.08
212: Kernfork-----	80	Very limited Flooding Ponding Runoff Sodium content Filtering capacity	 1.00 1.00 0.40 0.08 0.01	Very limited Flooding Ponding Sodium content Filtering capacity	 1.00 1.00 0.08 0.01
213: Calicreek-----	85	Very limited Filtering capacity Flooding Droughty	 1.00 0.60 0.30	Very limited Filtering capacity Flooding Droughty	 1.00 1.00 0.30
215: Kelval-----	85	Very limited Filtering capacity Flooding	 1.00 0.60	Very limited Filtering capacity Flooding	 1.00 1.00
216: Inyo-----	60	Very limited Filtering capacity Flooding Droughty Leaching	 1.00 1.00 0.91 0.45	Very limited Filtering capacity Flooding Droughty	 1.00 1.00 0.91
Riverwash-----	25	Not rated		Not rated	
217: Whitewolf-----	55	Very limited Filtering capacity Flooding Droughty Leaching	 1.00 1.00 0.79 0.45	Very limited Filtering capacity Flooding Droughty	 1.00 1.00 0.79
Riverwash-----	25	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
220: Aquentes-----	40	Very limited Filtering capacity Ponding Depth to saturated zone Flooding Sodium content	1.00 1.00 1.00 1.00 0.98	Very limited Filtering capacity Ponding Depth to saturated zone Flooding Sodium content	1.00 1.00 1.00 1.00 0.98
Aquolls-----	35	Very limited Ponding Depth to saturated zone Flooding Sodium content Filtering capacity	1.00 1.00 1.00 0.98 0.01	Very limited Ponding Depth to saturated zone Flooding Sodium content Filtering capacity	1.00 1.00 1.00 0.98 0.01
Riverwash-----	15	Not rated		Not rated	
222: Kelval-----	85	Somewhat limited Flooding Filtering capacity	0.60 0.01	Very limited Flooding Filtering capacity	1.00 0.01
223: Kelval-----	70	Very limited Filtering capacity Content of large stones Droughty Flooding	1.00 1.00 0.94 0.60	Very limited Filtering capacity Flooding Droughty	1.00 1.00 0.94
224: Inyo-----	85	Very limited Filtering capacity Droughty Flooding Leaching	1.00 0.91 0.60 0.45	Very limited Filtering capacity Flooding Droughty	1.00 1.00 0.91
238: Cinco-----	85	Very limited Slope Filtering capacity Droughty Leaching	1.00 1.00 0.99 0.45	Very limited Filtering capacity Slope Droughty	1.00 1.00 0.99
240: Dune land-----	85	Very limited Filtering capacity Droughty Slope Leaching	1.00 1.00 1.00 0.45	Very limited Droughty Filtering capacity Low adsorption Slope	1.00 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
241: Inyo-----	75	Very limited Filtering capacity Droughty Leaching	1.00 0.91 0.45	Very limited Filtering capacity Droughty Flooding	1.00 0.91 0.40
242: Inyo-----	80	Very limited Filtering capacity Droughty Leaching Slope	1.00 0.91 0.45 0.16	Very limited Filtering capacity Droughty Flooding Slope	1.00 0.91 0.40 0.16
243: Kernfork, saline-sodic, occasionally flooded-----	85	Very limited Ponding Depth to saturated zone Sodium content Flooding Salinity	1.00 1.00 1.00 0.60 0.50	Very limited Ponding Depth to saturated zone Flooding Sodium content Salinity	1.00 1.00 1.00 1.00 1.00
245: Chollawell-----	80	Very limited Filtering capacity Droughty	1.00 0.55	Very limited Filtering capacity Droughty Flooding	1.00 0.55 0.40
246: Chollawell-----	80	Very limited Filtering capacity Droughty Slope	1.00 0.37 0.16	Very limited Filtering capacity Flooding Droughty Slope	1.00 0.40 0.37 0.16
247: Inyo-----	45	Very limited Filtering capacity Droughty Leaching Slope	1.00 0.91 0.45 0.16	Very limited Filtering capacity Droughty Flooding Slope	1.00 0.91 0.40 0.16
Tips-----	25	Very limited Filtering capacity Droughty Depth to bedrock Slope	1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Depth to bedrock Slope	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
249:					
Hoffman-----	65	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.16	Slope	1.00
				Depth to bedrock	0.16
Rock outcrop-----	20	Not rated		Not rated	
250:					
Hoffman-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.16	Slope	1.00
				Depth to bedrock	0.16
Tips-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
				Depth to bedrock	1.00
Pilotwell-----	15	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	0.47	Slope	1.00
		Depth to bedrock	0.01	Depth to bedrock	0.01
253:					
Sorrell-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00
Martee-----	25	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones on the surface	1.00	Low adsorption	1.00
		Droughty	1.00	Large stones on the surface	1.00
Rock outcrop-----	20	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
254:					
Martee-----	60	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Rock outcrop-----	25	Not rated		Not rated	
255:					
Kernfork, occasionally flooded-----	45	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Flooding	0.60	Flooding	1.00
		Runoff	0.40	Droughty	0.12
		Droughty	0.12	Depth to saturated zone	0.09
		Depth to saturated zone	0.09		
Kernfork, frequently flooded-----	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Droughty	0.25	Droughty	0.25
		Filtering capacity	0.01	Filtering capacity	0.01
257:					
Hoffman-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.16	Slope	1.00
				Depth to bedrock	0.16
Tips-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
				Depth to bedrock	1.00
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
259: Cowspring-----	80	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.71	Slope	1.00
				Depth to bedrock	0.71
260: Cowspring-----	45	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.71	Slope	1.00
				Depth to bedrock	0.71
Tips-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
				Depth to bedrock	1.00
Rock outcrop-----	15	Not rated		Not rated	
261: Blasingame-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.99	Slope	1.00
		Slow water movement	0.41	Depth to bedrock	0.99
		Large stones on the surface	0.18	Slow water movement	0.31
Arujo-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Content of large stones	0.19	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Cieneba-----	25	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
		Too acid	0.02	Too acid	0.07

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
264: Arujo-----	35	Very limited Slope Slow water movement Filtering capacity	 1.00 0.41 0.01	Very limited Low adsorption Slope Slow water movement Filtering capacity	 1.00 1.00 0.31 0.01
Walong-----	25	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.84 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.84 0.01
Tunis-----	20	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
265: Arujo-----	80	Somewhat limited Slow water movement Slope Filtering capacity	 0.41 0.16 0.01	Very limited Low adsorption Slow water movement Slope Filtering capacity	 1.00 0.31 0.16 0.01
266: Tunis-----	50	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Rock outcrop-----	30	Not rated		Not rated	
267: Cieneba-----	40	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.18	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.18

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
267: Vista-----	25	Very limited Slope Slow water movement Droughty Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.71 0.01	Very limited Low adsorption Slope Droughty Slow water movement Depth to bedrock	 1.00 1.00 1.00 0.99 0.71
Rock outcrop-----	15	Not rated		Not rated	
268: Tunis-----	35	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Tollhouse-----	25	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.98	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.98
Sorrell-----	20	Very limited Slope Content of large stones Large stones on the surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.06	Very limited Low adsorption Slope Large stones on the surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.06
269: Tollhouse-----	45	Very limited Slope Droughty Depth to bedrock Content of large stones Runoff	 1.00 1.00 1.00 1.00 0.40	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Sorrell-----	25	Very limited Slope Droughty Content of large stones Large stones on the surface Depth to bedrock	 1.00 1.00 1.00 1.00 0.71	Very limited Droughty Low adsorption Slope Large stones on the surface Depth to bedrock	 1.00 1.00 1.00 1.00 0.71
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
270:					
Locobill-----	35	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.80	Slope	1.00
		Slow water movement	0.41	Droughty	0.80
		Depth to bedrock	0.10	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.10
Backcanyon-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Content of large stones	0.19	Filtering capacity	0.01
Sesame-----	15	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.41	Slope	1.00
		Depth to bedrock	0.20	Droughty	0.41
		Filtering capacity	0.01	Depth to bedrock	0.20
				Filtering capacity	0.01
271:					
Walong-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.46	Slope	1.00
		Content of large stones	0.19	Depth to bedrock	0.46
		Filtering capacity	0.01	Filtering capacity	0.01
Tunis-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Rock outcrop-----	15	Not rated		Not rated	
272:					
Tollhouse-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
		Runoff	0.40	Filtering capacity	0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
272: Edmundston-----	30	Very limited Slope Droughty Filtering capacity	 1.00 0.13 0.01	Very limited Low adsorption Slope Droughty Filtering capacity	 1.00 1.00 0.13 0.01
Sorrell-----	20	Very limited Slope Content of large stones Large stones on the surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.95 0.01	Very limited Low adsorption Slope Large stones on the surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.95 0.01
274: Sesame-----	40	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 0.98 0.90 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.98 0.90 0.01
Tweedy-----	20	Very limited Slope Depth to bedrock Droughty Content of large stones Slow water movement	 1.00 0.90 0.89 0.76 0.41	Very limited Low adsorption Slope Depth to bedrock Droughty Slow water movement	 1.00 1.00 0.90 0.89 0.31
Rock outcrop-----	15	Not rated		Not rated	
275: Strahle-----	50	Very limited Slope Depth to bedrock Droughty Slow water movement Runoff	 1.00 1.00 1.00 0.41 0.40	Very limited Droughty Depth to bedrock Low adsorption Slope Slow water movement	 1.00 1.00 1.00 1.00 0.31
Sesame-----	15	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 0.94 0.90 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.94 0.90 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
275: Tweedy-----	15	Very limited Slope Depth to bedrock Droughty Slow water movement Filtering capacity	1.00 0.84 0.70 0.41 0.01	Very limited Low adsorption Slope Depth to bedrock Droughty Slow water movement	1.00 1.00 0.84 0.70 0.31
276: Tips-----	35	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.94	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Hoffman-----	30	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 0.98 0.01	Very limited Filtering capacity Low adsorption Slope Droughty Depth to bedrock	1.00 1.00 1.00 0.98 0.01
Cinco-----	15	Very limited Slope Filtering capacity Droughty Leaching	1.00 1.00 0.99 0.45	Very limited Filtering capacity Slope Droughty	1.00 1.00 0.99
277: Feethill-----	30	Very limited Slope Depth to bedrock Droughty Filtering capacity	1.00 0.46 0.27 0.01	Very limited Low adsorption Slope Depth to bedrock Droughty Filtering capacity	1.00 1.00 0.46 0.27 0.01
Vista-----	25	Very limited Slope Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.99 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.99 0.01
Walong-----	20	Very limited Slope Droughty Content of large stones Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.65 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.65 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
279:					
Strahle-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Runoff	0.40	Slow water movement	0.31
Rock outcrop-----	20	Not rated		Not rated	
Sesame-----	15	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.35	Slope	1.00
		Depth to bedrock	0.16	Droughty	0.35
		Filtering capacity	0.01	Depth to bedrock	0.16
				Filtering capacity	0.01
280:					
Tollhouse-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Martee-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Edmundston-----	15	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.71	Slope	1.00
		Filtering capacity	0.01	Droughty	0.71
				Filtering capacity	0.01
281:					
Havala-----	55	Somewhat limited		Somewhat limited	
		Content of large stones	0.76	Slow water movement	0.31
		Slow water movement	0.41	Slope	0.04
		Slope	0.04	Filtering capacity	0.01
		Filtering capacity	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
281: Walong-----	15	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.54 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.54 0.01
Kernfork-----	15	Very limited Depth to saturated zone Flooding Runoff Filtering capacity	 0.99 0.60 0.40 0.01	Very limited Flooding Depth to saturated zone Filtering capacity	 1.00 0.99 0.01
282: Tollhouse-----	35	Very limited Slope Droughty Depth to bedrock Large stones on the surface Runoff	 1.00 1.00 1.00 0.98 0.40	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.98
Sesame-----	25	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 0.92 0.80 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.92 0.80 0.01
Friant-----	20	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00
283: Tollhouse-----	35	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
283:					
Martee-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Rock outcrop-----	15	Not rated		Not rated	
284:					
Tollhouse-----	70	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00
		Runoff	0.40	Large stones on the surface	1.00
Rock outcrop-----	15	Not rated		Not rated	
285:					
Inyo-----	50	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.91	Flooding	1.00
		Flooding	0.60	Droughty	0.91
		Leaching	0.45		
Kelval-----	40	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	0.60	Flooding	1.00
		Droughty	0.01	Droughty	0.01
286:					
Tollhouse-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Tweedy-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.20	Slow water movement	0.31
		Droughty	0.20	Depth to bedrock	0.20
		Filtering capacity	0.01	Droughty	0.20

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
286: Locobill-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.55	Slope	1.00
		Slow water movement	0.41	Droughty	0.55
		Depth to bedrock	0.10	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.10
287: Tweedy-----	40	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Droughty	0.06	Slow water movement	0.31
		Depth to bedrock	0.01	Droughty	0.06
		Filtering capacity	0.01	Depth to bedrock	0.01
Strahle-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Runoff	0.40	Slow water movement	0.31
288: Sorrell-----	45	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00
Arujo-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Rock outcrop-----	15	Not rated		Not rated	
289: Erskine-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
289:					
Hyte-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Rock outcrop-----	20	Not rated		Not rated	
294:					
Edmundston-----	45	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.30	Slope	1.00
		Filtering capacity	0.01	Droughty	0.30
				Filtering capacity	0.01
Tweedy-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.29	Slow water movement	0.31
		Droughty	0.26	Depth to bedrock	0.29
		Filtering capacity	0.01	Droughty	0.26
Walong-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.84	Slope	1.00
		Filtering capacity	0.01	Depth to bedrock	0.84
				Filtering capacity	0.01
295:					
Tweedy-----	30	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.83	Slope	1.00
		Depth to bedrock	0.80	Droughty	0.83
		Slow water movement	0.41	Depth to bedrock	0.80
		Filtering capacity	0.01	Slow water movement	0.31
Tunis-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
295: Rankor-----	20	Very limited Slope Slow water movement Filtering capacity	 1.00 0.41 0.01	Very limited Low adsorption Slope Slow water movement Filtering capacity	 1.00 1.00 0.31 0.01
296: Arujo-----	40	Very limited Slope Content of large stones Slow water movement Filtering capacity	 1.00 1.00 0.41 0.01	Very limited Low adsorption Slope Slow water movement Filtering capacity	 1.00 1.00 0.31 0.01
Walong-----	30	Very limited Slope Content of large stones Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.97 0.01 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.97 0.01 0.01
Tunis-----	15	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
297: Walong-----	30	Very limited Slope Content of large stones Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.99 0.29 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.99 0.29 0.01
Blasingame-----	25	Very limited Slope Content of large stones Droughty Depth to bedrock Large stones on the surface	 1.00 1.00 0.26 0.20 0.18	Very limited Low adsorption Slope Droughty Depth to bedrock Large stones on the surface	 1.00 1.00 0.26 0.20 0.18
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
298:					
Arujo-----	35	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Feethill-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.01	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.01
				Filtering capacity	0.01
Sesame-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Depth to bedrock	0.65	Slope	1.00
		Droughty	0.57	Depth to bedrock	0.65
		Filtering capacity	0.01	Droughty	0.57
				Filtering capacity	0.01
299:					
Arujo-----	40	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Feethill-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.01	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.01
				Filtering capacity	0.01
Sesame-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Depth to bedrock	0.65	Slope	1.00
		Droughty	0.57	Depth to bedrock	0.65
		Filtering capacity	0.01	Droughty	0.57
				Filtering capacity	0.01
300:					
Stineway-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
		Runoff	0.40	Filtering capacity	0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
300: Kiscove-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Runoff	0.40	Slow water movement	0.31
301: Feethill-----	35	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.99	Slope	1.00
		Depth to bedrock	0.97	Droughty	0.99
		Slow water movement	0.41	Depth to bedrock	0.97
		Filtering capacity	0.01	Slow water movement	0.31
Vista-----	25	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Slope	1.00	Low adsorption	1.00
		Depth to bedrock	0.90	Slope	1.00
		Filtering capacity	0.01	Depth to bedrock	0.90
				Filtering capacity	0.01
Rock outcrop-----	15	Not rated		Not rated	
302: Feethill-----	30	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Depth to bedrock	0.80	Slope	1.00
		Droughty	0.57	Depth to bedrock	0.80
		Slow water movement	0.41	Droughty	0.57
				Slow water movement	0.31
Cibo-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	1.00	Slope	1.00
		Depth to bedrock	0.95	Slow water movement	1.00
		Droughty	0.89	Depth to bedrock	0.95
		Runoff	0.40	Droughty	0.89
Cieneba-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
303: Steuber-----	80	Somewhat limited		Very limited	
		Flooding	0.60	Flooding	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
304: Cibo-----	80	Very limited Slope	1.00	Very limited Low adsorption	1.00
		Slow water movement	1.00	Slope	1.00
		Runoff	0.40	Slow water movement	1.00
		Droughty	0.32	Droughty	0.32
		Depth to bedrock	0.10	Depth to bedrock	0.10
305: Chanac-----	45	Very limited Slope	1.00	Very limited Slope	1.00
		Slow water movement	0.41	Slow water movement	0.31
Pleito-----	20	Very limited Slope	1.00	Very limited Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00
Premier-----	15	Very limited Slope	1.00	Very limited Slope	1.00
306: Xerofluents, occasionally flooded-----	60	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
		Flooding	0.60	Flooding	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Droughty	0.09	Droughty	0.09
Riverwash-----	25	Not rated		Not rated	
307: Typic Xeropsamments	80	Very limited Filtering capacity	1.00	Very limited Filtering capacity	1.00
		Droughty	0.62	Flooding	1.00
		Flooding	0.60	Droughty	0.62
		Leaching	0.45		
308: Rankor-----	35	Very limited Slope	1.00	Very limited Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Edmundston-----	25	Very limited Slope	1.00	Very limited Low adsorption	1.00
		Droughty	0.42	Slope	1.00
		Filtering capacity	0.01	Droughty	0.42
				Filtering capacity	0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
308: Tweedy-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.01	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.01
				Filtering capacity	0.01
309: Rankor-----	35	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Filtering capacity	0.01	Slow water movement	0.31
				Filtering capacity	0.01
Edmundston-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.42	Slope	1.00
		Filtering capacity	0.01	Droughty	0.42
				Filtering capacity	0.01
Tweedy-----	20	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Depth to bedrock	0.01	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.01
				Filtering capacity	0.01
310: Stineway-----	50	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Content of large stones	0.76	Slope	1.00
		Runoff	0.40	Filtering capacity	0.01
Kiscove-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Runoff	0.40	Slow water movement	0.31

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
311: Xerorthents-----	50	Very limited Slope Droughty Depth to bedrock Content of large stones Runoff	 1.00 1.00 1.00 1.00 0.40	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.18
Rock outcrop-----	30	Not rated		Not rated	
312: Havala-----	85	Somewhat limited Content of large stones Slow water movement	 0.76 0.50	Somewhat limited Slow water movement	 0.37
313: Dumps-----	80	Not rated		Not rated	
314: Premier-----	45	Very limited Slope	 1.00	Very limited Slope	 1.00
Haplodurids-----	35	Very limited Slope Droughty Depth to cemented pan Runoff	 1.00 0.99 0.84 0.40	Very limited Low adsorption Slope Droughty Depth to cemented pan	 1.00 1.00 0.99 0.84
315: Premier-----	45	Not limited		Not limited	
Haplodurids-----	40	Somewhat limited Droughty Depth to cemented pan Runoff	 0.99 0.84 0.40	Very limited Low adsorption Droughty Depth to cemented pan	 1.00 0.99 0.84
316: Premier-----	85	Not limited		Not limited	
317: Premier-----	85	Not limited		Not limited	
320: Southlake-----	80	Very limited Content of large stones Slow water movement Droughty Slope Filtering capacity	 1.00 0.41 0.11 0.04 0.01	Somewhat limited Flooding Slow water movement Droughty Slope Filtering capacity	 0.40 0.31 0.11 0.04 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
325: Walong-----	75	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Depth to bedrock	0.71	Depth to bedrock	0.71
326: Walong-----	80	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Depth to bedrock	0.71	Depth to bedrock	0.71
330: Kernville-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Faycreek-----	25	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony----	55	Very limited		Somewhat limited	
		Content of large stones	1.00	Large stones on the surface	0.68
		Large stones on the surface	0.68	Flooding	0.40
		Slow water movement	0.41	Slow water movement	0.31
		Slope	0.16	Slope	0.16
		Filtering capacity	0.01	Filtering capacity	0.01
Goodale-----	20	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00
		Content of large stones	1.00	Flooding	1.00
		Flooding	0.60	Cobble content	0.24
		Leaching	0.45	Slope	0.16

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
352:					
Goodale-----	65	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00
		Content of large stones	1.00	Flooding	1.00
		Cobble content	0.99	Cobble content	0.99
		Flooding	0.60		
Riverwash-----	20	Not rated		Not rated	
360:					
Kernville, bouldery	40	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00
		Slope	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Hogeye-----	30	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Content of large stones	1.00	Low adsorption	1.00
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.54	Depth to bedrock	0.54
		Large stones on the surface	0.02	Large stones on the surface	0.02
Southlake-----	15	Very limited		Somewhat limited	
		Content of large stones	1.00	Large stones on the surface	0.68
		Large stones on the surface	0.68	Flooding	0.40
		Slow water movement	0.41	Slow water movement	0.31
		Slope	0.16	Slope	0.16
		Filtering capacity	0.01	Filtering capacity	0.01
380:					
Delvar-----	40	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Slope	1.00	Slope	1.00
Pleito-----	40	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Slope	1.00	Slope	1.00
407:					
Centerville-----	90	Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Salinity	0.01	Flooding	0.20
				Salinity	0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
410: Stineway-----	40	Very limited Droughty Depth to bedrock Slope Content of large stones Runoff	 1.00 1.00 1.00 0.76 0.40	Very limited Droughty Low adsorption Depth to bedrock Slope Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Kiscove-----	25	Very limited Slope Depth to bedrock Droughty Slow water movement Runoff	 1.00 1.00 1.00 0.41 0.40	Very limited Droughty Depth to bedrock Low adsorption Slope Slow water movement	 1.00 1.00 1.00 1.00 0.31
Urban land-----	15	Not rated		Not rated	
411: Delvar-----	85	Very limited Slow water movement Sodium content Salinity	 1.00 0.32 0.01	Very limited Slow water movement Sodium content Flooding	 1.00 0.32 0.20
412: Chollawell-----	70	Somewhat limited Droughty Slope Filtering capacity	 0.52 0.16 0.01	Somewhat limited Droughty Flooding Slope Filtering capacity	 0.52 0.40 0.16 0.01
Urban land-----	15	Not rated		Not rated	
417: Southlake-----	40	Very limited Content of large stones Large stones on the surface Slow water movement Slope Filtering capacity	 1.00 0.68 0.41 0.16 0.01	Somewhat limited Large stones on the surface Flooding Slow water movement Slope Filtering capacity	 0.68 0.40 0.31 0.16 0.01
Southlake, gravelly	20	Somewhat limited Flooding Slow water movement Slope Droughty Filtering capacity	 0.60 0.41 0.16 0.10 0.01	Very limited Flooding Slow water movement Slope Droughty Filtering capacity	 1.00 0.31 0.16 0.10 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
417: Goodale-----	15	Very limited Filtering capacity Droughty Content of large stones Flooding Leaching	 1.00 1.00 1.00 0.60 0.45	Very limited Droughty Filtering capacity Flooding Cobble content Slope	 1.00 1.00 1.00 0.24 0.16
Urban land-----	15	Not rated		Not rated	
420: Southlake-----	65	Very limited Content of large stones Slow water movement Droughty Slope Filtering capacity	 1.00 0.41 0.11 0.04 0.01	Somewhat limited Flooding Slow water movement Droughty Slope Filtering capacity	 0.40 0.31 0.11 0.04 0.01
Urban land-----	15	Not rated		Not rated	
422: Kelval-----	70	Somewhat limited Flooding Filtering capacity	 0.60 0.01	Very limited Flooding Filtering capacity	 1.00 0.01
Urban land-----	15	Not rated		Not rated	
423: Auberry-----	45	Very limited Slope Slow water movement Too acid	 1.00 0.50 0.11	Very limited Low adsorption Slope Too acid Slow water movement	 1.00 1.00 0.42 0.37
Crouch-----	15	Very limited Slope Too acid	 1.00 0.03	Very limited Low adsorption Slope Too acid	 1.00 1.00 0.14
Rock outcrop-----	15	Not rated		Not rated	
424: Inyo-----	70	Very limited Filtering capacity Droughty Flooding Leaching	 1.00 0.91 0.60 0.45	Very limited Filtering capacity Flooding Droughty	 1.00 1.00 0.91
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
430: Friant-----	70	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
432: Alberti, gravelly---	70	Very limited Droughty Slow water movement Depth to bedrock Slope Content of large stones	 1.00 1.00 1.00 1.00 0.94	Very limited Droughty Low adsorption Depth to bedrock Slow water movement Slope	 1.00 1.00 1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
441: Inyo-----	65	Very limited Filtering capacity Droughty Leaching	 1.00 0.91 0.45	Very limited Filtering capacity Droughty Flooding	 1.00 0.91 0.40
Urban land-----	15	Not rated		Not rated	
442: Inyo-----	70	Very limited Filtering capacity Droughty Slope Leaching	 1.00 0.91 0.63 0.45	Very limited Filtering capacity Droughty Slope Flooding	 1.00 0.91 0.63 0.40
Urban land-----	15	Not rated		Not rated	
445: Chollawell-----	70	Very limited Filtering capacity Droughty	 1.00 0.55	Very limited Filtering capacity Droughty Flooding	 1.00 0.55 0.40
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
450: Southlake, stony----	45	Very limited		Somewhat limited	
		Content of large stones	1.00	Large stones on the surface	0.68
		Large stones on the surface	0.68	Flooding	0.40
		Slow water movement	0.41	Slow water movement	0.31
		Slope	0.16	Slope	0.16
		Filtering capacity	0.01	Filtering capacity	0.01
Goodale-----	15	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00
		Content of large stones	1.00	Flooding	1.00
		Flooding	0.60	Cobble content	0.24
		Leaching	0.45	Slope	0.16
Urban land-----	15	Not rated		Not rated	
460: Kernville, bouldery	30	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00
		Slope	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
Hogeye-----	25	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Content of large stones	1.00	Low adsorption	1.00
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.54	Depth to bedrock	0.54
		Large stones on the surface	0.02	Large stones on the surface	0.02
Southlake-----	15	Very limited		Somewhat limited	
		Content of large stones	1.00	Large stones on the surface	0.68
		Large stones on the surface	0.68	Flooding	0.40
		Slow water movement	0.41	Slow water movement	0.31
		Slope	0.16	Slope	0.16
		Filtering capacity	0.01	Filtering capacity	0.01
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
465: Arujo-----	65	Somewhat limited		Very limited	
		Slow water movement	0.41	Low adsorption	1.00
		Slope	0.16	Slow water movement	0.31
		Filtering capacity	0.01	Slope	0.16
				Filtering capacity	0.01
Urban land-----	15	Not rated		Not rated	
485: Inyo-----	45	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.91	Flooding	1.00
		Flooding	0.60	Droughty	0.91
		Leaching	0.45		
Kelval-----	30	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	0.60	Flooding	1.00
		Droughty	0.01	Droughty	0.01
Urban land-----	15	Not rated		Not rated	
488: Tweedy-----	35	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Droughty	0.06	Slow water movement	0.31
		Depth to bedrock	0.01	Droughty	0.06
		Filtering capacity	0.01	Depth to bedrock	0.01
Tollhouse-----	20	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Runoff	0.40	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Locobill-----	15	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.55	Slope	1.00
		Slow water movement	0.41	Droughty	0.55
		Depth to bedrock	0.10	Slow water movement	0.31
		Filtering capacity	0.01	Depth to bedrock	0.10
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
501:					
Hyte-----	35	Very limited Slope Droughty Depth to bedrock Content of large stones Filtering capacity	 1.00 1.00 1.00 0.76 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Erskine-----	25	Very limited Slope Droughty Depth to bedrock Content of large stones Large stones on the surface	 1.00 1.00 1.00 1.00 0.02	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.02
Sorrell-----	25	Very limited Slope Large stones on the surface Content of large stones Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.06	Very limited Low adsorption Slope Large stones on the surface Droughty Depth to bedrock	 1.00 1.00 1.00 0.99 0.06
503:					
Tips-----	40	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	 1.00 1.00 1.00 1.00 0.94	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	 1.00 1.00 1.00 1.00 1.00
Erskine-----	30	Very limited Slope Droughty Depth to bedrock Large stones on the surface Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
505:					
Chollawell-----	85	Very limited Filtering capacity Slope Droughty	 1.00 0.84 0.37	Very limited Filtering capacity Slope Flooding Droughty	 1.00 0.84 0.40 0.37

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
507: Xyno-----	40	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.19	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Canebrake-----	30	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Pilotwell-----	15	Very limited Slope Filtering capacity Droughty Content of large stones Depth to bedrock	1.00 1.00 1.00 0.47 0.01	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.01
508: Pilotwell-----	45	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 0.86 0.47	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.86
Xyno-----	25	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
509: Xyno-----	40	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
509:					
Faycreek-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
Rock outcrop-----	15	Not rated		Not rated	
510:					
Xyno-----	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
Canebrake-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
Pilotwell, bouldery	15	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	0.84	Slope	1.00
		Content of large stones	0.47	Depth to bedrock	0.84
512:					
Chollawell, cobbly substratum-----	60	Somewhat limited		Somewhat limited	
		Droughty	0.52	Droughty	0.52
		Slope	0.16	Flooding	0.40
		Filtering capacity	0.01	Slope	0.16
				Filtering capacity	0.01
Chollawell, gravelly	15	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.37	Flooding	0.40
				Droughty	0.37

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
514: Chollawell-----	50	Very limited Filtering capacity Droughty Slope	 1.00 0.37 0.16	Very limited Filtering capacity Flooding Droughty Slope	 1.00 0.40 0.37 0.16
Inyo-----	35	Very limited Filtering capacity Droughty Leaching Slope	 1.00 0.90 0.45 0.16	Very limited Filtering capacity Droughty Flooding Slope	 1.00 0.90 0.40 0.16
515: Scodie-----	35	Very limited Slope Filtering capacity Depth to bedrock Droughty Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	 1.00 1.00 1.00 1.00 1.00
Canebrake-----	30	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	 1.00 1.00 1.00 1.00 1.00
Xyno-----	20	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	 1.00 1.00 1.00 1.00 0.19	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	 1.00 1.00 1.00 1.00 1.00
516: Xyno-----	45	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	 1.00 1.00 1.00 1.00 0.76	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	

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Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
516: Canebrake-----	20	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
517: Southlake-----	55	Very limited		Somewhat limited	
		Content of large stones	1.00	Flooding	0.40
		Slow water movement	0.41	Slow water movement	0.31
		Large stones on the surface	0.18	Large stones on the surface	0.18
		Slope	0.16	Slope	0.16
		Filtering capacity	0.01	Filtering capacity	0.01
Southlake, gravelly	20	Somewhat limited		Very limited	
		Flooding	0.60	Flooding	1.00
		Slow water movement	0.41	Slow water movement	0.31
		Large stones on the surface	0.18	Large stones on the surface	0.18
		Slope	0.16	Slope	0.16
		Droughty	0.10	Droughty	0.10
Goodale-----	15	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00
		Content of large stones	1.00	Flooding	1.00
		Flooding	0.60	Cobble content	0.24
		Leaching	0.45	Slope	0.16
518: Backcanyon-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Runoff	0.40	Depth to bedrock	1.00
		Content of large stones	0.19	Filtering capacity	0.01
Rock outcrop-----	30	Not rated		Not rated	
520: Kernville-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
520: Hogeye-----	20	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 0.54 0.02	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 0.54 0.02
Rock outcrop-----	15	Not rated		Not rated	
523: Kernville, bouldery	45	Very limited Slope Filtering capacity Depth to bedrock Droughty Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	 1.00 1.00 1.00 1.00 1.00
Faycreek-----	20	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	 1.00 1.00 1.00 1.00 0.76	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	 1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
525: Hungrygulch-----	35	Very limited Slope Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.80 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.80 0.01
Kernville-----	30	Very limited Slope Filtering capacity Depth to bedrock Droughty Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	 1.00 1.00 1.00 1.00 1.00
Hogeye-----	20	Very limited Slope Droughty Content of large stones Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 0.54 0.02	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 0.54 0.02

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
530: Alberti, cobbly----	45	Very limited Slope Droughty Slow water movement Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.76	Very limited Droughty Low adsorption Slope Depth to bedrock Slow water movement	1.00 1.00 1.00 1.00 1.00
Alberti, gravelly---	40	Very limited Slope Droughty Slow water movement Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.94	Very limited Droughty Low adsorption Slope Depth to bedrock Slow water movement	1.00 1.00 1.00 1.00 1.00
531: Tweedy-----	40	Very limited Slope Slow water movement Depth to bedrock Droughty Filtering capacity	1.00 0.41 0.05 0.04 0.01	Very limited Low adsorption Slope Slow water movement Depth to bedrock Droughty	1.00 1.00 0.31 0.05 0.04
Erskine-----	25	Very limited Slope Droughty Depth to bedrock Large stones on the surface Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Low adsorption Slope Depth to bedrock Large stones on the surface	1.00 1.00 1.00 1.00 1.00
Alberti, gravelly---	20	Very limited Slope Droughty Slow water movement Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.94	Very limited Droughty Low adsorption Slope Depth to bedrock Slow water movement	1.00 1.00 1.00 1.00 1.00
532: Alberti, gravelly---	80	Very limited Droughty Slow water movement Depth to bedrock Slope Content of large stones	1.00 1.00 1.00 1.00 0.94	Very limited Droughty Low adsorption Depth to bedrock Slow water movement Slope	1.00 1.00 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
540: Canebrake-----	60	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Lachim-----	20	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 0.80	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.80
541: Canebrake-----	45	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Lachim-----	20	Very limited Slope Filtering capacity Droughty Depth to bedrock	1.00 1.00 1.00 0.80	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.80
Rock outcrop-----	15	Not rated		Not rated	
543: Wortley-----	45	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01
Indiano-----	25	Very limited Slope Droughty Depth to bedrock Slow water movement Cobble content	1.00 0.89 0.65 0.41 0.12	Very limited Low adsorption Slope Droughty Depth to bedrock Slow water movement	1.00 1.00 0.89 0.65 0.31
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
544:					
Xeric Haplargids----	60	Very limited		Very limited	
		Content of large stones	1.00	Low adsorption	1.00
		Slope	1.00	Slope	1.00
		Droughty	0.95	Droughty	0.95
		Slow water movement	0.41	Flooding	0.40
				Slow water movement	0.31
Lithic Xeric Haplargids-----	20	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Runoff	0.40	Slope	1.00
				Flooding	0.40
545:					
Sacatar-----	50	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Low adsorption	1.00
		Droughty	0.98	Slope	1.00
		Depth to bedrock	0.16	Droughty	0.98
				Depth to bedrock	0.16
Canebrake-----	30	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Slope	1.00
549:					
Tunawee-----	60	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
Rock outcrop-----	25	Not rated		Not rated	
550:					
Kenypeak-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Content of large stones	1.00	Slope	1.00
		Runoff	0.40		
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
551: Tunawee-----	70	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
552: Kenypeak-----	60	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Depth to bedrock	1.00
		Runoff	0.40		
Torriorthetic Haploxerolls-----	25	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	1.00	Slope	1.00
		Content of large stones	1.00	Droughty	1.00
		Runoff	0.40	Large stones on the surface	0.18
		Large stones on the surface	0.18	Depth to bedrock	0.16
553: Tibbcreek-----	75	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Slow water movement	0.41	Slope	1.00
				Slow water movement	0.31
554: Deerspring-----	85	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Flooding	0.60	Flooding	1.00
		Sodium content	0.02	Sodium content	0.02
555: Cumulic Endoaquolls, frigid-----	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
556: Toll-----	80	Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.95	Droughty	0.95
		Leaching	0.45	Flooding	0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
557: Scodie-----	35	Very limited Slope Filtering capacity Depth to bedrock Droughty Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	1.00 1.00 1.00 1.00 1.00
Canebrake-----	25	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Deadfoot-----	20	Very limited Slope Filtering capacity Droughty Content of large stones Large stones on the surface	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Large stones on the surface	1.00 1.00 1.00 1.00 1.00
558: Indiano-----	60	Very limited Slope Droughty Depth to bedrock Slow water movement Filtering capacity	1.00 0.89 0.65 0.41 0.01	Very limited Low adsorption Slope Droughty Depth to bedrock Slow water movement	1.00 1.00 0.89 0.65 0.31
Wortley-----	20	Very limited Slope Droughty Depth to bedrock Runoff Filtering capacity	1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Slope Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01
560: Sacatar-----	30	Very limited Filtering capacity Slope Droughty Depth to bedrock	1.00 1.00 0.90 0.16	Very limited Filtering capacity Low adsorption Slope Droughty Depth to bedrock	1.00 1.00 1.00 0.90 0.16

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
560: Wortley-----	30	Very limited Droughty Depth to bedrock Slope Runoff Filtering capacity	 1.00 1.00 1.00 0.40 0.01	Very limited Droughty Low adsorption Depth to bedrock Slope Filtering capacity	 1.00 1.00 1.00 1.00 0.01
Calpine-----	20	Very limited Filtering capacity Slope	 1.00 0.16	Very limited Filtering capacity Slope	 1.00 0.16
561: Scodie-----	30	Very limited Filtering capacity Depth to bedrock Droughty Slope Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	 1.00 1.00 1.00 1.00 1.00
Sacatar-----	25	Very limited Filtering capacity Slope Droughty Depth to bedrock	 1.00 1.00 0.90 0.16	Very limited Filtering capacity Low adsorption Slope Droughty Depth to bedrock	 1.00 1.00 1.00 0.90 0.16
Canebrake-----	20	Very limited Filtering capacity Droughty Depth to bedrock Slope Content of large stones	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Depth to bedrock Slope	 1.00 1.00 1.00 1.00 1.00
562: Deerspring, partially drained--	85	Very limited Flooding Sodium content Filtering capacity	 1.00 0.32 0.01	Very limited Flooding Sodium content Filtering capacity	 1.00 0.32 0.01
570: Deadfoot-----	40	Very limited Slope Filtering capacity Droughty Content of large stones Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Large stones on the surface	 1.00 1.00 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
570: Scodie-----	20	Very limited Slope Filtering capacity Depth to bedrock Droughty Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Depth to bedrock Low adsorption Slope	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
590: Xyno-----	35	Very limited Filtering capacity Droughty Depth to bedrock Slope Content of large stones	1.00 1.00 1.00 1.00 0.76	Very limited Droughty Filtering capacity Low adsorption Depth to bedrock Slope	1.00 1.00 1.00 1.00 1.00
Canebrake-----	25	Very limited Filtering capacity Droughty Depth to bedrock Slope Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Depth to bedrock Slope	1.00 1.00 1.00 1.00 1.00
Pilotwell-----	20	Very limited Filtering capacity Droughty Slope Depth to bedrock Content of large stones	1.00 1.00 1.00 0.80 0.47	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 0.80
591: Xyno-----	50	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 0.76	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Canebrake-----	20	Very limited Slope Filtering capacity Droughty Depth to bedrock Content of large stones	1.00 1.00 1.00 1.00 1.00	Very limited Droughty Filtering capacity Low adsorption Slope Depth to bedrock	1.00 1.00 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
599: Rock outcrop-----	80	Not rated		Not rated	
610: Hyte-----	40	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Content of large stones	0.76	Slope	1.00
		Filtering capacity	0.01	Filtering capacity	0.01
Erskine-----	35	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Low adsorption	1.00
		Slope	1.00	Depth to bedrock	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00
		Content of large stones	1.00	Slope	1.00
650: Stineway-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.76	Depth to bedrock	1.00
		Runoff	0.40	Large stones on the surface	0.18
Kiscove-----	30	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Slow water movement	0.41	Slope	1.00
		Runoff	0.40	Slow water movement	0.31
Rock outcrop-----	15	Not rated		Not rated	
3250: Jawbone-----	50	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Low adsorption	1.00
		Runoff	0.40	Slope	1.00
		Filtering capacity	0.31	Filtering capacity	0.31
Jawbone, moderately deep-----	40	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Low adsorption	1.00
		Runoff	0.40	Slope	1.00
		Filtering capacity	0.31	Filtering capacity	0.31
		Depth to bedrock	0.16	Depth to bedrock	0.16

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
4432:					
Koehn, occasionally flooded-----	70	Somewhat limited		Very limited	
		Droughty	0.85	Flooding	1.00
		Flooding	0.60	Droughty	0.85
		Leaching	0.45	Filtering	0.31
		Filtering capacity	0.31	capacity	
Koehn, frequently flooded-----	15	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Droughty	0.85	Droughty	0.85
		Leaching	0.45	Filtering	0.31
		Filtering capacity	0.31	capacity	
5201:					
Wingap-----	55	Very limited		Very limited	
		Slope	1.00	Low adsorption	1.00
		Droughty	0.74	Slope	1.00
		Filtering capacity	0.31	Droughty	0.74
				Filtering capacity	0.31
Pinyonpeak-----	30	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00
		Slope	1.00	Low adsorption	1.00
		Runoff	0.40	Slope	1.00
5210:					
Grandora-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.99	Droughty	0.99
		Leaching	0.45	Filtering	0.31
		Filtering capacity	0.31	capacity	
Grandora, warm-----	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.99	Droughty	0.99
		Leaching	0.45	Filtering	0.31
		Filtering capacity	0.31	capacity	
Pinyonpeak-----	30	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00
		Slope	1.00	Low adsorption	1.00
		Runoff	0.40	Slope	1.00
6001:					
Goldpeak-----	55	Somewhat limited		Somewhat limited	
		Filtering capacity	0.31	Filtering capacity	0.31

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9a.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
6001:					
Pinyonpeak-----	15	Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00
		Slope	1.00	Low adsorption	1.00
		Runoff	0.40	Slope	1.00
Wingap-----	15	Somewhat limited		Very limited	
		Droughty	0.74	Low adsorption	1.00
		Filtering capacity	0.31	Droughty	0.74
		Slope	0.16	Filtering capacity	0.31
				Slope	0.16
W:					
Water-----	100	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
115: Chanac-----	85	Very limited Too steep for surface application	1.00	Very limited Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Slow water movement	0.37		
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	Somewhat limited Slow water movement	0.31	Very limited Seepage	1.00
		Filtering capacity	0.01	Flooding	0.40
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	Somewhat limited Too steep for surface application	0.68	Very limited Seepage	1.00
138: Hesperia-----	85	Not limited		Very limited Seepage	1.00
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Droughty	0.21	Flooding	0.40
144: Calicreek-----	85	Somewhat limited Flooding	0.60	Very limited Flooding	1.00
		Droughty	0.56	Seepage	1.00
		Filtering capacity	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
145: Delano-----	85	Somewhat limited		Very limited	
		Too acid	0.77	Seepage	1.00
		Slow water movement	0.31	Too acid	0.77
		Filtering capacity	0.01	Flooding	0.40
146: Delano-----	80	Somewhat limited		Very limited	
		Slow water movement	0.31	Seepage	1.00
		Filtering capacity	0.01	Flooding	0.40
147: Chanac-----	80	Somewhat limited		Very limited	
		Too steep for surface application	0.68	Seepage	1.00
		Slow water movement	0.37		
148: Delano-----	85	Somewhat limited		Very limited	
		Slow water movement	0.31	Seepage	1.00
		Filtering capacity	0.01	Flooding	0.40
149: Delano-----	85	Somewhat limited		Very limited	
		Too steep for surface application	0.92	Seepage	1.00
		Slow water movement	0.31	Flooding	0.40
		Too steep for sprinkler application	0.02	Too steep for surface application	0.06
		Filtering capacity	0.01		
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too steep for surface application	0.08	Flooding	0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
153: Chanac-----	85	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.78 0.37	Very limited Seepage Too steep for surface application	1.00 1.00
154: Dam-----	100	Not rated		Not rated	
166: Delano-----	60	Somewhat limited Slow water movement Filtering capacity	0.31 0.01	Very limited Seepage Flooding	1.00 0.40
Urban land-----	20	Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Droughty	1.00 1.00 1.00 0.02	Very limited Too steep for surface application Seepage	1.00 1.00
Calcic Haploxerepts	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Sodium content	1.00 1.00 0.32 0.02	Very limited Too steep for surface application Seepage Sodium content	1.00 0.67 0.02
176: Elkhills, eroded----	75	Very limited Too steep for surface application Too steep for sprinkler application Sodium content Filtering capacity	1.00 1.00 0.02 0.01	Very limited Seepage Too steep for surface application Sodium content	1.00 1.00 0.02

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
177: Chanac-----	55	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Sodium content	1.00 1.00 0.31 0.04	Very limited Seepage Too steep for surface application Sodium content	1.00 1.00 0.04
Torriorthents, stratified-----	25	Very limited Too steep for surface application Too steep for sprinkler application Sodium content Slow water movement Droughty	1.00 1.00 1.00 0.60 0.05	Very limited Sodium content Seepage Too steep for surface application	1.00 1.00 1.00
178: Delano-----	40	Very limited Low adsorption Too steep for surface application Slow water movement Too steep for sprinkler application	1.00 0.92 0.31 0.02	Very limited Seepage Low adsorption Too steep for surface application	1.00 1.00 0.06
Cuyama-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application	1.00 1.00
Premier-----	15	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
179: Torriorthents, stratified, eroded	50	Very limited		Very limited	
		Too steep for surface application	1.00	Sodium content	1.00
		Sodium content	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	0.60		
		Droughty	0.05		
Elkhills-----	30	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01		
184: Cuyama-----	85	Somewhat limited		Very limited	
		Too steep for surface application	0.08	Seepage	1.00
		Droughty	0.01	Flooding	0.40
185: Brecken-----	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	0.31	Cobble content	0.99
		Filtering capacity	0.01	Stone content	0.02
Cuyama-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
185: Pleito-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
186: Cuyama-----	85	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 0.78 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
187: Trigo-----	50	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Chanac-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
188: Tweedy-----	50	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Droughty Depth to bedrock	1.00 1.00 0.31 0.06 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
188: Tollhouse-----	20	Very limited Droughty Too steep for surface application Depth to bedrock Too steep for sprinkler application Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Locobill-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement Depth to bedrock	 1.00 1.00 0.55 0.31 0.10	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
189: Tweedy-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	 1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 0.99
Walong-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.84 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
192: Chanac-----	55	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	 1.00 1.00 0.31	Very limited Too steep for surface application Seepage	 1.00 0.69

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
192: Pleito-----	30	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
193: Chanac-----	50	Somewhat limited Slow water movement Too steep for surface application	0.31 0.02	Very limited Seepage	1.00
Pleito-----	30	Very limited Slow water movement Too steep for surface application	1.00 0.02	Very limited Seepage	1.00
194: Pleito-----	40	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application	1.00 1.00 0.22	Somewhat limited Too steep for surface application	0.50
Delvar-----	40	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application Sodium content	1.00 1.00 0.22 0.02	Somewhat limited Seepage Too steep for surface application Sodium content	0.69 0.50 0.02
195: Centerville-----	60	Very limited Too steep for surface application Slow water movement Too steep for sprinkler application	1.00 1.00 1.00	Very limited Too steep for surface application	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
195: Delvar-----	20	Very limited Too steep for surface application	1.00	Very limited Too steep for surface application	1.00
		Slow water movement	1.00	Seepage	0.69
		Too steep for sprinkler application	1.00	Sodium content	0.02
		Sodium content	0.02		
196: Exeter-----	75	Somewhat limited Depth to cemented pan	0.84	Very limited Seepage	1.00
		Droughty	0.79	Depth to cemented pan	1.00
		Too steep for surface application	0.68	Sodium content	0.02
		Sodium content	0.02		
197: Nord-----	85	Not limited		Very limited Seepage	1.00
				Flooding	0.40
198: Centerville-----	65	Very limited Slow water movement	1.00	Not limited	
		Too steep for surface application	0.68		
Delvar-----	20	Very limited Slow water movement	1.00	Somewhat limited Seepage	0.69
		Too steep for surface application	0.68		
199: Exeter-----	80	Somewhat limited Droughty	0.08	Very limited Seepage	1.00
		Depth to cemented pan	0.01	Depth to cemented pan	1.00
200: Urban land-----	60	Not rated		Not rated	
Delano-----	25	Somewhat limited Slow water movement	0.31	Very limited Seepage	1.00
		Filtering capacity	0.01	Flooding	0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
201: Pleito-----	30	Very limited Slow water movement Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
Chanac-----	30	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
Raggulch-----	30	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application Sodium content	1.00 1.00 1.00 0.02
205: Pleito-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.31	Very limited Too steep for surface application Seepage	1.00 0.69
Trigo-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
205: Chanac-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
207: Whitewolf-----	85	Very limited Filtering capacity Droughty	1.00 0.84	Very limited Seepage Flooding	1.00 0.40
209: Whitewolf-----	85	Very limited Filtering capacity Droughty Flooding	1.00 0.75 0.60	Very limited Flooding Seepage	1.00 1.00
210: Kernfork-----	85	Very limited Filtering capacity Depth to saturated zone Flooding Sodium content	1.00 0.99 0.60 0.08	Very limited Flooding Seepage Depth to saturated zone Sodium content	1.00 1.00 0.99 0.08
212: Kernfork-----	80	Very limited Flooding Ponding Sodium content Filtering capacity	1.00 1.00 0.08 0.01	Very limited Flooding Seepage Ponding Sodium content	1.00 1.00 1.00 0.08
213: Calicreek-----	85	Very limited Filtering capacity Flooding Droughty	1.00 0.60 0.30	Very limited Flooding Seepage	1.00 1.00
215: Kelval-----	85	Very limited Filtering capacity Flooding	1.00 0.60	Very limited Flooding Seepage	1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
216:					
Inyo-----	60	Very limited Filtering capacity Flooding Droughty	1.00 1.00 0.91	Very limited Flooding Seepage	1.00 1.00
Riverwash-----	25	Not rated		Not rated	
217:					
Whitewolf-----	55	Very limited Filtering capacity Flooding Droughty	1.00 1.00 0.79	Very limited Flooding Seepage	1.00 1.00
Riverwash-----	25	Not rated		Not rated	
220:					
Aquents-----	40	Very limited Filtering capacity Ponding Depth to saturated zone Flooding Sodium content	1.00 1.00 1.00 1.00 0.98	Very limited Flooding Seepage Ponding Depth to saturated zone Sodium content	1.00 1.00 1.00 0.98
Aquolls-----	35	Very limited Ponding Depth to saturated zone Flooding Sodium content Filtering capacity	1.00 1.00 1.00 0.98 0.01	Very limited Flooding Seepage Ponding Depth to saturated zone Sodium content	1.00 1.00 1.00 1.00 0.98
Riverwash-----	15	Not rated		Not rated	
222:					
Kelval-----	85	Somewhat limited Flooding Filtering capacity	0.60 0.01	Very limited Flooding Seepage	1.00 1.00
223:					
Kelval-----	70	Very limited Filtering capacity Droughty Flooding	1.00 0.94 0.60	Very limited Flooding Seepage	1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
224: Inyo-----	85	Very limited Filtering capacity Droughty Flooding Too steep for surface application	1.00 0.91 0.60 0.32	Very limited Flooding Seepage	1.00 1.00
238: Cinco-----	85	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty	1.00 1.00 1.00 0.99	Very limited Seepage Too steep for surface application	1.00 1.00
240: Dune land-----	85	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
241: Inyo-----	75	Very limited Filtering capacity Droughty	1.00 0.91	Very limited Seepage Flooding	1.00 0.40
242: Inyo-----	80	Very limited Filtering capacity Too steep for surface application Droughty Too steep for sprinkler application	1.00 1.00 0.91 0.40	Very limited Seepage Too steep for surface application Flooding	1.00 0.78 0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
243: Kernfork, saline-sodic, occasionally flooded-----	85	Very limited Ponding Depth to saturated zone Sodium content Salinity Flooding	 1.00 1.00 1.00 1.00 0.60	Very limited Flooding Seepage Ponding Depth to saturated zone Sodium content	 1.00 1.00 1.00 1.00 1.00
245: Chollawell-----	80	Very limited Filtering capacity Droughty Too steep for surface application	 1.00 0.55 0.08	Very limited Seepage Flooding	 1.00 0.40
246: Chollawell-----	80	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty	 1.00 1.00 0.40 0.37	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40
247: Inyo-----	45	Very limited Filtering capacity Too steep for surface application Droughty Too steep for sprinkler application	 1.00 1.00 0.91 0.40	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40
Tips-----	25	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
249: Hoffman-----	65	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.16	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
250: Hoffman-----	40	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.16	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Tips-----	30	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Pilotwell-----	15	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
253: Sorrell-----	40	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Large stones on the surface	1.00 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Depth to bedrock Stone content Too acid	1.00 1.00 1.00 0.71 0.14
Martee-----	25	Very limited Droughty Filtering capacity Depth to bedrock Large stones on the surface Too steep for surface application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
254: Martee-----	60	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.12
Rock outcrop-----	25	Not rated		Not rated	
255: Kernfork, occasionally flooded-----	45	Very limited Ponding Flooding Droughty Depth to saturated zone	1.00 0.60 0.12 0.09	Very limited Flooding Seepage Ponding Depth to saturated zone	1.00 1.00 1.00 0.09

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
255: Kernfork, frequently flooded-----	40	Very limited		Very limited	
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Flooding	1.00	Ponding	1.00
		Droughty	0.25	Depth to saturated zone	1.00
		Filtering capacity	0.01		
257: Hoffman-----	50	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00		
		Depth to bedrock	0.16		
Tips-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Depth to bedrock	1.00		
Rock outcrop-----	15	Not rated		Not rated	
259: Cowspring-----	80	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00		
		Depth to bedrock	0.71		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
260: Cowspring-----	45	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.71	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Tips-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
261: Blasingame-----	30	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Slow water movement	 1.00 1.00 1.00 0.99 0.31	Very limited Seepage Too steep for surface application Depth to bedrock Stone content	 1.00 1.00 1.00 0.01
Arujo-----	25	Very limited Too steep for surface application Too steep for sprinkler application Filtering capacity	 1.00 1.00 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 0.01
Cieneba-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Too acid	 1.00 1.00 1.00 1.00 0.07	Very limited Seepage Depth to bedrock Too steep for surface application Too acid	 1.00 1.00 1.00 0.07

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
264: Arujo-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.01
Walong-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.84 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Tunis-----	20	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
265: Arujo-----	80	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 0.40 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 0.78 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
266: Tunis-----	50	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
267: Cieneba-----	40	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.18	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Vista-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement Depth to bedrock	 1.00 1.00 1.00 0.99 0.71	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
268: Tunis-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
268:					
Tollhouse-----	25	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Stone content	0.17
		Large stones on the surface	0.98		
Sorrell-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00
		Droughty	0.99	Stone content	0.99
		Depth to bedrock	0.06		
269:					
Tollhouse-----	45	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Sorrell-----	25	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Large stones on the surface	1.00	Stone content	0.79
		Depth to bedrock	0.71		
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
270: Locobill-----	35	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement Depth to bedrock	 1.00 1.00 0.80 0.31 0.10	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Backcanyon-----	30	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Sesame-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	 1.00 1.00 0.41 0.20 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
271: Walong-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.46 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
271:					
Tunis-----	30	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Rock outcrop-----	15	Not rated		Not rated	
272:					
Tollhouse-----	35	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Edmundston-----	30	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.13	Depth to bedrock	0.02
		Filtering capacity	0.01		
Sorrell-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00
		Droughty	0.95	Stone content	1.00
		Depth to bedrock	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
274: Sesame-----	40	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.98 0.90 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Tweedy-----	20	Very limited Too steep for surface application Too steep for sprinkler application Depth to bedrock Droughty Slow water movement	1.00 1.00 0.90 0.89 0.31	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
275: Strahle-----	50	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Sesame-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.94 0.90 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
275: Tweedy-----	15	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.84	Depth to bedrock	1.00
		Droughty	0.70		
		Slow water movement	0.31		
276: Tips-----	35	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Depth to bedrock	1.00		
Hoffman-----	30	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Droughty	0.98		
		Depth to bedrock	0.01		
Cinco-----	15	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Droughty	0.99		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
277: Feethill-----	30	Very limited Too steep for surface application Too steep for sprinkler application Depth to bedrock Droughty Filtering capacity	1.00 1.00 0.46 0.27 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Vista-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.99 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Walong-----	20	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.65 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
279: Strahle-----	50	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
279: Sesame-----	15	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.35	Depth to bedrock	1.00
		Depth to bedrock	0.16		
		Filtering capacity	0.01		
280: Tollhouse-----	40	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Martee-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	0.17
		Too steep for sprinkler application	1.00		
Edmundston-----	15	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.71	Depth to bedrock	0.88
		Filtering capacity	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
281: Havala-----	55	Very limited Too steep for surface application Slow water movement Too steep for sprinkler application Filtering capacity	1.00 0.31 0.22 0.01	Very limited Seepage Too steep for surface application	1.00 0.50
Walong-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 1.00 0.54 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Kernfork-----	15	Very limited Depth to saturated zone Flooding Filtering capacity	0.99 0.60 0.01	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 0.99
282: Tollhouse-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	1.00 1.00 1.00 1.00 0.98	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.08
Sesame-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.92 0.80 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
282: Friant-----	20	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.55
283: Tollhouse-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Martee-----	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.17
Rock outcrop-----	15	Not rated		Not rated	
284: Tollhouse-----	70	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.39
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
285:					
Inyo-----	50	Very limited Filtering capacity Droughty Flooding	1.00 0.91 0.60	Very limited Flooding Seepage	1.00 1.00
Kelval-----	40	Very limited Filtering capacity Flooding Droughty	1.00 0.60 0.01	Very limited Flooding Seepage	1.00 1.00
286:					
Tollhouse-----	40	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Tweedy-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Droughty	1.00 1.00 1.00 0.31 0.20 0.20	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Locobill-----	20	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement Depth to bedrock	1.00 1.00 1.00 0.55 0.31 0.10	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
287: Tweedy-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Droughty Depth to bedrock	 1.00 1.00 0.31 0.06 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Strahle-----	40	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	 1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
288: Sorrell-----	45	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Depth to bedrock Stone content	 1.00 1.00 1.00 0.71
Arujo-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	 1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 0.61
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
289: Erskine-----	35	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Hyte-----	30	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
294: Edmundston-----	45	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	 1.00 1.00 0.30 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 0.42
Tweedy-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Droughty	 1.00 1.00 0.31 0.29 0.26	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
294: Walong-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Depth to bedrock	0.84		
		Filtering capacity	0.01		
295: Tweedy-----	30	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.83	Depth to bedrock	1.00
		Depth to bedrock	0.80		
		Slow water movement	0.31		
Tunis-----	30	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Rankor-----	20	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	0.31	Depth to bedrock	0.01
		Filtering capacity	0.01		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296: Arujo-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.26
Walong-----	30	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.97 0.01 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Tunis-----	15	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
297: Walong-----	30	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Filtering capacity	1.00 1.00 0.99 0.29 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
297: Blasingame-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Large stones on the surface	1.00 1.00 0.26 0.20 0.18	Very limited Seepage Too steep for surface application Depth to bedrock Stone content	1.00 1.00 1.00 0.06
Rock outcrop-----	15	Not rated		Not rated	
298: Arujo-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.05
Feethill-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Filtering capacity	1.00 1.00 0.31 0.01 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Sesame-----	20	Very limited Too steep for surface application Too steep for sprinkler application Depth to bedrock Droughty Filtering capacity	1.00 1.00 0.65 0.57 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
299: Arujo-----	40	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.05
Feethill-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Filtering capacity	1.00 1.00 0.31 0.01 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Sesame-----	20	Very limited Too steep for surface application Too steep for sprinkler application Depth to bedrock Droughty Filtering capacity	1.00 1.00 0.65 0.57 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
300: Stineway-----	50	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
300: Kiscove-----	30	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Slow water movement	0.31		
301: Feethill-----	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Droughty	0.99	Too steep for surface application	1.00
		Depth to bedrock	0.97		
		Slow water movement	0.31		
Vista-----	25	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.90		
		Filtering capacity	0.01		
Rock outcrop-----	15	Not rated		Not rated	
302: Feethill-----	30	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.80	Depth to bedrock	1.00
		Droughty	0.57		
		Slow water movement	0.31		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
302: Cibo-----	25	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Droughty	1.00 1.00 1.00 0.95 0.89	Very limited Too steep for surface application Depth to bedrock	1.00 1.00
Cieneba-----	20	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
303: Steuber-----	80	Somewhat limited Flooding	0.60	Very limited Flooding Seepage	1.00 1.00
304: Cibo-----	80	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Droughty Depth to bedrock	1.00 1.00 1.00 0.32 0.10	Very limited Too steep for surface application Depth to bedrock	1.00 1.00
305: Chanac-----	45	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 0.31	Very limited Seepage Too steep for surface application	1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
305: Pleito-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
Premier-----	15	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
306: Xerofluents, occasionally flooded-----	60	Very limited Filtering capacity Flooding Slow water movement Droughty	1.00 0.60 0.31 0.09	Very limited Flooding Seepage	1.00 1.00
Riverwash-----	25	Not rated		Not rated	
307: Typic Xeropsamments	80	Very limited Filtering capacity Droughty Flooding	1.00 0.62 0.60	Very limited Flooding Seepage	1.00 1.00
308: Rankor-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.77

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
308: Edmundston-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	1.00 1.00 0.42 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.61
Tweedy-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Filtering capacity	1.00 1.00 0.31 0.01 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
309: Rankor-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 1.00 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.77
Edmundston-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	1.00 1.00 0.42 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.61

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
309: Tweedy-----	20	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Depth to bedrock Filtering capacity	1.00 1.00 0.31 0.01 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
310: Stineway-----	50	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Kiscove-----	30	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
311: Xerorthents-----	50	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	1.00 1.00 1.00 1.00 0.18	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
312: Havala-----	85	Somewhat limited Slow water movement Too steep for surface application	0.37 0.08	Very limited Seepage	1.00
313: Dumps-----	80	Not rated		Not rated	
314: Premier-----	45	Very limited Too steep for surface application Too steep for sprinkler application	1.00 1.00	Very limited Seepage Too steep for surface application	1.00 1.00
Haplodurids-----	35	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to cemented pan	1.00 1.00 0.99 0.84	Very limited Seepage Depth to cemented pan Too steep for surface application	1.00 1.00 1.00
315: Premier-----	45	Somewhat limited Too steep for surface application	0.68	Very limited Seepage	1.00
Haplodurids-----	40	Somewhat limited Droughty Depth to cemented pan Too steep for surface application	0.99 0.84 0.68	Very limited Seepage Depth to cemented pan	1.00 1.00
316: Premier-----	85	Somewhat limited Too steep for surface application Too steep for sprinkler application	0.92 0.02	Very limited Seepage Too steep for surface application	1.00 0.06
317: Premier-----	85	Somewhat limited Too steep for surface application	0.02	Very limited Seepage	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
320: Southlake-----	80	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Slow water movement	0.31	Too steep for surface application	0.50
		Too steep for sprinkler application	0.22	Flooding	0.40
		Droughty	0.11		
		Filtering capacity	0.01		
325: Walong-----	75	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Depth to bedrock	0.71		
326: Walong-----	80	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Depth to bedrock	0.71		
330: Kernville-----	35	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00		
		Too steep for sprinkler application	1.00		
Faycreek-----	25	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Depth to bedrock	1.00		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
330: Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony----	55	Very limited Too steep for surface application Large stones on the surface Too steep for sprinkler application Slow water movement Filtering capacity	1.00 0.68 0.40 0.31 0.01	Very limited Seepage Stone content Too steep for surface application Flooding	1.00 1.00 0.78 0.40
Goodale-----	20	Very limited Droughty Filtering capacity Too steep for surface application Flooding Too steep for sprinkler application	1.00 1.00 1.00 0.60 0.40	Very limited Flooding Seepage Stone content Too steep for surface application Cobble content	1.00 1.00 1.00 0.78 0.18
352: Goodale-----	65	Very limited Droughty Filtering capacity Cobble content Flooding	1.00 1.00 0.99 0.60	Very limited Flooding Seepage Cobble content Stone content	1.00 1.00 0.99 0.93
Riverwash-----	20	Not rated		Not rated	
360: Kernville, bouldery-	40	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
360: Hogeye-----	30	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 0.54 0.02	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Southlake-----	15	Very limited Too steep for surface application Large stones on the surface Too steep for sprinkler application Slow water movement Filtering capacity	 1.00 0.68 0.40 0.31 0.01	Very limited Seepage Stone content Too steep for surface application Flooding	 1.00 1.00 0.78 0.40
380: Delvar-----	40	Very limited Too steep for surface application Slow water movement Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Too steep for surface application Seepage	 1.00 0.69
Pleito-----	40	Very limited Too steep for surface application Slow water movement Too steep for sprinkler application	 1.00 1.00 1.00	Very limited Seepage Too steep for surface application	 1.00 1.00
407: Centerville-----	90	Very limited Sodium content Slow water movement Too steep for surface application Salinity	 1.00 1.00 0.08 0.01	Very limited Sodium content Flooding	 1.00 0.20

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
410: Stineway-----	40	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Kiscove-----	25	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	 1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
411: Delvar-----	85	Very limited Slow water movement Too steep for surface application Sodium content	 1.00 0.68 0.32	Somewhat limited Seepage Sodium content Flooding	 0.69 0.32 0.20
412: Chollawell-----	70	Very limited Too steep for surface application Droughty Too steep for sprinkler application Filtering capacity	 1.00 0.52 0.40 0.01	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
417:					
Southlake-----	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Large stones on the surface	0.68	Stone content	1.00
		Too steep for sprinkler application	0.40	Too steep for surface application	0.78
		Slow water movement	0.31	Flooding	0.40
		Filtering capacity	0.01		
Southlake, gravelly	20	Very limited		Very limited	
		Too steep for surface application	1.00	Flooding	1.00
		Flooding	0.60	Seepage	1.00
		Too steep for sprinkler application	0.40	Too steep for surface application	0.78
		Slow water movement	0.31	Stone content	0.13
		Droughty	0.10		
Goodale-----	15	Very limited		Very limited	
		Droughty	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Too steep for surface application	1.00	Stone content	1.00
		Flooding	0.60	Too steep for surface application	0.78
		Too steep for sprinkler application	0.40	Cobble content	0.19
Urban land-----	15	Not rated		Not rated	
420:					
Southlake-----	65	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Slow water movement	0.31	Too steep for surface application	0.50
		Too steep for sprinkler application	0.22	Flooding	0.40
		Droughty	0.11		
		Filtering capacity	0.01		
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
422: Kelval-----	70	Somewhat limited Flooding Filtering capacity	0.60 0.01	Very limited Flooding Seepage	1.00 1.00
Urban land-----	15	Not rated		Not rated	
423: Auberry-----	45	Very limited Too steep for surface application Too steep for sprinkler application Too acid Slow water movement	1.00 1.00 0.42 0.37	Very limited Seepage Too steep for surface application Too acid Depth to bedrock	1.00 1.00 0.42 0.05
Crouch-----	15	Very limited Too steep for surface application Too steep for sprinkler application Too acid	1.00 1.00 0.14	Very limited Seepage Too steep for surface application Too acid	1.00 1.00 0.14
Rock outcrop-----	15	Not rated		Not rated	
424: Inyo-----	70	Very limited Filtering capacity Too steep for surface application Droughty Flooding Too steep for sprinkler application	1.00 0.92 0.91 0.60 0.02	Very limited Flooding Seepage Too steep for surface application	1.00 1.00 0.06
Urban land-----	15	Not rated		Not rated	
430: Friant-----	70	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.55
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
432: Alberti, gravelly---	70	Very limited Droughty Depth to bedrock Slow water movement Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
441: Inyo-----	65	Very limited Filtering capacity Droughty	 1.00 0.91	Very limited Seepage Flooding	 1.00 0.40
Urban land-----	15	Not rated		Not rated	
442: Inyo-----	70	Very limited Filtering capacity Too steep for surface application Droughty Too steep for sprinkler application	 1.00 1.00 0.91 0.78	Very limited Seepage Too steep for surface application Flooding	 1.00 1.00 0.40
Urban land-----	15	Not rated		Not rated	
445: Chollawell-----	70	Very limited Filtering capacity Droughty Too steep for surface application	 1.00 0.55 0.08	Very limited Seepage Flooding	 1.00 0.40
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
450: Southlake, stony----	45	Very limited Too steep for surface application Large stones on the surface Too steep for sprinkler application Slow water movement Filtering capacity	1.00 0.68 0.40 0.31 0.01	Very limited Seepage Stone content Too steep for surface application Flooding	1.00 1.00 0.78 0.40
Goodale-----	15	Very limited Droughty Filtering capacity Too steep for surface application Flooding Too steep for sprinkler application	1.00 1.00 1.00 0.60 0.40	Very limited Flooding Seepage Stone content Too steep for surface application Cobble content	1.00 1.00 1.00 0.78 0.18
Urban land-----	15	Not rated		Not rated	
460: Kernville, bouldery	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Hogeye-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	1.00 1.00 1.00 0.54 0.02	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
460: Southlake-----	15	Very limited Too steep for surface application Large stones on the surface Too steep for sprinkler application Slow water movement Filtering capacity	1.00 0.68 0.40 0.31 0.01	Very limited Seepage Stone content Too steep for surface application Flooding	1.00 1.00 0.78 0.40
Urban land-----	15	Not rated		Not rated	
465: Arujo-----	65	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Filtering capacity	1.00 0.40 0.31 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 0.78 0.01
Urban land-----	15	Not rated		Not rated	
485: Inyo-----	45	Very limited Filtering capacity Droughty Flooding	1.00 0.91 0.60	Very limited Flooding Seepage	1.00 1.00
Kelval-----	30	Very limited Filtering capacity Flooding Droughty	1.00 0.60 0.01	Very limited Flooding Seepage	1.00 1.00
Urban land-----	15	Not rated		Not rated	
488: Tweedy-----	35	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Droughty Depth to bedrock	1.00 1.00 0.31 0.06 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
488:					
Tollhouse-----	20	Very limited Droughty Too steep for surface application Depth to bedrock Too steep for sprinkler application Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Locobill-----	15	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement Depth to bedrock	 1.00 1.00 0.55 0.31 0.10	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
501:					
Hyte-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Erskine-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 0.02	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
501: Sorrell-----	25	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00
		Droughty	0.99	Stone content	0.99
		Depth to bedrock	0.06		
503: Tips-----	40	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Stone content	0.01
		Depth to bedrock	1.00		
Erskine-----	30	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Stone content	0.57
		Large stones on the surface	1.00		
Rock outcrop-----	15	Not rated		Not rated	
505: Chollawell-----	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	0.90	Flooding	0.40
		Droughty	0.37		

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Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
507: Xyno-----	40	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Canebrake-----	30	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Pilotwell-----	15	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
508: Pilotwell-----	45	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 0.86	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00

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Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
508: Xyno-----	25	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
509: Xyno-----	40	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Faycreek-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.01
Rock outcrop-----	15	Not rated		Not rated	
510: Xyno-----	35	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

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Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
510: Canebrake-----	30	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Pilotwell, bouldery	15	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.84	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
512: Chollawell, cobbly substratum-----	60	Very limited Too steep for surface application Droughty Too steep for sprinkler application Filtering capacity	 1.00 0.52 0.40 0.01	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40
Chollawell, gravelly	15	Very limited Filtering capacity Droughty Too steep for surface application	 1.00 0.37 0.32	Very limited Seepage Flooding	 1.00 0.40
514: Chollawell-----	50	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty	 1.00 1.00 0.40 0.37	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
514: Inyo-----	35	Very limited Filtering capacity Too steep for surface application Droughty Too steep for sprinkler application	 1.00 1.00 0.90 0.40	Very limited Seepage Too steep for surface application Flooding	 1.00 0.78 0.40
515: Scodie-----	35	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Canebrake-----	30	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Xyno-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
516: Xyno-----	45	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
Canebrake-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.20
517: Southlake-----	55	Very limited Too steep for surface application Too steep for sprinkler application Slow water movement Large stones on the surface Filtering capacity	1.00 0.40 0.31 0.18 0.01	Very limited Seepage Too steep for surface application Flooding Stone content	1.00 0.78 0.40 0.18
Southlake, gravelly	20	Very limited Too steep for surface application Flooding Too steep for sprinkler application Slow water movement Large stones on the surface	1.00 0.60 0.40 0.31 0.18	Very limited Flooding Seepage Too steep for surface application Stone content	1.00 1.00 0.78 0.18

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
517: Goodale-----	15	Very limited		Very limited	
		Droughty	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Too steep for surface application	1.00	Stone content	1.00
		Flooding	0.60	Too steep for surface application	0.78
		Too steep for sprinkler application	0.40	Cobble content	0.19
518: Backcanyon-----	50	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00		
		Filtering capacity	0.01		
Rock outcrop-----	30	Not rated		Not rated	
520: Kernville-----	50	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00		
		Too steep for sprinkler application	1.00		
Hogeye-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Depth to bedrock	0.54		
		Large stones on the surface	0.02		
Rock outcrop-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
523: Kernville, bouldery	45	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Faycreek-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
525: Hungrygulch-----	35	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 0.80 0.01	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Kernville-----	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
525: Hogeye-----	20	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Depth to bedrock	0.54		
		Large stones on the surface	0.02		
530: Alberti, cobbly-----	45	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	0.69
		Depth to bedrock	1.00		
		Slow water movement	1.00		
Alberti, gravelly---	40	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	0.69
		Depth to bedrock	1.00		
		Slow water movement	1.00		
531: Tweedy-----	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Slow water movement	0.31	Depth to bedrock	1.00
		Depth to bedrock	0.05		
		Droughty	0.04		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
531: Erskine-----	25	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.60
Alberti, gravelly---	20	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Slow water movement	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to bedrock Too steep for surface application Seepage	 1.00 1.00 0.69
532: Alberti, gravelly---	80	Very limited Droughty Depth to bedrock Slow water movement Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
540: Canebrake-----	60	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
540: Lachim-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.80	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
541: Canebrake-----	45	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Lachim-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 0.80	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
543: Wortley-----	45	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
543: Indiano-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Slow water movement	1.00 1.00 0.89 0.65 0.31	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
544: Xeric Haplargids----	60	Very limited Too steep for surface application Too steep for sprinkler application Droughty Slow water movement	1.00 1.00 0.95 0.31	Very limited Seepage Too steep for surface application Depth to bedrock Flooding Cobble content	1.00 1.00 0.99 0.40 0.01
Lithic Xeric Haplargids-----	20	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Flooding Cobble content	1.00 1.00 1.00 0.40 0.13
545: Sacatar-----	50	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	1.00 1.00 1.00 0.98 0.16	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
545: Canebrake-----	30	Very limited Droughty Filtering capacity Too steep for surface application Depth to bedrock Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
549: Tunawee-----	60	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.32
Rock outcrop-----	25	Not rated		Not rated	
550: Kenypeak-----	40	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	
551: Tunawee-----	70	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	 1.00 1.00 1.00 0.78

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
552: Kenypeak-----	60	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Torriorthetic Haploxerolls-----	25	Very limited Too steep for surface application Too steep for sprinkler application Droughty Large stones on the surface Depth to bedrock	1.00 1.00 1.00 1.00 0.18 0.16	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 1.00
553: Tibbcreek-----	75	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Slow water movement	1.00 1.00 1.00 1.00 0.31	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
554: Deerspring-----	85	Very limited Filtering capacity Flooding Sodium content	1.00 0.60 0.02	Very limited Flooding Seepage Sodium content	1.00 1.00 0.02
555: Cumulic Endoaquolls, frigid-----	75	Very limited Depth to saturated zone Flooding Filtering capacity	1.00 1.00 0.01	Very limited Flooding Seepage Depth to saturated zone	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
556: Toll-----	80	Very limited Filtering capacity Droughty Too steep for surface application	 1.00 0.95 0.68	Very limited Seepage Flooding	 1.00 0.40
557: Scodie-----	35	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Canebrake-----	25	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Deadfoot-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Large stones on the surface	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Depth to bedrock Stone content	 1.00 1.00 1.00 1.00
558: Indiano-----	60	Very limited Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock Slow water movement	 1.00 1.00 0.89 0.65 0.31	Very limited Seepage Too steep for surface application Depth to bedrock	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
558: Wortley-----	20	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
560: Sacatar-----	30	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	 1.00 1.00 1.00 0.90 0.16	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Wortley-----	30	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Filtering capacity	 1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Calpine-----	20	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application	 1.00 1.00 0.40	Very limited Seepage Too steep for surface application	 1.00 0.78
561: Scodie-----	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
561: Sacatar-----	25	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Droughty Depth to bedrock	 1.00 1.00 1.00 1.00 0.90 0.16	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Canebrake-----	20	Very limited Droughty Filtering capacity Too steep for surface application Depth to bedrock Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
562: Deerspring, partially drained--	85	Very limited Flooding Sodium content Filtering capacity	 1.00 0.32 0.01	Very limited Flooding Seepage Sodium content	 1.00 1.00 0.32
570: Deadfoot-----	40	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Large stones on the surface	 1.00 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Too steep for surface application Depth to bedrock Stone content	 1.00 1.00 1.00 1.00
Scodie-----	20	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	 1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
590: Xyno-----	35	Very limited Droughty Filtering capacity Too steep for surface application Depth to bedrock Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Canebrake-----	25	Very limited Droughty Filtering capacity Too steep for surface application Depth to bedrock Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Pilotwell-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 0.80	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
591: Xyno-----	50	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
591: Canebrake-----	20	Very limited Droughty Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated	
610: Hyte-----	40	Very limited Droughty Depth to bedrock Too steep for surface application Too steep for sprinkler application Filtering capacity	1.00 1.00 1.00 1.00 0.01	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Erskine-----	35	Very limited Droughty Depth to bedrock Too steep for surface application Large stones on the surface Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application Stone content	1.00 1.00 1.00 0.60
650: Stineway-----	40	Very limited Droughty Too steep for surface application Too steep for sprinkler application Depth to bedrock Large stones on the surface	1.00 1.00 1.00 1.00 0.18	Very limited Seepage Depth to bedrock Too steep for surface application Cobble content	1.00 1.00 1.00 0.05

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Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
650:					
Kiscove-----	30	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Slow water movement	0.31		
Rock outcrop-----	15	Not rated		Not rated	
3250:					
Jawbone-----	50	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
		Filtering capacity	0.31		
Jawbone, moderately deep-----	40	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Filtering capacity	0.31		
		Depth to bedrock	0.16		
4432:					
Koehn, occasionally flooded-----	70	Somewhat limited		Very limited	
		Droughty	0.85	Flooding	1.00
		Flooding	0.60	Seepage	1.00
		Filtering capacity	0.31		
Koehn, frequently flooded-----	15	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Droughty	0.85	Seepage	1.00
		Filtering capacity	0.31		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5201: Wingap-----	55	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	1.00 1.00 0.74 0.31	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 1.00 0.14
Pinyonpeak-----	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
5210: Grandora-----	30	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	1.00 1.00 0.99 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
Grandora, warm-----	30	Very limited Too steep for surface application Too steep for sprinkler application Droughty Filtering capacity	1.00 1.00 0.99 0.31	Very limited Seepage Too steep for surface application	1.00 1.00
Pinyonpeak-----	30	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00

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Table 9b.--Agricultural Waste Management--Continued

Map symbol and component name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
6001: Goldpeak-----	55	Somewhat limited Filtering capacity Too steep for surface application	0.31 0.08	Very limited Seepage	1.00
Pinyonpeak-----	15	Very limited Droughty Filtering capacity Depth to bedrock Too steep for surface application Too steep for sprinkler application	1.00 1.00 1.00 1.00 1.00	Very limited Seepage Depth to bedrock Too steep for surface application	1.00 1.00 1.00
Wingap-----	15	Very limited Too steep for surface application Droughty Too steep for sprinkler application Filtering capacity	1.00 0.74 0.40 0.31	Very limited Seepage Too steep for surface application Depth to bedrock	1.00 0.78 0.14
W: Water-----	100	Not rated		Not rated	

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Table 10.--Rangeland Productivity and Characteristic Vegetation

(See text for an explanation of terms used in this table. Absence of an entry indicates that information was not available)

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
115: Chanac-----	2,800	2,000	700	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				Burclover (MEHI)-----	10
				Misc. perennial forbs (PPFF)---	5
				Purple needlegrass (NAPU4)-----	5
				Allscale saltbush (ATPO)-----	1
128: Pits.					
Delano-----	1,500	1,000	400	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)---	15
Oil waste land.					
136: Hesperia-----	1,200	700	350	Red brome (BRRU2)-----	30
				Filaree (ERODI)-----	25
				Russian thistle (SALSO)-----	5
				Allscale saltbush (ATPO)-----	5
139. Riverwash					
143: Calicreek-----	900	400	200	Red brome (BRRU2)-----	30
				Filaree (ERODI)-----	20
				Misc. annual grasses (AAGG)---	10
				Oat (AVENA)-----	5
144: Calicreek-----	900	400	200	Red brome (BRRU2)-----	35
				Filaree (ERODI)-----	20
				Misc. annual grasses (AAGG)---	10
				Goldenbush (ERICA2)-----	5
				Oat (AVENA)-----	5
145: Delano-----	1,500	1,000	400	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)---	10
146: Delano-----	1,500	1,000	400	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)---	10

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
147: Chanac-----	2,800	2,000	700	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				Burclover (MEHI)-----	10
				Misc. perennial forbs (PPFF)---	5
				Purple needlegrass (NAPU4)----	5
				Allscale saltbush (ATPO)-----	1
148: Delano-----	1,800	1,400	600	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)----	10
149: Delano-----	1,800	1,200	600	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)----	10
150. Pits and dumps					
152: Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	40
				Misc. annual forbs (AAFF)-----	15
				Foxtail fescue (FEME)-----	10
				Slender oat (AVBA)-----	10
				Misc. annual grasses (AAGG)----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
153: Chanac-----	2,800	2,000	700	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				Burclover (MEHI)-----	10
				Misc. perennial forbs (PPFF)---	5
				Purple needlegrass (NAPU4)----	5
				Allscale saltbush (ATPO)-----	1
154. Dam					
166: Delano-----	1,500	1,000	400	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)----	10
Urban land.					
174: Xeric Torriorthents, silty-----	1,500	1,000	500	Red brome (BRRU2)-----	60
				Filaree (ERODI)-----	15
				Oat (AVENA)-----	5
				Russian thistle (SALSO)-----	2

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
174: Calctic Haploxerepts-----	2,200	1,500	900	Red brome (BRRU2)-----	30
				Slender oat (AVBA)-----	20
				Foxtail barley (HOJU)-----	10
				Filaree (ERODI)-----	20
				Fiddleneck (AMSIN)-----	1
176: Elkhills, eroded-----	2,200	1,000	500	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	15
				Allscale saltbush (ATPO)-----	10
				Foxtail fescue (FEME)-----	5
				Ripgut brome (BRDI3)-----	5
177: Chanac-----	2,500	1,600	700	Ripgut brome (BRDI3)-----	30
				Russian thistle (SALSO)-----	15
				Red brome (BRRU2)-----	15
				Slender oat (AVBA)-----	10
				Allscale saltbush (ATPO)-----	5
Torriorrhents, stratified-----	1,900	1,200	400	Red brome (BRRU2)-----	40
				Ripgut brome (BRDI3)-----	15
				Russian thistle (SALSO)-----	10
				Foxtail fescue (FEME)-----	10
				Allscale saltbush (ATPO)-----	5
				Filaree (ERODI)-----	5
178: Delano-----	2,500	2,200	1,000	Ripgut brome (BRDI3)-----	35
				Russian thistle (SALSO)-----	15
				Red brome (BRRU2)-----	10
				Allscale saltbush (ATPO)-----	5
				Filaree (ERODI)-----	5
				Foxtail fescue (FEME)-----	5
				Slender oat (AVBA)-----	5
Cuyama-----	2,500	2,200	1,000	Red brome (BRRU2)-----	30
				Foxtail fescue (FEME)-----	25
				Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	10
				Saltbush (ATRIP)-----	5
Premier-----	2,300	1,800	800	Red brome (BRRU2)-----	30
				Wild oat (AVFA)-----	20
				Allscale saltbush (ATPO)-----	10
				Filaree (ERODI)-----	10
				Foxtail fescue (FEME)-----	5
179: Torriorrhents, stratified, eroded.					
Elkhills-----	3,000	2,500	1,000	Red brome (BRRU2)-----	60
				Allscale saltbush (ATPO)-----	10
				Filaree (ERODI)-----	5
				Foxtail fescue (FEME)-----	5
				Ripgut brome (BRDI3)-----	5
				Schismus (SCHIS)-----	5
				Winterfat (KRASC)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
184: Cuyama-----	2,500	2,200	1,000	Red brome (BRRU2)-----	30
				Foxtail fescue (FEME)-----	25
				Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	10
				Saltbush (ATRIP)-----	5
185: Brecken-----	2,500	1,800	1,000	Foxtail fescue (FEME)-----	20
				Ripgut brome (BRDI3)-----	20
				Soft chess (BRHOH)-----	15
				Slender oat (AVBA)-----	10
				Tarweed (HEMIZ)-----	10
				Nodding chickweed (STME2)-----	5
Cuyama-----	2,500	2,200	1,000	Red brome (BRRU2)-----	30
				Soft chess (BRHOH)-----	25
				Tarweed (HEMIZ)-----	25
				Filaree (ERODI)-----	10
				White burrobush (HYSA)-----	5
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	40
				Misc. annual forbs (AAFF)-----	15
				Wild oat (AVFA)-----	10
				Misc. annual grasses (AAGG)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
186: Cuyama-----	2,500	2,200	1,000	Red brome (BRRU2)-----	30
				Foxtail fescue (FEME)-----	25
				Filaree (ERODI)-----	10
				Russian thistle (SALSO)-----	5
				Nodding chickweed (STME2)-----	5
187: Trigo-----	2,000	1,500	1,000	Soft chess (BRHOH)-----	20
				Wild oat (AVFA)-----	15
				Filaree (ERODI)-----	10
				Red brome (BRRU2)-----	10
				Ripgut brome (BRDI3)-----	10
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMAG)-----	5
Chanac-----	2,600	1,800	800	Foxtail fescue (FEME)-----	40
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	10
				Wild oat (AVFA)-----	10
				Soft chess (BRHOH)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
188:					
Tweedy-----	1,500	1,000	800	Big sagebrush (ARTR2)-----	10
				Bluegrass (POA)-----	10
				Interior live oak (QUWI2)-----	10
				Misc. annual forbs (A AFF)-----	10
				Misc. annual grasses (AAGG)----	10
				Blue oak (QUDO)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Ceanothus (CEANO)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Western mountainmahogany (CEMO2)-----	5
Tollhouse-----	1,200	800	500	Big sagebrush (ARTR2)-----	25
				Mountainmahogany (CERCO)-----	20
				Pine bluegrass (POSC)-----	10
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Interior live oak (QUWI2)-----	5
Locobill-----	1,400	900	600	Red brome (BRRU2)-----	30
				Narrowleaf goldenbush (ERLI6)--	20
				Blue oak (QUDO)-----	10
				Buckbrush (CECU)-----	10
				California juniper (JUCA7)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
189:					
Tweedy-----	1,600	1,200	1,000	Bluegrass (POA)-----	10
				Ceanothus (CEANO)-----	10
				Cheatgrass (BRTE)-----	10
				Misc. annual grasses (AAGG)----	10
				Singleleaf pinyon (PIMO)-----	10
				Big sagebrush (ARTR2)-----	5
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Sandberg bluegrass (POSAL2)----	10
				Blue oak (QUDO)-----	10
				Blue wildrye (ELGL)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRDI3)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
192:					
Chanac-----	2,500	1,800	700	Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				Ripgut brome (BRDI3)-----	10
				Burclover (MEHI)-----	5
				Misc. perennial forbs (PPFF)---	5
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	35
				Misc. annual grasses (AAGG)----	15
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
193:					
Chanac-----	2,800	2,000	700	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				Burclover (MEHI)-----	10
				Allscale saltbush (ATPO)-----	1
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	40
				Misc. annual forbs (AAFF)-----	15
				Wild oat (AVFA)-----	10
				Misc. annual grasses (AAGG)----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
194:					
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	40
				Misc. annual forbs (AAFF)-----	15
				Purple needlegrass (NAPU4)-----	10
				Slender oat (AVBA)-----	10
				Misc. annual grasses (AAGG)----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
Delvar-----	3,200	2,200	1,500	Soft chess (BRHOH)-----	50
				Filaree (ERODI)-----	10
				Slender oat (AVBA)-----	10
				Mustard (BRASS2)-----	5
				Red brome (BRRU2)-----	5
195:					
Centerville-----	2,800	2,000	1,200	Soft chess (BRHOH)-----	30
				Redstem filaree (ERCI6)-----	15
				Burclover (MEHI)-----	10
				Foxtail fescue (FEME)-----	10
				Slender oat (AVBA)-----	10
				Ripgut brome (BRDI3)-----	5
Delvar-----	3,200	2,200	1,500	Soft chess (BRHOH)-----	50
				Filaree (ERODI)-----	10
				Slender oat (AVBA)-----	10
				Mustard (BRASS2)-----	5
				Red brome (BRRU2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
196:					
Exeter-----	2,400	1,800	1,000	Soft chess (BRHOH)-----	25
				Ripgut brome (BRDI3)-----	15
				Filaree (ERODI)-----	10
				Red brome (BRRU2)-----	10
				Slender oat (AVBA)-----	10
				Burclover (MEHI)-----	5
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMAG)-----	5
197:					
Nord-----	2,200	1,500	700	Red brome (BRRU2)-----	25
				Filaree (ERODI)-----	15
				Foxtail barley (HOJU)-----	15
				Ripgut brome (BRDI3)-----	5
				Slender oat (AVBA)-----	5
				Soft chess (BRHOH)-----	5
				Tarweed (HEMIZ)-----	5
198:					
Centerville-----	2,800	2,000	1,200	Soft chess (BRHOH)-----	30
				Redstem filaree (ERIC6)-----	15
				Burclover (MEHI)-----	10
				Foxtail fescue (FEME)-----	10
				Slender oat (AVBA)-----	10
				Ripgut brome (BRDI3)-----	5
Delvar-----	3,200	2,200	1,500	Soft chess (BRHOH)-----	50
				Filaree (ERODI)-----	10
				Slender oat (AVBA)-----	10
				Mustard (BRASS2)-----	5
				Red brome (BRRU2)-----	5
199:					
Exeter-----	2,400	1,800	1,000	Soft chess (BRHOH)-----	25
				Ripgut brome (BRDI3)-----	15
				Filaree (ERODI)-----	10
				Red brome (BRRU2)-----	10
				Wild oat (AVFA)-----	10
				Burclover (MEHI)-----	5
				Clover (TRIFO)-----	5
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMAG)-----	5
200:					
Urban land.					
Delano-----	1,500	1,000	400	Red brome (BRRU2)-----	40
				Filaree (ERODI)-----	25
				Misc. annual grasses (AAGG)----	10
201:					
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)-----	40
				Misc. annual forbs (AAFF)-----	15
				Slender oat (AVBA)-----	10
				Misc. annual grasses (AAGG)----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
201:					
Chanac-----	2,600	1,800	800	Foxtail fescue (FEME)----- Filaree (ERODI)----- Red brome (BRRU2)----- Slender oat (AVBA)----- Soft chess (BRHOH)-----	40 15 10 10 5
Raggulch-----	1,900	1,500	1,000	Foxtail fescue (FEME)----- Red brome (BRRU2)----- Tarweed (HEMIZ)----- Filaree (ERODI)----- Soft chess (BRHOH)-----	50 10 10 5 5
205:					
Pleito-----	3,000	2,000	1,500	Soft chess (BRHOH)----- Misc. annual forbs (AAFF)----- Wild oat (AVFA)----- Ripgut brome (BRDI3)----- Misc. annual grasses (AAGG)----- Red brome (BRRU2)-----	40 15 15 10 5 5
Trigo-----	1,500	1,000	500	Filaree (ERODI)----- Soft chess (BRHOH)----- Wild oat (AVFA)----- Red brome (BRRU2)----- Ripgut brome (BRDI3)----- Foxtail fescue (FEME)----- Mouse barley (HOMAG)-----	15 15 15 10 10 5 5
Chanac-----	2,600	1,800	800	Foxtail fescue (FEME)----- Filaree (ERODI)----- Red brome (BRRU2)----- Wild oat (AVFA)----- Soft chess (BRHOH)-----	40 15 10 10 5
207:					
Whitewolf-----	1,600	1,100	800	Redstem filaree (ERCI6)----- Soft chess (BRHOH)----- Red brome (BRRU2)----- Burclover (MEHI)----- Ripgut brome (BRDI3)----- Foxtail barley (HOJU)----- Schismus (SCHIS)----- Wild oat (AVFA)-----	20 20 15 10 10 5 5 5
209:					
Whitewolf-----	1,600	1,100	800	Redstem filaree (ERCI6)----- Soft chess (BRHOH)----- Red brome (BRRU2)----- Burclover (MEHI)----- Ripgut brome (BRDI3)----- Foxtail barley (HOJU)----- Schismus (SCHIS)----- Wild oat (AVFA)-----	20 20 15 10 10 5 5 5
210:					
Kernfork-----	2,000	1,600	1,000	Saltgrass (DISTI)----- Rabbitbrush (CHRYS9)----- Saltbush (ATRIP)----- Indian ricegrass (ACHY)-----	60 10 10 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
212: Kernfork-----	2,000	1,600	1,000	Saltgrass (DISTI)-----	35
				Arroyo willow (SALA6)-----	35
				Cottonwood (POPUL)-----	25
				Rubber rabbitbrush (ERNA10)----	5
213: Calicreek-----	1,500	900	600	Red brome (BRRU2)-----	35
				Filaree (ERODI)-----	20
				Misc. annual grasses (AAGG)----	10
				Goldenbush (ERICA2)-----	5
				Oat (AVENA)-----	5
215: Kelval-----	1,400	900	500	Redstem filaree (ERCI6)-----	30
				Mouse barley (HOMAG)-----	20
				Rabbitbrush (CHRYS9)-----	10
				Ripgut brome (BRDI3)-----	5
				Saltgrass (DISTI)-----	5
				Red brome (BRRU2)-----	1
216: Inyo-----	200	100	50	California broomsage (LESQ)----	80
				Mojave buckwheat (ERFAP)-----	5
				Rubber rabbitbrush (ERNA10)----	5
				Desertsenna (SEAR8)-----	3
				White bursage (AMDU2)-----	2
Riverwash.					
217: Whitewolf-----	800	600	400	Redstem filaree (ERCI6)-----	20
				Red brome (BRRU2)-----	15
				Allscale saltbush (ATPO)-----	5
				Bladderpod (LESQU)-----	5
				Foxtail barley (HOJU)-----	5
				Ripgut brome (BRDI3)-----	5
				Schismus (SCHIS)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5
Riverwash.					
220: Aquents-----	3,500	2,100	1,500	Inland saltgrass (DISP)-----	30
				Ripgut brome (BRR18)-----	20
				Mouse barley (HOMU)-----	15
				Misc. annual forbs (AAFF)-----	10
				Fiddleneck (AMSIN)-----	5
				Willow (SALIX)-----	5
Aquolls-----	4,000	2,800	2,000	Inland saltgrass (DISP)-----	30
				Wildrye (ELYMU)-----	25
				Misc. annual forbs (AAFF)-----	10
				Rush (JUNCU)-----	10
				Cattail (TYPHA)-----	5
				Cottonwood (POPUL)-----	5
				Willow (SALIX)-----	5
Riverwash.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
222: Kelval-----	700	550	400	Rabbitbrush (CHRS9)----- Red brome (BRRU2)----- Redstem filaree (ERCI6)----- Mediterranean barley (HOMUL)--- Cheatgrass (BRTE)----- Saltgrass (DISTI)-----	35 15 15 5 5 5
223: Kelval-----	1,200	900	700	Rabbitbrush (CHRS9)----- Cheatgrass (BRTE)----- California buckwheat (ERFA2)--- Redstem filaree (ERCI6)----- Foothill pine (PISA2)-----	35 20 10 10 1
224: Inyo-----	1,000	700	500	Nevada ephedra (EPNE)----- Rabbitbrush (CHRS9)----- Horsebrush (TETRA3)----- California buckwheat (ERFA2)--- Joshua tree (YUBR)----- Blackbrush (CORA)-----	20 20 15 5 5 5
238: Cinco-----	700	500	300	Desert needlegrass (ACSP12)--- Bottlebrush squirreltail (ELEL5)----- Misc. annual forbs (AAFF)----- California buckwheat (ERFA2)--- Sandberg bluegrass (POSA12)--- Lupine (LUPIN)----- Pine bluegrass (POSC)----- Spiny hopsage (GRSP)-----	40 10 10 5 5 5 5 5
240. Dune land					
241: Inyo-----	1,000	700	500	Rabbitbrush (CHRS9)----- White burrobush (HYSA)----- California buckwheat (ERFA2)--- Nevada ephedra (EPNE)----- Bottlebrush squirreltail (ELEL5)----- Joshua tree (YUBR)-----	35 20 15 15 10 5
242: Inyo-----	600	450	300	Mojave buckwheat (ERFAP)----- Desert needlegrass (ACSP12)--- White burrobush (HYSA)----- Nevada ephedra (EPNE)----- Not available (ENAC)----- Joshua tree (YUBR)-----	40 30 10 5 4 1
243: Kernfork, saline-sodic, occasionally flooded---	3,500	1,800	1,100	Saltgrass (DISTI)----- Rabbitbrush (CHRS9)----- Rush (JUNCU)----- Willow (SALIX)-----	60 10 10 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
245: Chollawell-----	400	300	200	California buckwheat (ERFA2)---	20
				Blackbrush (CORA)-----	20
				Nevada ephedra (EPNE)-----	10
				Bottlebrush squirreltail (ELEL5)-----	10
				Joshua tree (YUBR)-----	5
				Mojave cottonthorn (TEST2)----	5
				Desert needlegrass (ACSP12)----	5
246: Chollawell-----	800	600	400	Blackbrush (CORA)-----	50
				California buckwheat (ERFA2)---	15
				Sandberg bluegrass (POSE)-----	10
				Bottlebrush squirreltail (ELEL5)-----	10
				Green Mormon tea (EPVI)-----	10
				California juniper (JUCA7)-----	5
247: Inyo-----	400	300	200	California buckwheat (ERFA2)---	15
				Nevada ephedra (EPNE)-----	15
				Rabbitbrush (CHRYS9)-----	15
				Bottlebrush squirreltail (ELEL5)-----	10
				White burrobush (HYSA)-----	10
				Joshua tree (YUBR)-----	5
				Blackbrush (CORA)-----	5
Tips-----	350	250	150	Red brome (BRRU2)-----	25
				California buckwheat (ERFA2)---	20
				Goldenbush (ERICA2)-----	20
				Rabbitbrush (CHRYS9)-----	5
Rock outcrop.					
249: Hoffman-----	600	400	250	Blackbrush (CORA)-----	40
				Narrowleaf goldenbush (ERLI6)--	10
				Pine bluegrass (POSC)-----	10
				California buckwheat (ERFA2)---	5
				California juniper (JUCA7)-----	5
				Desert needlegrass (ACSP12)----	5
				Red brome (BRRU2)-----	5
Rock outcrop.					
250: Hoffman-----	800	600	400	Blackbrush (CORA)-----	40
				Narrowleaf goldenbush (ERLI6)--	10
				Pine bluegrass (POSC)-----	10
				California buckwheat (ERFA2)---	5
				California juniper (JUCA7)-----	5
				Desert needlegrass (ACSP12)----	5
				Red brome (BRRU2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
250:					
Tips-----	800	600	400	Blackbrush (CORA)-----	25
				California buckwheat (ERFA2)---	20
				California juniper (JUCA7)-----	10
				Desert needlegrass (ACSP12)-----	10
				Green Mormon tea (EPVI)-----	5
				Pine bluegrass (POSC)-----	5
				Rabbitbrush (CHRYS9)-----	5
Pilotwell-----	900	600	200	White burrobush (HYSA)-----	20
				California buckwheat (ERFA2)---	15
				Misc. annual forbs (AAFF)-----	15
				Arabian schismus (SCAR)-----	10
				Desert needlegrass (ACSP12)---	10
				Red brome (BRRU2)-----	10
				Filaree (ERODI)-----	5
253:					
Sorrell-----	2,400	1,600	1,000	Cheatgrass (BRTE)-----	25
				Big sagebrush (ARTR2)-----	15
				California scrub oak (QUDU)---	10
				Pine bluegrass (POSC)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Buckbrush (CECU)-----	5
				Geranium (GERAN)-----	5
Martee-----	1,600	1,200	800	Cheatgrass (BRTE)-----	20
				Singleleaf pinyon (PIMO)-----	15
				Interior live oak (QUWI2)-----	10
				Ripgut brome (BRDI3)-----	10
				Big sagebrush (ARTR2)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Miners lettuce (CLPE)-----	5
				Pine bluegrass (POSC)-----	5
Rock outcrop.					
254:					
Martee-----	800	500	300	California scrub oak (QUDU)---	20
				Buckbrush (CECU)-----	15
				Big sagebrush (ARTR2)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
				Redstem filaree (ERIC16)-----	5
				Yucca (YUCCA)-----	5
Rock outcrop.					
255:					
Kernfork, occasionally flooded-----	2,500	1,700	1,100	Red brome (BRRU2)-----	20
				Rubber rabbitbrush (CHNA2)-----	15
				Cheatgrass (BRTE)-----	10
				Douglas rabbitbrush (CHVI8)---	5
				Big sagebrush (ARTR2)-----	5
				Blue oak (QUDO)-----	5
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
				Rush (JUNCU)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
255: Kernfork, frequently flooded-----	2,500	1,700	1,100	Rush (JUNCU)----- Cheatgrass (BRTE)----- Douglas rabbitbrush (CHVI8)---- Big sagebrush (ARTR2)----- Filaree (ERODI)----- Foothill pine (PISA2)----- Red brome (BRRU2)----- Rubber rabbitbrush (CHNA2)---- Ryegrass (LOLIU)-----	30 10 5 5 5 5 5 5 5
257: Hoffman-----	1,400	1,000	400	Cheatgrass (BRTE)----- California buckwheat (ERFA2)--- California juniper (JUCA7)---- Blue oak (QUDO)----- Foothill pine (PISA2)----- Narrowleaf goldenbush (ERLI6)-- Pine bluegrass (POSC)----- Rubber rabbitbrush (CHNA2)----	25 10 10 10 5 5 5 5
Tips-----	500	400	300	California buckwheat (ERFA2)--- California juniper (JUCA7)---- Nevada ephedra (EPNE)----- White brittlebush (ENFA)----- Burrobush (HYMEN3)----- Desert needlegrass (ACSP12)--- Red brome (BRRU2)----- Schismus (SCHIS)-----	20 15 15 10 5 5 5 5
Rock outcrop.					
259: Cowspring-----	900	400	200	Red brome (BRRU2)----- Redstem filaree (ERCI6)----- Buckwheat (ERIOG)----- Rabbitbrush (CHRYS9)----- California juniper (JUCA7)----	60 15 5 5 2
260: Cowspring-----	450	250	158	Blackbrush (CORA)----- California buckwheat (ERFA2)--- Desert needlegrass (ACSP12)--- Red brome (BRRU2)----- Pine bluegrass (POSC)----- Rabbitbrush (CHRYS9)----- White burrobush (HYSA)-----	20 15 15 10 5 5 5
Tips-----	200	175	125	Blackbrush (CORA)----- Nevada ephedra (EPNE)----- Desert needlegrass (ACSP12)--- White brittlebush (ENFA)----- Bottlebrush squirreltail (ELEL5)-----	40 15 10 10 5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
261:					
Blasingame-----	1,500	1,000	500	Red brome (BRRU2)-----	20
				Ripgut brome (BRDI3)-----	15
				Soft chess (BRHOH)-----	15
				Fescue (FESTU)-----	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	5
Arujo-----	2,000	1,200	700	Red brome (BRRU2)-----	30
				Filaree (ERODI)-----	15
				Misc. annual forbs (AAFF)-----	10
				Ripgut brome (BRDI3)-----	10
				Blue oak (QUDO)-----	5
				Misc. annual grasses (AAGG)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5
Cieneba-----	900	800	600	Brome (BROMU)-----	40
				Fescue (FESTU)-----	15
				Filaree (ERODI)-----	10
264:					
Arujo-----	2,000	1,600	1,000	Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Foxtail fescue (FEME)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. shrubs (SSSS)-----	5
				Misc. trees (TTTT)-----	5
				Pine bluegrass (POSC)-----	5
				Ripgut brome (BRDI3)-----	5
				Soft chess (BRHOH)-----	5
Walong-----	1,800	1,200	800	Cheatgrass (BRTE)-----	25
				Filaree (ERODI)-----	15
				California scrub oak (QUDU)-----	10
				Blue oak (QUDO)-----	10
				California buckwheat (ERFA2)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Misc. perennial grasses (PPGG)-----	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRDI3)-----	5
Tunis-----	1,000	600	400	Filaree (ERODI)-----	15
				California buckwheat (ERFA2)-----	10
				Blue oak (QUDO)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Ceanothus (CEANO)-----	5
				Foothill pine (PISA2)-----	5
				Foxtail fescue (FEME)-----	5
				Rabbitbrush (CHRYS9)-----	5
				Soft chess (BRHOH)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
265: Arujo-----	2,400	1,900	1,400	Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	15
				Needlegrass (STIPA)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)-----	5
				Misc. shrubs (SSSS)-----	5
				Misc. trees (TTTT)-----	5
				Ripgut brome (BRDI3)-----	5
266: Tunis-----	650	450	350	California buckwheat (ERFA2)---	15
				Blue oak (QUDO)-----	15
				Red brome (BRRU2)-----	15
				Cheatgrass (BRTE)-----	10
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
				Yucca (YUCCA)-----	5
Rock outcrop.					
267: Cieneba-----	900	800	600	Brome (BROMU)-----	40
				Fescue (FESTU)-----	15
				Filaree (ERODI)-----	10
Vista-----	1,700	1,200	800	Red brome (BRRU2)-----	20
				Soft chess (BRHOH)-----	15
				Filaree (ERODI)-----	10
				Tarweed (HEMIZ)-----	10
				Wild oat (AVFA)-----	10
				Fiddleneck (AMSIN)-----	5
Rock outcrop.					
268: Tunis-----	600	400	300	California buckwheat (ERFA2)---	15
				Filaree (ERODI)-----	15
				Cheatgrass (BRTE)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Blue oak (QUDO)-----	5
				Ceanothus (CEANO)-----	5
				Foothill pine (PISA2)-----	5
				Rabbitbrush (CHRYS9)-----	5
				Soft chess (BRHOH)-----	5
Tollhouse-----	1,100	900	700	Cheatgrass (BRTE)-----	40
				Big sagebrush (ARTR2)-----	25
				Interior live oak (QUWI2)-----	10
				California fremontia (FRCA6)---	5
				Mountainmahogany (CERCO)-----	5
Sorrell-----	1,200	800	600	Big sagebrush (ARTR2)-----	30
				Cheatgrass (BRTE)-----	30
				California buckwheat (ERFA2)---	10
				Interior live oak (QUWI2)-----	10
				Foothill pine (PISA2)-----	5
				Ripgut brome (BRDI3)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
269:					
Tollhouse-----	1,100	900	700	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Cheatgrass (BRTE)-----	10
				Mountainmahogany (CERCO)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Jeffrey pine (PIJE)-----	5
				Big sagebrush (ARTR2)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
				Whitethorn ceanothus (CECO)----	5
Sorrell-----	2,300	1,600	1,000	Cheatgrass (BRTE)-----	25
				Big sagebrush (ARTR2)-----	15
				California scrub oak (QUDU)----	10
				Pine bluegrass (POSC)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Buckbrush (CECU)-----	5
				Geranium (GERAN)-----	5
Rock outcrop.					
270:					
Locobill-----	600	500	200	Red brome (BRRU2)-----	30
				Narrowleaf goldenbush (ERLI6)--	20
				Blue oak (QUDO)-----	10
				Buckbrush (CECU)-----	10
				California juniper (JUCA7)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
Backcanyon-----	300	200	125	Red brome (BRRU2)-----	20
				California juniper (JUCA7)-----	15
				Redstem filaree (ERCI6)-----	15
				Narrowleaf goldenbush (ERLI6)--	10
				California buckwheat (ERFA2)---	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Snakeweed (GUTIE)-----	5
				Yucca (YUCCA)-----	5
Sesame-----	700	400	200	Soft chess (BRHOH)-----	25
				Oat (AVENA)-----	20
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				California scrub oak (QUDU)----	5
				Blue oak (QUDO)-----	5
				Clover (TRIFO)-----	5
271:					
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Sandberg bluegrass (POSAL2)----	10
				Blue oak (QUDO)-----	10
				Blue wildrye (ELGL)-----	5
				Bottlebrush squirreltail	
				(ELEL5)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRDI3)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
271:					
Tunis-----	650	450	350	California buckwheat (ERFA2)---	15
				Red brome (BRRU2)-----	15
				Blue oak (QUDO)-----	10
				Cheatgrass (BRTE)-----	10
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual grasses (AAGG)---	5
				Yucca (YUCCA)-----	5
Rock outcrop.					
272:					
Tollhouse-----	1,100	900	700	Buckbrush (CECU)-----	10
				Canyon live oak (QUCH2)-----	10
				Pine bluegrass (POSC)-----	10
				Cheatgrass (BRTE)-----	5
				California buckwheat (ERFA2)---	5
				Jeffrey pine (PIJE)-----	5
				Big sagebrush (ARTR2)-----	5
				Black oak (QUVE)-----	5
				Foothill pine (PISA2)-----	5
				Whitethorn ceanothus (CECO)----	5
				Red brome (BRRU2)-----	0
Edmundston-----	2,000	1,200	1,000	Pine bluegrass (POSC)-----	25
				California black oak (QUKE)----	10
				Jeffrey pine (PIJE)-----	10
				Misc. perennial grasses (PPGG)	10
				Canyon live oak (QUCH2)-----	10
				Rubber rabbitbrush (CHNA2)----	5
				Ponderosa pine (PIPO)-----	1
				Cheatgrass (BRTE)-----	0
				Red brome (BRRU2)-----	0
				Redstem filaree (ERCI6)-----	0
Sorrell-----	2,000	1,100	900	Pine bluegrass (POSC)-----	20
				California scrub oak (QUDU)----	10
				Buckbrush (CECU)-----	10
				Canyon live oak (QUCH2)-----	10
				Jeffrey pine (PIJE)-----	5
				Big sagebrush (ARTR2)-----	5
				Singleleaf pinyon (PIMO)-----	5
				Geranium (GERAN)-----	1
				Cheatgrass (BRTE)-----	0
274:					
Sesame-----	2,800	1,900	1,200	Soft chess (BRHOH)-----	25
				Oat (AVENA)-----	20
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				California scrub oak (QUDU)----	5
				Blue oak (QUDO)-----	5
				Clover (TRIFO)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
274:					
Tweedy-----	1,200	1,000	800	Big sagebrush (ARTR2)-----	15
				Bluegrass (POA)-----	10
				Ceanothus (CEANO)-----	10
				Misc. annual forbs (AAFF)-----	10
				Misc. annual grasses (AAGG)----	10
				Blue oak (QUDO)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Western mountainmahogany (CEMO2)-----	5
Rock outcrop.					
275:					
Strahle-----	800	650	350	Red brome (BRRU2)-----	15
				Buckbrush (CECU)-----	10
				Cheatgrass (BRTE)-----	10
				Foothill pine (PISA2)-----	10
				California buckwheat (ERFA2)---	5
				Blue oak (QUDO)-----	5
				Filaree (ERODI)-----	5
				Oat (AVENA)-----	5
Sesame-----	2,500	2,000	1,200	Soft chess (BRHOH)-----	25
				Oat (AVENA)-----	20
				Blue oak (QUDO)-----	10
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				California scrub oak (QUDU)----	5
				Clover (TRIFO)-----	5
Tweedy-----	1,300	1,100	900	Ceanothus (CEANO)-----	10
				Foothill pine (PISA2)-----	10
				Misc. annual grasses (AAGG)----	10
				Misc. shrubs (SSSS)-----	10
				Blue oak (QUDO)-----	5
				Bluegrass (POA)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5
276:					
Tips-----	350	250	150	Red brome (BRRU2)-----	25
				California buckwheat (ERFA2)---	20
				Goldenbush (ERICA2)-----	20
				Rabbitbrush (CHRYS9)-----	5
Hoffman-----	600	400	250	Blackbrush (CORA)-----	40
				Narrowleaf goldenbush (ERLI6)---	10
				Pine bluegrass (POSC)-----	10
				California buckwheat (ERFA2)---	5
				California juniper (JUCA7)-----	5
				Desert needlegrass (ACSP12)----	5
				Red brome (BRRU2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
276: Cinco-----	550	350	200	Desert needlegrass (ACSP12)---- Bottlebrush squirreltail (ELEL5)----- Misc. annual forbs (A AFF)----- California buckwheat (ERFA2)--- Sandberg bluegrass (POSAL2)---- Lupine (LUPIN)----- Pine bluegrass (POSC)----- Spiny hopsage (GRSP)-----	40 10 10 5 5 5 5 5
277: Feethill-----	3,000	2,200	1,400	Blue oak (QUDO)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- Slender oat (AVBA)----- California buckeye (AECA)----- Gooseberry (RIBES)----- Pine bluegrass (POSC)-----	20 15 10 10 10 5 5 5
Vista-----	1,700	1,200	800	Red brome (BRRU2)----- Soft chess (BRHOH)----- Sandberg bluegrass (POSAL2)---- Filaree (ERODI)----- Tarweed (HEMIZ)----- Wild oat (AVFA)----- Fiddleneck (AMSIN)-----	20 15 10 10 10 10 5
Walong-----	2,000	1,200	800	Soft chess (BRHOH)----- Filaree (ERODI)----- Sandberg bluegrass (POSAL2)---- Blue oak (QUDO)----- Blue wildrye (ELGL)----- Bottlebrush squirreltail (ELEL5)----- Misc. perennial grasses (PPGG) Misc. shrubs (SSSS)----- Ripgut brome (BRDI3)-----	25 15 10 10 5 5 5 5 5
279: Strahle-----	800	650	350	Red brome (BRRU2)----- Blue oak (QUDO)----- Cheatgrass (BRTE)----- California buckwheat (ERFA2)--- Buckbrush (CECU)----- Filaree (ERODI)----- Foothill pine (PISA2)----- Oat (AVENA)-----	15 10 10 5 5 5 5 5
Rock outcrop. Sesame-----	3,000	1,900	1,200	Soft chess (BRHOH)----- Oat (AVENA)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- California scrub oak (QUDU)---- Blue oak (QUDO)----- Clover (TRIFO)-----	25 20 10 10 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
280:					
Tollhouse-----	1,100	900	700	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Cheatgrass (BRTE)-----	10
				Mountainmahogany (CERCO)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Jeffrey pine (PIJE)-----	5
				Big sagebrush (ARTR2)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
				Whitethorn ceanothus (CECO)----	5
Martee-----	800	500	300	California scrub oak (QUDU)----	20
				Buckbrush (CECU)-----	15
				Big sagebrush (ARTR2)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
				Redstem filaree (ERCI6)-----	5
				Yucca (YUCCA)-----	5
Edmundston-----	1,600	1,000	800	Singleleaf pinyon (PIMO)-----	30
				Pine bluegrass (POSC)-----	20
				Cheatgrass (BRTE)-----	15
				Big sagebrush (ARTR2)-----	10
				Buckbrush (CECU)-----	5
				Jeffrey pine (PIJE)-----	5
				Buckwheat (ERIOG)-----	2
				Mountainmahogany (CERCO)-----	2
281:					
Havala-----	1,800	1,500	900	Soft chess (BRHOH)-----	25
				Redstem filaree (ERCI6)-----	15
				Purple needlegrass (NAPU4)-----	10
				Wild oat (AVFA)-----	10
				Burclover (MEHI)-----	5
				Clover (TRIFO)-----	5
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMAG)-----	5
				Oak (QUERC)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
Walong-----	1,500	1,100	700	Cheatgrass (BRTE)-----	20
				Filaree (ERODI)-----	20
				Blue oak (QUDO)-----	10
				Foothill pine (PISA2)-----	5
				Ripgut brome (BRDI3)-----	5
				Soft chess (BRHOH)-----	5
Kernfork-----	2,000	1,600	1,000	Rush (JUNCU)-----	40
				Red brome (BRRU2)-----	20
				Rabbitbrush (CHRY9)-----	10
				Filaree (ERODI)-----	5
				Saltgrass (DISTI)-----	1

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
282:					
Tollhouse-----	1,700	1,000	700	Big sagebrush (ARTR2)-----	25
				Misc. annual forbs (A AFF)-----	20
				Pine bluegrass (POSC)-----	10
				California juniper (JUCA7)-----	5
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
Sesame-----	1,200	900	400	Soft ches (BRHOH)-----	25
				Oat (AVENA)-----	20
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				California scrub oak (QUDU)-----	5
				Blue oak (QUDO)-----	5
				Clover (TRIFO)-----	5
Friant-----	900	500	250	Oak (QUERC)-----	20
				Buckwheat (ERIOG)-----	15
				Filaree (ERODI)-----	10
				Ceanothus (CEANO)-----	5
				Cheatgrass (BRTE)-----	5
				Juniper (JUNIP)-----	5
				Rabbitbrush (CHRYS9)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
				Soft ches (BRHOH)-----	5
				Wild oat (AVFA)-----	5
283:					
Tollhouse-----	1,600	1,100	700	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Cheatgrass (BRTE)-----	10
				Mountainmahogany (CERCO)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Jeffrey pine (PIJE)-----	5
				Big sagebrush (ARTR2)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
				Whitethorn ceanothus (CECO)---	5
Martee-----	1,200	800	500	Cheatgrass (BRTE)-----	20
				Singleleaf pinyon (PIMO)-----	15
				Interior live oak (QUWI2)-----	10
				Ripgut brome (BRDI3)-----	10
				Big sagebrush (ARTR2)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Miners lettuce (CLPE)-----	5
				Pine bluegrass (POSC)-----	5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
284:					
Tollhouse-----	1,200	1,000	600	Buckbrush (CECU)-----	15
				Cheatgrass (BRTE)-----	15
				Singleleaf pinyon (PIMO)-----	15
				Interior live oak (QUWI2)-----	10
				Pine bluegrass (POSC)-----	10
				Big sagebrush (ARTR2)-----	5
Rock outcrop.					
285:					
Inyo-----	500	250	100	Red brome (BRRU2)-----	25
				Redstem filaree (ERCI6)-----	25
				Rabbitbrush (CHRYS9)-----	15
				Mediterranean barley (HOMUL)---	10
				California buckwheat (ERFA2)---	5
Kelval-----	800	500	300	Redstem filaree (ERCI6)-----	40
				Mediterranean barley (HOMUL)---	20
				Rabbitbrush (CHRYS9)-----	15
				Red brome (BRRU2)-----	5
				Saltgrass (DISTI)-----	5
				Ripgut brome (BRDI3)-----	1
286:					
Tollhouse-----	1,000	900	600	Mountainmahogany (CERCO)-----	20
				California buckwheat (ERFA2)---	10
				Buckbrush (CECU)-----	10
				Foothill pine (PISA2)-----	10
				Big sagebrush (ARTR2)-----	5
				Interior live oak (QUWI2)-----	5
				Pine bluegrass (POSC)-----	5
				Red brome (BRRU2)-----	5
Tweedy-----	1,300	1,100	900	Ceanothus (CEANO)-----	10
				Foothill pine (PISA2)-----	10
				Misc. annual grasses (AAGG)---	10
				Misc. shrubs (SSSS)-----	10
				Blue oak (QUDO)-----	5
				Bluegrass (POA)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5
Locobill-----	1,000	700	400	Buckbrush (CECU)-----	15
				Narrowleaf goldenbush (ERLI6)---	15
				Pine bluegrass (POSC)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Interior live oak (QUWI2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
287:					
Tweedy-----	1,300	1,100	900	Ceanothus (CEANO)-----	10
				Foothill pine (PISA2)-----	10
				Misc. annual grasses (AAGG)----	10
				Misc. shrubs (SSSS)-----	10
				Blue oak (QUDO)-----	5
				Bluegrass (POA)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5
Strahle-----	800	650	350	Red brome (BRRU2)-----	15
				Blue oak (QUDO)-----	10
				Cheatgrass (BRTE)-----	10
				California buckwheat (ERFA2)---	5
				Buckbrush (CECU)-----	5
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
				Oat (AVENA)-----	5
288:					
Sorrell-----	2,400	1,600	1,000	Cheatgrass (BRTE)-----	25
				Big sagebrush (ARTR2)-----	15
				California scrub oak (QUDU)----	10
				Pine bluegrass (POSC)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Buckbrush (CECU)-----	5
				Geranium (GERAN)-----	5
Arujo-----	2,200	1,200	700	Red brome (BRRU2)-----	20
				Filaree (ERODI)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (A AFF)-----	5
				Misc. annual grasses (AAGG)----	5
				Misc. perennial grasses (PPGG)	5
				Ripgut brome (BRDI3)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5
Rock outcrop.					
289:					
Erskine-----	1,800	1,200	800	Big sagebrush (ARTR2)-----	15
				Cheatgrass (BRTE)-----	15
				California fremontia (FRCA6)---	10
				Blue oak (QUDO)-----	10
				Buckbrush (CECU)-----	10
				Mountainmahogany (CERCO)-----	10
				Pine bluegrass (POSC)-----	10
				Foothill pine (PISA2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
289:					
Hyte-----	1,300	1,000	600	California buckwheat (ERFA2)---	10
				California scrub oak (QUDU)----	10
				Narrowleaf goldenbush (ERLI6)--	10
				Wild oat (AVFA)-----	10
				Buckbrush (CECU)-----	5
				Desert needlegrass (ACSP12)----	5
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
Rock outcrop.					
294:					
Edmundston-----	3,000	2,000	1,000	Cheatgrass (BRTE)-----	20
				Redstem filaree (ERCI6)-----	20
				Blue wildrye (ELGL)-----	10
				Misc. perennial grasses (PPGG)	10
				Red brome (BRRU2)-----	10
				California black oak (QUKE)----	5
				Ceanothus (CEANO)-----	5
				Mountainmahogany (CERCO)-----	5
Tweedy-----	1,300	1,100	900	Ceanothus (CEANO)-----	10
				Foothill pine (PISA2)-----	10
				Misc. annual grasses (AAGG)----	10
				Misc. shrubs (SSSS)-----	10
				Blue oak (QUDO)-----	5
				Bluegrass (POA)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Sandberg bluegrass (POSA12)----	10
				Blue oak (QUDO)-----	10
				Blue wildrye (ELGL)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRDI3)-----	5
295:					
Tweedy-----	1,300	1,100	900	Ceanothus (CEANO)-----	10
				Foothill pine (PISA2)-----	10
				Misc. annual grasses (AAGG)----	10
				Misc. shrubs (SSSS)-----	10
				Blue oak (QUDO)-----	5
				Bluegrass (POA)-----	5
				Buckbrush (CECU)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
295:					
Tunis-----	600	400	300	Cheatgrass (BRTE)-----	15
				Filaree (ERODI)-----	15
				California buckwheat (ERFA2)---	10
				Blue oak (QUDO)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Ceanothus (CEANO)-----	5
				Foothill pine (PISA2)-----	5
				Rabbitbrush (CHRYS9)-----	5
				Soft chess (BRHOH)-----	5
Rankor-----	3,000	2,500	1,500	Pine bluegrass (POSC)-----	20
				Ripgut brome (BRDI3)-----	15
				Blue oak (QUDO)-----	10
				Foothill pine (PISA2)-----	10
				California buckeye (AECA)-----	5
				California scrub oak (QUDU)---	5
				Buckbrush (CECU)-----	5
				Filaree (ERODI)-----	5
				Interior live oak (QWII2)-----	5
				Medusahead (TACA8)-----	5
				Soft chess (BRHOH)-----	5
296:					
Arujo-----	2,400	1,900	1,400	Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	15
				Needlegrass (STIPA)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Burclover (MEHI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)----	5
				Misc. shrubs (SSSS)-----	5
				Misc. trees (TTTT)-----	5
				Ripgut brome (BRR18)-----	5
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Sandberg bluegrass (POSA12)---	10
				Blue oak (QUDO)-----	10
				Blue wildrye (ELGL)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRR18)-----	5
Tunis-----	600	400	300	Soft chess (BRHOH)-----	30
				Cheatgrass (BRTE)-----	15
				Filaree (ERODI)-----	10
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMU)-----	5
				Purple needlegrass (NAPU4)-----	5
				Ripgut brome (BRR18)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
297:					
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Blue oak (QUDO)-----	10
				Red brome (BRRU2)-----	10
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Pine bluegrass (POSC)-----	5
				Ripgut brome (BRDI3)-----	5
Blasingame-----	2,200	1,500	1,100	Ripgut brome (BRDI3)-----	15
				Soft chess (BRHOH)-----	15
				Fescue (FESTU)-----	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Red brome (BRRU2)-----	5
Rock outcrop.					
298:					
Arujo-----	2,200	1,600	1,000	Red brome (BRRU2)-----	20
				Blue oak (QUDO)-----	10
				Filaree (ERODI)-----	10
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)-----	5
				Misc. perennial grasses (PPGG)	5
				Ripgut brome (BRDI3)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5
Feethill-----	3,000	2,200	1,700	Blue oak (QUDO)-----	15
				Soft chess (BRHOH)-----	15
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				Slender oat (AVBA)-----	10
				California buckeye (AECA)-----	5
				Gooseberry (RIBES)-----	5
				Pine bluegrass (POSC)-----	5
Sesame-----	2,800	2,000	1,500	Soft chess (BRHOH)-----	25
				Oat (AVENA)-----	20
				Filaree (ERODI)-----	10
				Ripgut brome (BRDI3)-----	10
				California scrub oak (QUDU)-----	5
				Blue oak (QUDO)-----	5
				Clover (TRIFO)-----	5
299:					
Arujo-----	2,800	1,200	900	Red brome (BRRU2)-----	20
				Filaree (ERODI)-----	10
				Blue oak (QUDO)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)-----	5
				Misc. perennial grasses (PPGG)	5
				Ripgut brome (BRDI3)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
299: Feethill-----	2,500	1,000	700	Blue oak (QUDO)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- Slender oat (AVBA)----- California buckeye (AECA)----- Pine bluegrass (POSC)-----	15 15 10 10 10 5 5
Sesame-----	2,500	1,000	700	Soft chess (BRHOH)----- Oat (AVENA)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- Blue oak (QUDO)-----	25 20 10 10 5
300: Stineway-----	1,000	600	400	Red brome (BRRU2)----- California buckwheat (ERFA2)--- Filaree (ERODI)----- Mojave buckwheat (ERHE)----- White burrobush (HYSA)----- California juniper (JUCA7)-----	25 20 20 10 5 2
Kiscove-----	800	600	400	Mojave buckwheat (ERHE)----- Pine bluegrass (POSC)----- Filaree (ERODI)----- Misc. annual forbs (A AFF)----- California juniper (JUCA7)----- Narrowleaf goldenbush (ERLI6)-- Rubber rabbitbrush (ERNA10)---- Sagebrush (ARTEM)-----	20 20 10 10 5 5 5 5
301: Feethill-----	2,200	1,400	900	Blue oak (QUDO)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- Slender oat (AVBA)----- California buckeye (AECA)----- Gooseberry (RIBES)----- Pine bluegrass (POSC)-----	20 15 10 10 10 5 5 5
Vista-----	1,200	900	500	Red brome (BRRU2)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Tarweed (HEMIZ)----- Wild oat (AVFA)----- Fiddleneck (AMSIN)-----	20 15 10 10 10 5
Rock outcrop.					
302: Feethill-----	2,800	1,900	1,200	Blue oak (QUDO)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Ripgut brome (BRDI3)----- Slender oat (AVBA)----- California buckeye (AECA)----- Gooseberry (RIBES)----- Pine bluegrass (POSC)-----	20 15 10 10 10 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
302: Cibo-----	3,800	2,600	1,600	Soft chess (BRHOH)----- Burclover (MEHI)----- Filaree (ERODI)----- Wild oat (AVFA)----- Clover (TRIFO)----- Fescue (FESTU)----- Red brome (BRRU2)----- Ripgut brome (BRDI3)-----	35 25 15 10 5 5 5 5
Cieneba-----	1,000	800	600	Brome (BROMU)----- Fescue (FESTU)----- Filaree (ERODI)-----	40 15 10
303: Steuber-----	2,000	1,500	1,000	Soft chess (BRHOH)----- Oak (QUERC)----- Redstem filaree (ERIC16)----- Wild oat (AVFA)----- Bluegrass (POA)----- Gooseberry (RIBES)----- Red brome (BRRU2)----- Ripgut brome (BRDI3)-----	20 15 10 10 5 5 5 5
304: Cibo-----	3,500	2,000	1,200	Soft chess (BRHOH)----- Filaree (ERODI)----- Wild oat (AVFA)----- Fescue (FESTU)----- Red brome (BRRU2)----- Ripgut brome (BRDI3)-----	35 15 10 5 5 5
305: Chanac-----	2,800	1,900	700	Soft chess (BRHOH)----- Filaree (ERODI)----- Red brome (BRRU2)----- Wild oat (AVFA)----- Bladderpod (LESQU)----- Misc. perennial forbs (PPFF)--- Allscale saltbush (ATPO)-----	25 15 15 15 5 5 1
Pleito-----	3,000	2,000	1,200	Soft chess (BRHOH)----- Misc. annual forbs (AAFF)----- Wild oat (AVFA)----- Red brome (BRRU2)----- Coastal bladderpod (ISAR)----- Filaree (ERODI)----- Ripgut brome (BRDI3)-----	30 15 15 10 5 5 5
Premier-----	2,300	1,700	800	Red brome (BRRU2)----- Soft chess (BRHOH)----- Filaree (ERODI)----- Tarweed (HEMIZ)----- Foxtail fescue (FEME)-----	30 20 10 10 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
306: Xerofluvents, occasionally flooded---	1,500	1,000	800	Red brome (BRRU2)----- Fremont cottonwood (POFR2)---- Bermudagrass (CYDA)----- Black willow (SANI)----- Baccharis (BACCH)----- Inland saltgrass (DISP)----- Ripgut brome (BRR18)-----	15 10 10 10 5 5 5
Riverwash.					
307: Typic Xeropsamments----	2,000	1,500	800	Cheatgrass (BRTE)----- Ripgut brome (BRDI3)----- Red brome (BRRU2)----- California white oak (QULO)---- Rabbitbrush (CHRYS9)-----	30 20 10 5 5
308: Rankor-----	2,800	2,300	1,500	California black oak (QUKE)---- Cheatgrass (BRTE)----- Pine bluegrass (POSC)----- Ripgut brome (BRDI3)----- California buckeye (AECA)----- Blue oak (QUDO)----- Buckbrush (CECU)----- Interior live oak (QUWI2)-----	20 15 15 10 5 5 5 5
Edmundston-----	2,500	1,500	800	Cheatgrass (BRTE)----- Jeffrey pine (PIJE)----- Misc. perennial grasses (PPGG) Pine bluegrass (POSC)----- California black oak (QUKE)---- Ceanothus (CEANO)----- Foothill pine (PISA2)----- Mountainmahogany (CERCO)-----	20 10 10 10 5 5 5 5
Tweedy-----	2,000	1,300	900	Ceanothus (CEANO)----- Cheatgrass (BRTE)----- Misc. shrubs (SSSS)----- California black oak (QUKE)---- Bluegrass (POA)----- Interior live oak (QUWI2)----- Misc. perennial grasses (PPGG) Western mountainmahogany (CEMO2)-----	10 10 10 5 5 5 5 5
309: Rankor-----	2,800	2,300	1,500	California black oak (QUKE)---- Cheatgrass (BRTE)----- Pine bluegrass (POSC)----- Ripgut brome (BRDI3)----- California buckeye (AECA)----- Blue oak (QUDO)----- Buckbrush (CECU)----- Interior live oak (QUWI2)-----	20 15 15 10 5 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
309: Edmundston-----	2,500	1,700	1,000	Cheatgrass (BRTE)-----	20
				Jeffrey pine (PIJE)-----	15
				Misc. perennial grasses (PPGG)	10
				Pine bluegrass (POSC)-----	10
				California black oak (QUKE)----	5
				Ceanothus (CEANO)-----	5
				Mountainmahogany (CERCO)-----	5
Tweedy-----	2,000	1,100	900	Ceanothus (CEANO)-----	10
				Cheatgrass (BRTE)-----	10
				Misc. shrubs (SSSS)-----	10
				California black oak (QUKE)----	5
				Bluegrass (POA)-----	5
				Interior live oak (QUWI2)-----	5
				Misc. perennial grasses (PPGG)	5
				Western mountainmahogany (CEMO2)-----	5
310: Stineway-----	1,200	700	500	California buckwheat (ERFA2)---	20
				Red brome (BRRU2)-----	20
				Mojave buckwheat (ERHE)-----	15
				California juniper (JUCA7)-----	5
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
Kiscove-----	800	600	400	Mojave buckwheat (ERHE)-----	20
				Pine bluegrass (POSC)-----	20
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				California juniper (JUCA7)-----	5
				Big sagebrush (ARTR2)-----	5
				Rubber rabbitbrush (ERNA10)----	5
311. Xerorthents-Rock outcrop					
312: Havala-----	2,000	1,500	1,000	Soft chess (BRHOH)-----	25
				Redstem filaree (ERCI6)-----	15
				Purple needlegrass (NAPU4)-----	10
				Wild oat (AVFA)-----	10
				Burclover (MEHI)-----	5
				Clover (TRIFO)-----	5
				Foxtail fescue (FEME)-----	5
				Mouse barley (HOMAG)-----	5
				Oak (QUERC)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
313. Dumps					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
314:					
Premier-----	2,300	1,800	800	Red brome (BRRU2)-----	30
				Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	10
				Tarweed (HEMIZ)-----	10
				Foxtail fescue (FEME)-----	5
Haplodurids-----	1,700	1,200	600	Red brome (BRRU2)-----	30
				Filaree (ERODI)-----	20
				Soft chess (BRHOH)-----	20
				Tarweed (HEMIZ)-----	10
315:					
Premier-----	2,300	1,800	800	Red brome (BRRU2)-----	30
				Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	10
				Tarweed (HEMIZ)-----	10
				Foxtail fescue (FEME)-----	5
Haplodurids-----	1,700	1,400	600	Red brome (BRRU2)-----	30
				Filaree (ERODI)-----	20
				Soft chess (BRHOH)-----	20
				Tarweed (HEMIZ)-----	10
316:					
Premier-----	2,000	1,300	700	Red brome (BRRU2)-----	30
				Wild oat (AVFA)-----	20
				Allscale saltbush (ATPO)-----	10
				Filaree (ERODI)-----	10
				Foxtail fescue (FEME)-----	5
317:					
Premier-----	2,300	1,800	800	Red brome (BRRU2)-----	30
				Wild oat (AVFA)-----	20
				Allscale saltbush (ATPO)-----	10
				Filaree (ERODI)-----	10
				Foxtail fescue (FEME)-----	5
320:					
Southlake-----	1,100	800	600	Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Goldenbush (ERICA2)-----	5
				Rubber rabbitbrush (ERNA10)-----	5
				Schismus (SCHIS)-----	5
325:					
Walong-----	2,000	1,200	800	Soft chess (BRHOH)-----	25
				Filaree (ERODI)-----	15
				Blue oak (QUDO)-----	10
				Pine bluegrass (POSC)-----	10
				Bottlebrush squirreltail (ELEL5)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Ripgut brome (BRDI3)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
326: Walong-----	2,000	1,200	800	Soft chess (BRHOH)----- Filaree (ERODI)----- Blue oak (QUDO)----- Pine bluegrass (POSC)----- Bottlebrush squirreltail (ELEL5)----- Misc. perennial grasses (PPGG) Misc. shrubs (SSSS)----- Ripgut brome (BRDI3)-----	25 15 10 10 5 5 5 5
330: Kernville-----	1,800	1,100	500	Red brome (BRRU2)----- California buckwheat (ERFA2)--- Filaree (ERODI)----- Wild oat (AVFA)----- California scrub oak (QUDU)---- Buckbrush (CECU)----- Chaparral yucca (YUWH)----- Desert needlegrass (ACSP12)---- Foothill pine (PISA2)----- Narrowleaf goldenbush (ERLI6)-- White brittlebush (ENFA)-----	20 10 10 10 5 5 5 5 5 5
Faycreek-----	1,600	1,200	800	Buckbrush (CECU)----- Big sagebrush (ARTR2)----- Pine bluegrass (POSC)----- Cheatgrass (BRTE)----- Blue oak (QUDO)----- Foothill pine (PISA2)----- Gooseberry (RIBES)----- Green Mormon tea (EPVI)-----	20 15 15 10 5 5 5 5
Rock outcrop.					
350: Southlake, stony-----	1,100	800	600	Mojave buckwheat (ERHE)----- Filaree (ERODI)----- Foothill pine (PISA2)----- Red brome (BRRU2)----- California juniper (JUCA7)---- Cheatgrass (BRTE)----- Goldenbush (ERICA2)----- Rubber rabbitbrush (ERNA10)---- Schismus (SCHIS)-----	15 15 10 10 5 5 5 5
Goodale-----	700	400	200	Red brome (BRRU2)----- California buckwheat (ERFA2)--- Filaree (ERODI)----- Rabbitbrush (CHRYS9)----- White burrobrush (HYSA)----- Arabian schismus (SCAR)----- Narrowleaf goldenbush (ERLI6)--	20 15 15 10 10 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
352:					
Goodale-----	700	400	200	Red brome (BRRU2)-----	20
				Filaree (ERODI)-----	15
				Schismus (SCHIS)-----	10
				California buckwheat (ERFA2)---	5
				Desert needlegrass (ACSP12)---	5
				Narrowleaf goldenbush (ERLI6)--	5
				Rabbitbrush (CHRY9)-----	5
				White burrobush (HYSA)-----	5
Riverwash.					
360:					
Kernville, bouldery----	1,900	1,200	800	Red brome (BRRU2)-----	20
				Wild oat (AVFA)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				California scrub oak (QUDU)---	5
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
Hogeye-----	2,000	1,400	800	Oat (AVENA)-----	20
				Misc. annual forbs (AAFF)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Red brome (BRRU2)-----	10
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
Southlake-----	1,100	800	600	Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	15
				Foothill pine (PISA2)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Goldenbush (ERICA2)-----	5
				Rubber rabbitbrush (ERNA10)----	5
				Schismus (SCHIS)-----	1
380:					
Delvar-----	3,500	2,200	1,500	Soft chess (BRHOH)-----	50
				Filaree (ERODI)-----	10
				Slender oat (AVBA)-----	10
				Mustard (BRASS2)-----	5
				Misc. annual grasses (AAGG)----	5
				Red brome (BRRU2)-----	5
Pleito-----	3,200	2,000	1,500	Soft chess (BRHOH)-----	50
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)----	5
				Purple needlegrass (NAPU4)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
				Wild oat (AVFA)-----	5
407.					
Centerville					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
410: Stineway-----	1,200	700	500	California buckwheat (ERFA2)--- Red brome (BRRU2)----- Mojave buckwheat (ERHE)----- California juniper (JUCA7)----- Filaree (ERODI)----- Foothill pine (PISA2)----- Misc. annual forbs (AAFF)-----	20 20 15 5 5 5 5
Kiscove-----	800	600	400	Mojave buckwheat (ERHE)----- Pine bluegrass (POSC)----- Filaree (ERODI)----- Misc. annual forbs (AAFF)----- California juniper (JUCA7)----- Big sagebrush (ARTR2)----- Rubber rabbitbrush (ERNA10)----	20 20 10 10 5 5 5
Urban land.					
411: Delvar					
412: Chollawell-----	800	400	150	White burrobush (HYSA)----- Arabian schismus (SCAR)----- Filaree (ERODI)----- Misc. annual forbs (AAFF)----- Red brome (BRRU2)----- Joshua tree (YUBR)----- Rubber rabbitbrush (CHNA2)----- Staghorn cholla (OPEC)-----	30 10 10 10 10 5 5 1
Urban land.					
417: Southlake-----	900	500	300	Red brome (BRRU2)----- Mojave buckwheat (ERHE)----- California juniper (JUCA7)----- Filaree (ERODI)----- Schismus (SCHIS)----- Rubber rabbitbrush (ERNA10)----	25 15 10 10 10 5
Southlake, gravelly----	900	600	400	Red brome (BRRU2)----- Mojave buckwheat (ERHE)----- Filaree (ERODI)----- Schismus (SCHIS)----- California juniper (JUCA7)----- Cheatgrass (BRTE)----- Foothill pine (PISA2)----- Rubber rabbitbrush (ERNA10)---- Horsebrush (TETRA3)-----	25 15 10 10 5 5 5 5 1
Goodale-----	400	250	150	California buckwheat (ERFA2)--- Rabbitbrush (CHRYS9)----- Red brome (BRRU2)----- Nevada ephedra (EPNE)----- Desert needlegrass (ACSP12)---- Pine bluegrass (POSC)----- Spiny hopsage (GRSP)-----	25 20 10 5 5 5 5
Urban land.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
420: Southlake-----	1,100	800	600	Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Goldenbush (ERICA2)-----	5
				Rubber rabbitbrush (ERNA10)-----	5
				Schismus (SCHIS)-----	5
Urban land.					
422: Kelval-----	700	550	400	Rabbitbrush (CHRYS9)-----	35
				Red brome (BRRU2)-----	15
				Redstem filaree (ERIC6)-----	15
				Mediterranean barley (HOMUL)---	5
				Cheatgrass (BRTE)-----	5
				Saltgrass (DISTI)-----	5
Urban land.					
423: Auberry-----	3,500	2,400	1,200	Wild oat (AVFA)-----	15
				Filaree (ERODI)-----	10
				Interior live oak (QUWI2)-----	10
				Soft chess (BRHOH)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Foxtail fescue (FEME)-----	5
				Red brome (BRRU2)-----	5
				Ripgut brome (BRDI3)-----	5
Crouch-----	4,500	4,000	3,000	Pine bluegrass (POSC)-----	20
				Ripgut brome (BRDI3)-----	15
				Foothill pine (PISA2)-----	10
				California black oak (QUKE)---	5
				California scrub oak (QUDU)---	5
				Jeffrey pine (PIJE)-----	5
				Buckbrush (CECU)-----	5
				Filaree (ERODI)-----	5
				Interior live oak (QUWI2)-----	5
				Interior live oak (QUWI2)-----	5
				Medusahead (TACA8)-----	5
				Soft chess (BRHOH)-----	5
				Wild oat (AVFA)-----	5
Rock outcrop.					
424: Inyo-----	400	300	150	Nevada ephedra (EPNE)-----	20
				Rabbitbrush (CHRYS9)-----	20
				Horsebrush (TETRA3)-----	15
				California buckwheat (ERFA2)---	5
				Joshua tree (YUBR)-----	5
				Blackbrush (CORA)-----	5
Urban land.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
430: Friant-----	900	500	250	Red brome (BRRU2)-----	20
				Ripgut brome (BRDI3)-----	15
				Soft chess (BRHOH)-----	15
				Wild oat (AVFA)-----	15
				Filaree (ERODI)-----	10
				Cheatgrass (BRTE)-----	5
				Oak (QUERC)-----	1
Rock outcrop.					
432: Alberti, gravelly-----	1,400	1,200	900	California buckwheat (ERFA2)---	15
				California juniper (JUCA7)-----	15
				Buckbrush (CECU)-----	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Red brome (BRRU2)-----	5
				Yucca (YUCCA)-----	5
Urban land.					
441: Inyo-----	400	300	200	California buckwheat (ERFA2)---	15
				Nevada ephedra (EPNE)-----	15
				Rabbitbrush (CHRYS9)-----	15
				Bottlebrush squirreltail (ELEL5)-----	10
				White burrobush (HYSA)-----	10
				Joshua tree (YUBR)-----	5
				Blackbrush (CORA)-----	5
Urban land.					
442: Inyo-----	700	500	200	California buckwheat (ERFA2)---	15
				Nevada ephedra (EPNE)-----	15
				Rabbitbrush (CHRYS9)-----	15
				Bottlebrush squirreltail (ELEL5)-----	10
				White burrobush (HYSA)-----	10
				Joshua tree (YUBR)-----	5
				Blackbrush (CORA)-----	5
Urban land.					
445: Chollawell-----	400	300	200	California buckwheat (ERFA2)---	20
				Blackbrush (CORA)-----	20
				Nevada ephedra (EPNE)-----	10
				Bottlebrush squirreltail (ELEL5)-----	10
				Joshua tree (YUBR)-----	5
				Mojave cottonthorn (TEST2)-----	5
				Desert needlegrass (ACSP12)----	5
Urban land.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
450:					
Southlake, stony-----	1,100	800	600	Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	15
				Foothill pine (PISA2)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Goldenbush (ERICA2)-----	5
				Rubber rabbitbrush (ERNA10)----	5
				Schismus (SCHIS)-----	5
Goodale-----	700	400	200	Red brome (BRRU2)-----	20
				California buckwheat (ERFA2)---	15
				Filaree (ERODI)-----	15
				Rabbitbrush (CHRY9)-----	10
				White burrobush (HYS)-----	10
				Arabian schismus (SCAR)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
Urban land.					
460:					
Kernville, bouldery-----	1,900	1,200	800	Red brome (BRRU2)-----	20
				Wild oat (AVFA)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				California scrub oak (QUDU)----	5
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
Hogeye-----	2,000	1,400	800	Oat (AVENA)-----	20
				Misc. annual forbs (AAFF)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Red brome (BRRU2)-----	10
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
Southlake-----	1,100	800	600	Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	15
				Foothill pine (PISA2)-----	10
				Red brome (BRRU2)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Goldenbush (ERICA2)-----	5
				Rubber rabbitbrush (ERNA10)----	5
				Schismus (SCHIS)-----	1
Urban land.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
465:					
Arujo-----	2,400	1,900	1,400	Soft chess (BRHOH)-----	20
				Filaree (ERODI)-----	15
				Needlegrass (STIPA)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)-----	5
				Misc. shrubs (SSSS)-----	5
				Misc. trees (TTTT)-----	5
				Ripgut brome (BRDI3)-----	5
Urban land.					
485:					
Inyo-----	500	250	100	Red brome (BRRU2)-----	25
				Redstem filaree (ERCI6)-----	25
				Rabbitbrush (CHRYS9)-----	15
				Mediterranean barley (HOMUL)---	10
				California buckwheat (ERFA2)---	5
Kelval-----	800	500	300	Redstem filaree (ERCI6)-----	40
				Mediterranean barley (HOMUL)---	20
				Rabbitbrush (CHRYS9)-----	15
				Red brome (BRRU2)-----	5
				Saltgrass (DISTI)-----	5
				Ripgut brome (BRDI3)-----	1
Urban land.					
488:					
Tweedy-----	1,500	1,000	800	Big sagebrush (ARTR2)-----	10
				Bluegrass (POA)-----	10
				Interior live oak (QUWI2)-----	10
				Misc. annual forbs (AAFF)-----	10
				Misc. annual grasses (AAGG)-----	10
				Blue oak (QUDO)-----	5
				Bottlebrush squirreltail (ELEL5)-----	5
				Ceanothus (CEANO)-----	5
				Misc. perennial grasses (PPGG)	5
				Misc. shrubs (SSSS)-----	5
				Western mountainmahogany (CEMO2)-----	5
Tollhouse-----	1,200	800	500	Big sagebrush (ARTR2)-----	25
				Mountainmahogany (CERCO)-----	20
				Pine bluegrass (POSC)-----	10
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Interior live oak (QUWI2)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
488:					
Locobill-----	1,400	900	600	Red brome (BRRU2)-----	30
				Narrowleaf goldenbush (ERLI6)--	20
				Blue oak (QUDO)-----	10
				Buckbrush (CECU)-----	10
				California juniper (JUCA7)-----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5
Urban land.					
501:					
Hyte-----	1,500	1,000	600	Wild oat (AVFA)-----	15
				California buckwheat (ERFA2)---	10
				California scrub oak (QUDU)----	10
				Buckbrush (CECU)-----	10
				Narrowleaf goldenbush (ERLI6)--	10
				Desert needlegrass (ACSP12)----	5
				Filaree (ERODI)-----	5
				Foothill pine (PISA2)-----	5
Erskine-----	1,800	1,200	800	Cheatgrass (BRTE)-----	15
				California fremontia (FRCA6)---	10
				Big sagebrush (ARTR2)-----	10
				Blue oak (QUDO)-----	10
				Buckbrush (CECU)-----	10
				Mountainmahogany (CERCO)-----	10
				Pine bluegrass (POSC)-----	10
				Foothill pine (PISA2)-----	5
Sorrell-----	2,400	1,600	1,000	Cheatgrass (BRTE)-----	25
				Big sagebrush (ARTR2)-----	15
				California scrub oak (QUDU)----	10
				Pine bluegrass (POSC)-----	10
				Buckbrush (CECU)-----	5
				Singleleaf pinyon (PIMO)-----	5
				Geranium (GERAN)-----	1
503:					
Tips-----	600	350	200	Filaree (ERODI)-----	15
				Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Desert needlegrass (ACSP12)----	10
				Schismus (SCHIS)-----	10
				California juniper (JUCA7)-----	5
				Burrobush (HYMEN3)-----	5
				White brittlebush (ENFA)-----	5
Erskine-----	800	600	500	Big sagebrush (ARTR2)-----	15
				California buckwheat (ERFA2)---	10
				Pine bluegrass (POSC)-----	10
				Rubber rabbitbrush (ERNA10)----	10
				California juniper (JUCA7)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Ephedra (EPHED)-----	5
				Red brome (BRRU2)-----	5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
505: Chollawell-----	450	250	150	California buckwheat (ERFA2)--- Greene rabbitbrush (CHGR6)----- Horsebrush (TETRA3)----- Rubber rabbitbrush (ERNA10)---- Nevada ephedra (EPNE)----- Desert needlegrass (ACSP12)---- Filaree (ERODI)----- Red brome (BRRU2)----- Joshua tree (YUBR)-----	15 15 10 10 5 5 5 5 1
507: Xyno-----	800	300	100	White burrobush (HYSA)----- Arabian schismus (SCAR)----- Desert needlegrass (ACSP12)---- Red brome (BRRU2)----- California buckwheat (ERFA2)--- Nevada ephedra (EPNE)----- Filaree (ERODI)----- Narrowleaf goldenbush (ERLI6)-- Misc. annual forbs (AAFF)-----	25 10 10 10 5 5 5 5 5
Canebrake-----	1,000	400	200	Big sagebrush (ARTR2)----- Pine bluegrass (POSC)----- Nevada ephedra (EPNE)----- Desert needlegrass (ACSP12)---- Buckwheat (ERIOG)----- Narrowleaf goldenbush (ERLI6)-- Misc. annual forbs (AAFF)-----	30 15 10 10 5 5 5
Pilotwell-----	1,000	500	100	White burrobush (HYSA)----- Desert needlegrass (ACSP12)---- Misc. annual forbs (AAFF)----- Arabian schismus (SCAR)----- Red brome (BRRU2)----- California buckwheat (ERFA2)--- Filaree (ERODI)----- Narrowleaf goldenbush (ERLI6)--	20 15 15 10 10 5 5 5
508: Pilotwell-----	800	600	200	California buckwheat (ERFA2)--- Red brome (BRRU2)----- Desert needlegrass (ACSP12)---- Filaree (ERODI)----- Misc. annual forbs (AAFF)----- Green Mormon tea (EPVI)----- Rabbitbrush (CHRYS9)----- White burrobush (HYSA)-----	25 15 10 10 10 5 5 5
Xyno-----	600	300	100	California buckwheat (ERFA2)--- Desert needlegrass (ACSP12)---- Filaree (ERODI)----- Red brome (BRRU2)----- Goldenbush (ERICA2)----- Green Mormon tea (EPVI)----- Narrowleaf goldenbush (ERLI6)-- Misc. annual forbs (AAFF)----- White burrobush (HYSA)-----	20 10 10 10 5 5 5 5 5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
509:					
Xyno-----	600	300	100	California buckwheat (ERFA2)---	20
				Red brome (BRRU2)-----	15
				Desert needlegrass (ACSP12)---	10
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				Misc. annual grasses (AAGG)----	10
				Goldenbush (ERICA2)-----	5
				White burrobush (HYSA)-----	5
Faycreek-----	1,600	1,200	800	Buckbrush (CECU)-----	30
				Big sagebrush (ARTR2)-----	15
				Pine bluegrass (POSC)-----	15
				California buckwheat (ERFA2)---	5
				Desert needlegrass (ACSP12)----	5
				Foothill pine (PISA2)-----	5
				Green Mormon tea (EPVI)-----	5
				Rubber rabbitbrush (CHNA2)-----	5
Rock outcrop.					
510:					
Xyno-----	1,000	500	200	California buckwheat (ERFA2)---	15
				Desert needlegrass (ACSP12)---	15
				Red brome (BRRU2)-----	15
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				Goldenbush (ERICA2)-----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual grasses (AAGG)----	5
				White burrobush (HYSA)-----	5
Canebrake-----	1,300	800	500	Big sagebrush (ARTR2)-----	20
				Buckbrush (CECU)-----	20
				Desert needlegrass (ACSP12)----	10
				Pine bluegrass (POSC)-----	10
				California buckwheat (ERFA2)---	5
				California scrub oak (QUDU)----	5
				Foothill pine (PISA2)-----	5
				Green Mormon tea (EPVI)-----	5
				Narrowleaf goldenbush (ERLI6)---	5
				Misc. annual forbs (AAFF)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Pilotwell, bouldery----	1,000	600	200	California buckwheat (ERFA2)---	15
				Red brome (BRRU2)-----	15
				Desert needlegrass (ACSP12)----	10
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				Cheatgrass (BRTE)-----	5
				Green Mormon tea (EPVI)-----	5
				White brittlebush (ENFA)-----	5
				White burrobush (HYSA)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
512: Chollawell, cobbly substratum-----	800	400	150	White burrobush (HYSA)----- Arabian schismus (SCAR)----- Filaree (ERODI)----- Misc. annual forbs (AAFF)----- Red brome (BRRU2)----- Joshua tree (YUBR)----- Rubber rabbitbrush (CHNA2)----- Staghorn cholla (OPEC)-----	30 10 10 10 10 5 5 1
Chollawell, gravelly----	800	400	150	White burrobush (HYSA)----- Arabian schismus (SCAR)----- Filaree (ERODI)----- Misc. annual forbs (AAFF)----- Red brome (BRRU2)----- Joshua tree (YUBR)----- Rubber rabbitbrush (CHNA2)----- Staghorn cholla (OPEC)-----	30 10 10 10 10 5 5 1
514: Chollawell-----	800	400	200	Blackbrush (CORA)----- Sandberg bluegrass (POSE)----- Narrowleaf goldenbush (ERLI6)-- Spiny hopsage (GRSP)----- Joshua tree (YUBR)-----	80 10 5 3 2
Inyo-----	600	300	100	Rabbitbrush (CHRYS9)----- White burrobush (HYSA)----- California buckwheat (ERFA2)--- Nevada ephedra (EPNE)----- Bottlebrush squirreltail (ELEL5)----- Joshua tree (YUBR)-----	35 20 15 15 10 5
515: Scodie-----	800	500	200	Big sagebrush (ARTR2)----- Singleleaf pinyon (PIMO)----- Pine bluegrass (POSC)----- Desert bitterbrush (PUGL2)----- Desert needlegrass (ACSP12)---- Green Mormon tea (EPVI)----- Misc. annual forbs (AAFF)-----	30 25 10 5 5 5 5
Canebrake-----	500	400	200	Big sagebrush (ARTR2)----- Desert bitterbrush (PUGL2)----- Singleleaf pinyon (PIMO)----- Buckwheat (ERIOG)----- Desert needlegrass (ACSP12)---- Foothill pine (PISA2)----- Green Mormon tea (EPVI)----- Misc. annual forbs (AAFF)----- Pine bluegrass (POSC)----- Rubber rabbitbrush (ERNA10)----	30 10 10 5 5 5 5 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
515:					
Xyno-----	700	400	200	California buckwheat (ERFA2)---	15
				Misc. annual forbs (AAFF)-----	15
				Red brome (BRRU2)-----	15
				Desert needlegrass (ACSP12)----	10
				Filaree (ERODI)-----	10
				Goldenbush (ERICA2)-----	5
				Green Mormon tea (EPVI)-----	5
				Schismus (SCHIS)-----	5
				White brittlebush (ENFA)-----	5
				White burrobush (HYSA)-----	5
516:					
Xyno-----	600	300	100	White burrobush (HYSA)-----	15
				California buckwheat (ERFA2)---	10
				Bitterbrush (PURSH)-----	10
				Desert needlegrass (ACSP12)----	10
				Red brome (BRRU2)-----	10
				Filaree (ERODI)-----	5
				Goldenbush (ERICA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Schismus (SCHIS)-----	5
Rock outcrop.					
Canebrake-----	750	350	200	Big sagebrush (ARTR2)-----	30
				Pine bluegrass (POSC)-----	15
				Nevada ephedra (EPNE)-----	10
				Desert needlegrass (ACSP12)----	10
				Buckwheat (ERIOG)-----	5
				Goldenbush (ERICA2)-----	5
				Misc. annual forbs (AAFF)-----	5
517:					
Southlake-----	900	500	300	Red brome (BRRU2)-----	25
				Mojave buckwheat (ERHE)-----	15
				California juniper (JUCA7)-----	10
				Filaree (ERODI)-----	10
				Schismus (SCHIS)-----	10
				Rubber rabbitbrush (ERNA10)----	5
Southlake, gravelly----	900	600	400	Red brome (BRRU2)-----	25
				Mojave buckwheat (ERHE)-----	15
				Filaree (ERODI)-----	10
				Schismus (SCHIS)-----	10
				California juniper (JUCA7)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Rubber rabbitbrush (ERNA10)----	5
				Horsebrush (TETRA3)-----	1
Goodale-----	400	250	150	California buckwheat (ERFA2)---	25
				Rabbitbrush (CHRY9)-----	20
				Red brome (BRRU2)-----	10
				Nevada ephedra (EPNE)-----	5
				Desert needlegrass (ACSP12)----	5
				Pine bluegrass (POSC)-----	5
				Spiny hopsage (GRSP)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
518:					
Backcanyon-----	700	350	200	California buckwheat (ERFA2)---	20
				Red brome (BRRU2)-----	10
				Redstem filaree (ERCI6)-----	10
				Schismus (SCHIS)-----	10
				White brittlebush (ENFA)-----	10
				California juniper (JUCA7)-----	5
				Douglas rabbitbrush (CHVI8)---	5
				Winterfat (KRASC)-----	5
				Yucca (YUCCA)-----	5
Rock outcrop.					
520:					
Kernville-----	1,800	1,000	500	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				Wild oat (AVFA)-----	10
				California scrub oak (QUDU)---	5
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
Hogeye-----	2,000	1,100	600	Red brome (BRRU2)-----	15
				Wild oat (AVFA)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				California scrub oak (QUDU)---	5
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
Rock outcrop.					
523:					
Kernville, bouldery----	1,600	1,000	500	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				California scrub oak (QUDU)---	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Chaparral yucca (YUWH)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
				Misc. annual grasses (AAGG)---	5
				White brittlebush (ENFA)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
523:					
Faycreek-----	1,800	1,500	1,000	Pine bluegrass (POSC)-----	15
				Big sagebrush (ARTR2)-----	10
				Buckbrush (CECU)-----	10
				Cheatgrass (BRTE)-----	10
				California buckwheat (ERFA2)---	5
				California scrub oak (QUDU)----	5
				Foothill pine (PISA2)-----	5
				Mountainmahogany (CERCO)-----	5
				Red brome (BRRU2)-----	5
Rock outcrop.					
525:					
Hungrygulch-----	2,000	1,300	600	Big sagebrush (ARTR2)-----	20
				Pine bluegrass (POSC)-----	20
				Cheatgrass (BRTE)-----	15
				California scrub oak (QUDU)----	10
				Buckbrush (CECU)-----	10
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
Kernville-----	2,000	1,500	600	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				California scrub oak (QUDU)----	5
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Foothill pine (PISA2)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
				Misc. annual grasses (AAGG)----	5
Hogeye-----	2,200	1,400	800	Red brome (BRRU2)-----	15
				California buckwheat (ERFA2)---	10
				Filaree (ERODI)-----	10
				Misc. annual grasses (AAGG)----	10
				Wild oat (AVFA)-----	10
				California scrub oak (QUDU)----	5
				Blue oak (QUDO)-----	5
				Buckbrush (CECU)-----	5
				Cheatgrass (BRTE)-----	5
				Foothill pine (PISA2)-----	5
530:					
Alberti, cobbly-----	1,400	1,100	700	California buckwheat (ERFA2)---	15
				California juniper (JUCA7)-----	15
				Buckbrush (CECU)-----	10
				Filaree (ERODI)-----	10
				Wild oat (AVFA)-----	10
				California fremontia (FRCA6)---	5
				Blue oak (QUDO)-----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Red brome (BRRU2)-----	5
				Yucca (YUCCA)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
530: Alberti, gravelly-----	1,400	1,100	700	California buckwheat (ERFA2)--- California juniper (JUCA7)----- Buckbrush (CECU)----- Filaree (ERODI)----- Wild oat (AVFA)----- California fremontia (FRCA6)--- Blue oak (QUDO)----- Foothill pine (PISA2)----- Misc. annual forbs (AAFF)----- Red brome (BRRU2)----- Yucca (YUCCA)-----	15 15 10 10 10 5 5 5 5 5 5
531: Tweedy-----	1,400	1,000	800	Pine bluegrass (POSC)----- California fremontia (FRCA6)--- Cypress (CUPRE)----- Singleleaf pinyon (PIMO)----- Soft chess (BRHOH)----- California juniper (JUCA7)----- Big sagebrush (ARTR2)----- Buckbrush (CECU)----- Misc. perennial grasses (PPGG) Misc. shrubs (SSSS)----- Western mountainmahogany (CEMO2)-----	15 10 10 10 10 5 5 5 5 5 5
Erskine-----	1,500	1,100	800	Cheatgrass (BRTE)----- Cypress (CUPRE)----- California fremontia (FRCA6)--- Buckbrush (CECU)----- Mountainmahogany (CERCO)----- Pine bluegrass (POSC)----- Singleleaf pinyon (PIMO)----- Soft chess (BRHOH)-----	15 15 10 10 10 10 10 5
Alberti, gravelly-----	1,600	1,200	800	California buckwheat (ERFA2)--- California juniper (JUCA7)----- Pine bluegrass (POSC)----- Buckbrush (CECU)----- Cypress (CUPRE)----- Filaree (ERODI)----- Foothill pine (PISA2)----- Green ephedra (EPVI)----- Misc. annual forbs (AAFF)----- Soft chess (BRHOH)-----	15 15 10 5 5 5 5 5 5 5
532: Alberti, gravelly-----	1,400	1,200	900	California buckwheat (ERFA2)--- California juniper (JUCA7)----- Buckbrush (CECU)----- Filaree (ERODI)----- Wild oat (AVFA)----- Blue oak (QUDO)----- Foothill pine (PISA2)----- Misc. annual forbs (AAFF)----- Red brome (BRRU2)----- Yucca (YUCCA)-----	15 15 10 10 10 5 5 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
540:					
Canebrake-----	700	400	300	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	15
				Singleleaf pinyon (PIMO)-----	15
				Desert needlegrass (ACSP12)-----	10
				California buckwheat (ERFA2)---	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Lachim-----	800	400	300	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	15
				Singleleaf pinyon (PIMO)-----	15
				California buckwheat (ERFA2)---	5
				Desert needlegrass (ACSP12)----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
				Rubber rabbitbrush (ERNA10)----	5
541:					
Canebrake-----	500	400	250	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	15
				Singleleaf pinyon (PIMO)-----	15
				California buckwheat (ERFA2)---	5
				Desert needlegrass (ACSP12)----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Lachim-----	600	400	250	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	20
				Singleleaf pinyon (PIMO)-----	15
				California buckwheat (ERFA2)---	5
				Desert needlegrass (ACSP12)----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Rock outcrop.					
543:					
Wortley-----	500	350	200	Big sagebrush (ARTR2)-----	35
				Pine bluegrass (POSC)-----	15
				Singleleaf pinyon (PIMO)-----	15
				Cheatgrass (BRTE)-----	5
				Desert bitterbrush (PUGL2)-----	5
				Desert needlegrass (ACSP12)----	5
Indiano-----	400	300	200	Big sagebrush (ARTR2)-----	35
				Singleleaf pinyon (PIMO)-----	15
				Pine bluegrass (POSC)-----	10
				Cheatgrass (BRTE)-----	5
				Desert bitterbrush (PUGL2)-----	5
				Desert needlegrass (ACSP12)----	5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
544:					
Xeric Haplargids-----	800	550	400	Big sagebrush (ARTR2)-----	20
				Desert needlegrass (ACSP12)----	20
				California buckwheat (ERFA2)---	10
				Desert bitterbrush (PUGL2)-----	10
				Mojave buckwheat (ERHE)-----	5
				Green Mormon tea (EPVI)-----	5
				Rubber rabbitbrush (CHNA2)-----	5
				Singleleaf pinyon (PIMO)-----	5
				Sulfurflower (ERUM)-----	5
Lithic Xeric Haplargids	700	450	250	Big sagebrush (ARTR2)-----	20
				Desert needlegrass (ACSP12)----	15
				California buckwheat (ERFA2)---	10
				Desert bitterbrush (PUGL2)-----	10
				Rubber rabbitbrush (CHNA2)-----	10
				Mojave buckwheat (ERHE)-----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
545:					
Sacatar-----	600	500	400	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	15
				Singleleaf pinyon (PIMO)-----	15
				Buckwheat (ERIOG)-----	5
				Desert needlegrass (ACSP12)----	5
				Foothill pine (PISA2)-----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
Canebrake-----	500	400	300	Big sagebrush (ARTR2)-----	25
				Desert bitterbrush (PUGL2)-----	15
				Singleleaf pinyon (PIMO)-----	15
				Buckwheat (ERIOG)-----	5
				Desert needlegrass (ACSP12)----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
				Rubber rabbitbrush (ERNA10)----	5
549:					
Tunawee-----	700	600	500	Pine bluegrass (POSC)-----	15
				Big sagebrush (ARTR2)-----	10
				Buckwheat (ERIOG)-----	10
				Curlleaf mountainmahogany	
				(CELE3)-----	10
				Misc. perennial forbs (PPFF)---	10
				Singleleaf pinyon (PIMO)-----	10
				Western juniper (JUOC)-----	10
				Jeffrey pine (PIJE)-----	5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
550: Kenypeak-----	600	400	250	Shrubby buckwheat (ERWR)----- Western mountainmahogany (CEMO2)-----	25 15
				Narrowleaf goldenbush (ERLI6)-- Pine bluegrass (POSC)----- Singleleaf pinyon (PIMO)----- Manzanita (ARCTO3)----- Western juniper (JUOC)-----	10 10 10 5 5
Rubble land.					
Rock outcrop.					
551: Tunawee-----	900	700	500	Buckwheat (ERIOG)----- Curlleaf mountainmahogany (CELE3)----- Singleleaf pinyon (PIMO)----- Western juniper (JUOC)----- Jeffrey pine (PIJE)----- Big sagebrush (ARTR2)----- Misc. perennial forbs (PPFF)--- Pine bluegrass (POSC)-----	20 20 15 10 5 5 5 5
552: Kenypeak-----	600	400	250	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Desert bitterbrush (PUGL2)----- Pine bluegrass (POSC)----- Western juniper (JUOC)----- Western mountainmahogany (CEMO2)-----	35 15 10 5 5 5
Torriorthentic Haploxerolls-----	650	400	300	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Desert bitterbrush (PUGL2)----- Misc. annual grasses (AAGG)---- Pine bluegrass (POSC)----- Western juniper (JUOC)----- Western mountainmahogany (CEMO2)-----	35 15 5 5 5 5 5
553: Tibbcreek-----	800	600	400	Singleleaf pinyon (PIMO)----- Antelope bitterbrush (PUTR2)--- Big sagebrush (ARTR2)----- Rubber rabbitbrush (ERNA10)---- Western juniper (JUOC)-----	35 15 15 5 5
554: Deerspring-----	3,500	2,500	1,200	Beardless wildrye (LETR5)----- Carex (CAREX)----- Big sagebrush (ARTR2)----- Rush (JUNCU)----- Cheatgrass (BRTE)----- Rubber rabbitbrush (ERNA10)----	35 25 10 10 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
555: Cumulic Endoaquolls, frigid-----	3,200	2,000	1,500	Fescue (FESTU)----- Rush (JUNCU)----- Beardless wildrye (LETR5)----- Carex (CAREX)----- Misc. perennial forbs (PPFF)--- Misc. perennial grasses (PPGG)--- Willow (SALIX)-----	20 20 10 10 5 5 2
556: Toll-----	900	650	500	Big sagebrush (ARTR2)----- Rubber rabbitbrush (ERNA10)---- Green Mormon tea (EPVI)----- Pine bluegrass (POSC)----- Indian ricegrass (ACHY)----- Misc. annual forbs (A AFF)----- Misc. annual grasses (AAGG)---- Singleleaf pinyon (PIMO)-----	25 20 10 10 5 5 5 5
557: Scodie-----	700	500	300	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Buckwheat (ERIOG)----- Pine bluegrass (POSC)----- Green Mormon tea (EPVI)----- Western juniper (JUOC)-----	45 15 10 10 5 5
Canebrake-----	600	500	400	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Buckwheat (ERIOG)----- Pine bluegrass (POSC)----- Desert needlegrass (ACSP12)---- Green Mormon tea (EPVI)-----	50 15 10 10 5 5
Deadfoot-----	600	400	300	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Buckwheat (ERIOG)----- Pine bluegrass (POSC)----- Desert needlegrass (ACSP12)---- Green Mormon tea (EPVI)-----	50 15 10 10 5 5
558: Indiano-----	800	700	600	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Desert bitterbrush (PUGL2)---- Desert needlegrass (ACSP12)---- Pine bluegrass (POSC)-----	60 10 5 5 5
Wortley-----	500	350	250	Big sagebrush (ARTR2)----- Singleleaf pinyon (PIMO)----- Desert bitterbrush (PUGL2)---- Bottlebrush squirreltail (ELEL5)----- Cheatgrass (BRTE)----- Green Mormon tea (EPVI)----- Rubber rabbitbrush (ERNA10)----	35 15 10 5 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
560:					
Sacatar-----	600	500	400	Singleleaf pinyon (PIMO)-----	30
				Big sagebrush (ARTR2)-----	15
				Cheatgrass (BRTE)-----	10
				Desert bitterbrush (PUGL2)-----	10
				Bottlebrush squirreltail (ELEL5)-----	5
				Green Mormon tea (EPVI)-----	5
				Misc. annual forbs (AAFF)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Wortley-----	500	350	250	Big sagebrush (ARTR2)-----	40
				Desert bitterbrush (PUGL2)-----	10
				Green Mormon tea (EPVI)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Bottlebrush squirreltail (ELEL5)-----	5
				Cheatgrass (BRTE)-----	5
				Rubber rabbitbrush (ERNA10)----	5
Calpine-----	800	600	450	Singleleaf pinyon (PIMO)-----	30
				Big sagebrush (ARTR2)-----	15
				Cheatgrass (BRTE)-----	10
				Desert bitterbrush (PUGL2)-----	10
				Bottlebrush squirreltail (ELEL5)-----	5
				Green Mormon tea (EPVI)-----	5
				Rubber rabbitbrush (ERNA10)----	5
561:					
Scodie-----	550	400	300	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	20
				Singleleaf pinyon (PIMO)-----	15
				Green Mormon tea (EPVI)-----	10
				Desert needlegrass (ACSP12)----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
Sacatar-----	600	500	400	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	20
				Singleleaf pinyon (PIMO)-----	15
				Green Mormon tea (EPVI)-----	10
				Desert needlegrass (ACSP12)----	5
				Foothill pine (PISA2)-----	5
				Misc. annual forbs (AAFF)-----	5
				Pine bluegrass (POSC)-----	5
Canebrake-----	600	500	400	Big sagebrush (ARTR2)-----	30
				Desert bitterbrush (PUGL2)-----	15
				Green Mormon tea (EPVI)-----	10
				Singleleaf pinyon (PIMO)-----	10
				Buckwheat (ERIOG)-----	5
				Desert needlegrass (ACSP12)----	5
				Desert needlegrass (ACSP12)----	5
				Foothill pine (PISA2)-----	5
				Pine bluegrass (POSC)-----	5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
562: Deerspring, partially drained-----	2,000	1,500	900	Fescue (FESTU)----- Carex (CAREX)----- Locoweed (ASTRA)----- Rush (JUNCU)----- Buttercup (RANUN)----- Plantain (PLANT)-----	30 20 15 10 5 5
570: Deadfoot-----	600	400	300	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Buckwheat (ERIOG)----- Pine bluegrass (POSC)----- Desert needlegrass (ACSP12)---- Green Mormon tea (EPVI)-----	45 15 10 10 5 5
Scodie-----	500	400	300	Singleleaf pinyon (PIMO)----- Big sagebrush (ARTR2)----- Buckwheat (ERIOG)----- Pine bluegrass (POSC)----- Green Mormon tea (EPVI)----- Misc. annual forbs (AAFF)----- Western juniper (JUOC)-----	40 15 10 10 5 5 5
Rock outcrop.					
590: Xyno-----	900	500	300	California buckwheat (ERFA2)--- Filaree (ERODI)----- Red brome (BRRU2)----- White burrobush (HYSA)----- Buckbrush (CECU)----- Goldenbush (ERICA2)----- Misc. annual forbs (AAFF)----- Pine bluegrass (POSC)-----	15 15 15 10 5 5 5 5
Canebrake-----	1,200	900	500	Buckbrush (CECU)----- Buckwheat (ERIOG)----- Filaree (ERODI)----- Red brome (BRRU2)----- Big sagebrush (ARTR2)----- Foothill pine (PISA2)----- Interior live oak (QUWI2)----- Narrowleaf goldenbush (ERLI6)-- Misc. annual forbs (AAFF)----- Pine bluegrass (POSC)----- Rubber rabbitbrush (ERNA10)----	20 10 10 10 5 5 5 5 5 5 5
Pilotwell-----	1,100	600	300	California buckwheat (ERFA2)--- Filaree (ERODI)----- Red brome (BRRU2)----- Buckbrush (CECU)----- Goldenbush (ERICA2)----- Misc. annual forbs (AAFF)----- Rubber rabbitbrush (CHNA2)---- White burrobush (HYSA)-----	15 15 15 5 5 5 5 5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
591:					
Xyno-----	900	500	300	Red brome (BRRU2)-----	30
				California buckwheat (ERFA2)---	20
				Goldenbush (ERICA2)-----	15
				Misc. annual forbs (AAFF)-----	5
				Rabbitbrush (CHRYS9)-----	5
				Silver sagebrush (ARCA13)-----	5
Canebrake-----	1,000	700	400	Buckbrush (CECU)-----	15
				Red brome (BRRU2)-----	15
				Buckwheat (ERIOG)-----	10
				Foothill pine (PISA2)-----	10
				Pine bluegrass (POSC)-----	10
				Big sagebrush (ARTR2)-----	5
				Filaree (ERODI)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
				Rabbitbrush (CHRYS9)-----	5
				Singleleaf pinyon (PIMO)-----	1
Rock outcrop.					
610:					
Hyte-----	900	600	400	California buckwheat (ERFA2)---	20
				Red brome (BRRU2)-----	10
				Rubber rabbitbrush (ERNA10)----	10
				Schismus (SCHIS)-----	10
				California juniper (JUCA7)-----	5
				Burrobush (HYMEN3)-----	5
				Ephedra (EPHED)-----	5
				Filaree (ERODI)-----	5
Erskine-----	900	600	500	California buckwheat (ERFA2)---	15
				California juniper (JUCA7)-----	10
				Big sagebrush (ARTR2)-----	10
				Bottlebrush squirreltail (ELEL5)-----	5
				Ephedra (EPHED)-----	5
				Pine bluegrass (POSC)-----	5
				Purple Dorrs sage (SADOI)-----	5
				Red brome (BRRU2)-----	5
				Schismus (SCHIS)-----	5
650:					
Stineway-----	1,000	650	300	Red brome (BRRU2)-----	25
				California buckwheat (ERFA2)---	20
				Filaree (ERODI)-----	15
				California juniper (JUCA7)-----	5
				Mojave buckwheat (ERHE)-----	5
				Misc. annual forbs (AAFF)-----	5
				Misc. annual grasses (AAGG)----	5
				White burrobush (HYSA)-----	5
Kiscove-----	800	600	400	Mojave buckwheat (ERHE)-----	20
				Pine bluegrass (POSC)-----	20
				Filaree (ERODI)-----	10
				Misc. annual forbs (AAFF)-----	10
				California juniper (JUCA7)-----	5
				Narrowleaf goldenbush (ERLI6)--	5
				Rubber rabbitbrush (ERNA10)----	5
Rock outcrop.					

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		
3250:					
Jawbone-----	250	150	50	Creosotebush (LATR2)-----	35
				White bursage (AMDU2)-----	20
				Indian ricegrass (ACHY)-----	6
Jawbone, moderately deep	250	150	50	Creosotebush (LATR2)-----	35
				White bursage (AMDU2)-----	20
				Indian ricegrass (ACHY)-----	6
4432:					
Koehn, occasionally flooded-----	500	400	250	Cattle saltbush (ATPO)-----	68
				Indian ricegrass (ACHY)-----	10
Koehn, frequently flooded-----	200	100	50	California broomsage (LESQ)---	80
				California buckwheat (ERFA2)---	6
5201:					
Wingap-----	800	600	400	Blackbrush (CORA)-----	80
				Narrowleaf goldenbush (ERLI6)--	4
				Joshua tree (YUBR)-----	2
				Spiny hopsage (GRSP)-----	2
				Sandberg bluegrass (POSE)-----	10
Pinyonpeak-----	500	400	300	Blackbrush (CORA)-----	70
				California buckwheat (ERFA2)---	5
				Cooper goldenbush (ERCO23)-----	5
				Ericameria teretifolia (ERTE18)	3
				Nevada ephedra (EPNE)-----	3
				Sandberg bluegrass (POSE)-----	10
5210:					
Grandora-----	1,300	1,100	900	Mountain big sagebrush (ARTRV)	40
				Bastardsage (ERWR)-----	10
				Green ephedra (EPVI)-----	5
				Desert needlegrass (ACSP12)----	25
Grandora, warm-----	600	450	300	Mojave buckwheat (ERFAP)-----	30
				Narrowleaf goldenbush (ERLI6)--	10
				Green ephedra (EPVI)-----	5
				Sandberg bluegrass (POSE)-----	25
				Desert needlegrass (ACSP12)----	25
Pinyonpeak-----	800	600	400	California buckwheat (ERFA2)---	60
				Cooper goldenbush (ERCO23)-----	5
				Joshua tree (YUBR)-----	2
				Nevada ephedra (EPNE)-----	1
				Sandberg bluegrass (POSE)-----	10
				Desert needlegrass (ACSP12)----	10
6001:					
Goldpeak-----	800	600	400	Blackbrush (CORA)-----	80
				Narrowleaf goldenbush (ERLI6)--	4
				Joshua tree (YUBR)-----	2
				Spiny hopsage (GRSP)-----	2
				Sandberg bluegrass (POSE)-----	10

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 10.--Rangeland Productivity and Characteristic Vegetation--Continued

Map symbol and component name	Total dry-weight production			Characteristic vegetation	Species composition by weight
	Favorable year	Normal year	Unfavorable year		
	Lb/acre	Lb/acre	Lb/acre		Pct
6001:					
Pinyonpeak-----	500	400	300	Blackbrush (CORA)-----	70
				California buckwheat (ERFA2)---	5
				Cooper goldenbush (ERCO23)-----	5
				Ericameria teretifolia (ERTE18)	3
				Nevada ephedra (EPNE)-----	3
				Sandberg bluegrass (POSE)-----	10
Wingap-----	800	600	400	Blackbrush (CORA)-----	80
				Narrowleaf goldenbush (ERLI6)--	4
				Joshua tree (YUBR)-----	2
				Spiny hopsage (GRSP)-----	2
				Sandberg bluegrass (POSE)-----	10
W.					
Water					

Table 11a.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.14
128: Pits-----	35	Not rated		Not rated		Not rated	
Delano-----	30	Limitations Flooding >= rare	1.00	No limitations		Limitations Slopes 2 to 6%	0.26
Oil waste land-----	15	Not rated		Not rated		Not rated	
136: Hesperia-----	75	No limitations		No limitations		Limitations Slopes 2 to 6%	0.98
138: Hesperia-----	85	No limitations		No limitations		No limitations	
139: Riverwash-----	80	Not rated		Not rated		Not rated	
143: Calicreek-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	0.81 0.62
144: Calicreek-----	85	Limitations Flooding >= rare	1.00	No limitations		Limitations Surface fragments (<3") 10-25% Occasional flooding	0.62 0.50

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
145: Delano-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.30	Limitations Surface sand fractions 70-90% by wt.	0.30	Limitations Surface sand fractions 70-90% by wt.	0.30
146: Delano-----	80	Limitations Flooding >= rare	1.00	No limitations		No limitations	
147: Chanac-----	80	No limitations		No limitations		Limitations Slopes 2 to 6% Surface fragments (<3" 10-25%	0.98 0.14
148: Delano-----	85	Limitations Flooding >= rare	1.00	No limitations		No limitations	
149: Delano-----	85	Limitations Flooding >= rare	1.00	No limitations		Limitations Slopes > 6%	1.00
150: Pits-----	50	Not rated		Not rated		Not rated	
Dumps-----	40	Not rated		Not rated		Not rated	
152: Pleito-----	85	Limitations Flooding >= rare Permeability .06-.6"/hr	1.00 0.46	Limitations Permeability .06-.6"/hr	0.46	Limitations Surface fragments (<3" 10-25% Slopes 2 to 6% Permeability .06-.6"/hr	0.97 0.50 0.46
153: Chanac-----	85	Limitations Slopes 8 to 15%	0.63	Limitations Slopes 8 to 15%	0.63	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.14

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
154: Dam-----	100	Not rated		Not rated		Not rated	
166: Delano-----	60	Limitations Flooding >= rare	1.00	No limitations		No limitations	
Urban land-----	20	Not rated		Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations Slopes > 15% SAR > 12 Dusty	1.00 1.00 0.50	Limitations Slopes > 15% Dusty Permeability .06-.6"/hr	1.00 0.50 0.46	Limitations Slopes > 6% Dusty Permeability .06-.6"/hr	1.00 0.50 0.46
Calcic Haploxerepts-----	40	Limitations Slopes > 15% SAR > 12	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
176: Elkhills, eroded-----	75	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") >25%	1.00 0.99
177: Chanac-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10- 25%	1.00 0.14
Torriorthents, stratified-----	25	Limitations Slopes > 15% SAR > 12	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10- 25%	1.00 0.32
178: Delano-----	40	No limitations		No limitations		Limitations Slopes > 6%	1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
178:							
Cuyama-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.62
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
179:							
Torriorhents, stratified, eroded----	50	Limitations SAR > 12 Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.32
Elkhills-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.81
184:							
Cuyama-----	85	Limitations Flooding >= rare	1.00	No limitations		Limitations Surface fragments (<3" 10-25% Slopes 2 to 6%	0.62 0.50
185:							
Brecken-----	40	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.10	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.10	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") >25%	1.00 1.00 1.00
Cuyama-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.62
Pleito-----	20	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3" 10-25% Permeability .06-.6"/hr	1.00 0.85 0.46

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
186: Cuyama-----	85	Limitations Slopes 8 to 15% Dusty	0.63 0.50	Limitations Slopes 8 to 15% Dusty	0.63 0.50	Limitations Slopes > 6% Surface fragments (<3" 10- 25% Dusty	1.00 0.72 0.50
187: Trigo-----	50	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20"	1.00 1.00
Chanac-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10- 25%	1.00 0.14
188: Tweedy-----	50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10- 25%	1.00 0.27
Tollhouse-----	20	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3" 10- 25%	1.00 1.00 0.27
Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10- 25%	1.00 0.32
189: Tweedy-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10- 25%	1.00 0.27

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
189: Walong-----	35	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.02	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.02	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >3" 5 to 30%	1.00 1.00 0.03
192: Chanac-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10- 25%	1.00 0.08
Pleito-----	30	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10- 25% Permeability .06-.6"/hr	1.00 0.77 0.46
193: Chanac-----	50	No limitations		No limitations		Limitations Slopes 2 to 6% Surface fragments (<3") 10- 25%	0.38 0.14
Pleito-----	30	Limitations Permeability .06-.6"/hr	0.46	Limitations Permeability .06-.6"/hr	0.46	Limitations Surface fragments (<3") 10- 25% Permeability .06-.6"/hr Slopes 2 to 6%	0.77 0.46 0.38
194: Pleito-----	40	Limitations Permeability .06-.6"/hr Slopes 8 to 15%	0.46 0.04	Limitations Permeability .06-.6"/hr Slopes 8 to 15%	0.46 0.04	Limitations Slopes > 6% Surface fragments (<3") 10- 25% Permeability .06-.6"/hr	1.00 0.85 0.46
Delvar-----	40	Limitations Permeability .06-.6"/hr Slopes 8 to 15%	0.46 0.04	Limitations Permeability .06-.6"/hr Slopes 8 to 15%	0.46 0.04	Limitations Slopes > 6% Surface fragments (<3") 10- 25% Permeability .06-.6"/hr	1.00 0.68 0.46

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
195: Centerville-----	60	Limitations Surface clay >= 40% Slopes > 15% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Surface clay >= 40% Slopes > 15% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Slopes > 6% Surface clay >= 40% Permeability .06-.6"/hr	1.00 1.00 0.46
Delvar-----	20	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.78 0.46
196: Exeter-----	75	Limitations Depth to pan between 20 and 40"	0.84	Limitations Depth to pan between 20 and 40"	0.84	Limitations Slopes 2 to 6% Surface fragments (<3") 10-25%	0.98 0.08
197: Nord-----	85	Limitations Flooding >= rare	1.00	No limitations		Limitations Surface fragments (<3") 10-25%	0.32
198: Centerville-----	65	Limitations Surface clay >= 40% Permeability .06-.6"/hr	1.00 0.46	Limitations Surface clay >= 40% Permeability .06-.6"/hr	1.00 0.46	Limitations Surface clay >= 40% Slopes 2 to 6% Permeability .06-.6"/hr	1.00 0.98 0.46
Delvar-----	20	Limitations Permeability .06-.6"/hr	0.46	Limitations Permeability .06-.6"/hr	0.46	Limitations Slopes 2 to 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	0.98 0.78 0.46
199: Exeter-----	80	Limitations Depth to pan between 20 and 40"	0.01	Limitations Depth to pan between 20 and 40"	0.01	Limitations Surface fragments (<3") 10-25%	0.01

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
200: Urban land-----	60	Not rated		Not rated		Not rated	
Delano-----	25	Limitations Flooding >= rare	1.00	No limitations		No limitations	
201: Pleito-----	30	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.77 0.46
Chanac-----	30	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 6% Dusty Surface fragments (<3") 10-25%	1.00 0.50 0.14
Raggulch-----	30	Limitations Fragments >10" >3% Slopes > 15% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Fragments >10" >3% Slopes > 15% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Fragments >10" >3% Slopes > 6% Bedrock depth < 20"	1.00 1.00 1.00
205: Pleito-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25% Fragments >3" 5 to 30%	1.00 0.85 0.01
Trigo-----	25	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20"	1.00 1.00
Chanac-----	20	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 6% Dusty Surface fragments (<3") 10-25%	1.00 0.50 0.14

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
207: Whitewolf-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.47	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations Surface sand fractions 70-90% by wt. Surface fragments (<3" 10-25%	0.47 0.08
209: Whitewolf-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.47	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations Occasional flooding Surface sand fractions 70-90% by wt.	0.50 0.47
210: Kernfork-----	85	Limitations Flooding >= rare Saturation from 18 to 30" depth Surface sand fractions 70-90% by wt.	1.00 0.39 0.01	Limitations Saturation from 12 to 30" depth Surface sand fractions 70-90% by wt.	0.19 0.01	Limitations Occasional flooding Saturation from 18 to 30" depth Surface fragments (<3" 10-25%	0.50 0.39 0.08
212: Kernfork-----	80	Limitations Flooding >= rare Ponding (any duration) Surface sand fractions 70-90% by wt.	1.00 1.00 0.01	Limitations Ponding (any duration) Frequent flooding Surface sand fractions 70-90% by wt.	1.00 0.50 0.01	Limitations Flooding > occasional Ponding (any duration) Surface fragments (<3" 10-25%	1.00 1.00 0.08
213: Calicreek-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt. Surface fragments (<3" 10-25% Occasional flooding	0.70 0.62 0.50
215: Kelval-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt. Occasional flooding	0.81 0.50

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
216: Inyo-----	60	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt. Frequent flooding	0.82 0.50	Limitations Flooding > occasional Surface sand fractions 70-90% by wt. Slopes 2 to 6%	1.00 0.82 0.26
Riverwash-----	25	Not rated		Not rated		Not rated	
217: Whitewolf-----	55	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.82 0.05	Limitations Surface sand fractions 70-90% by wt. Frequent flooding Fragments (<3") 25-50%	0.82 0.50 0.05	Limitations Flooding > occasional Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.82
Riverwash-----	25	Not rated		Not rated		Not rated	
220: Aquents-----	40	Limitations Saturation < 18" depth Flooding >= rare Ponding (any duration)	1.00 1.00 1.00	Limitations Saturation < 12" depth Ponding (any duration) Frequent flooding	1.00 1.00 0.50	Limitations Saturation < 18" depth Flooding > occasional Ponding (any duration)	1.00 1.00 1.00
Aquolls-----	35	Limitations Saturation < 18" depth Flooding >= rare Ponding (any duration)	1.00 1.00 1.00	Limitations Saturation < 12" depth Ponding (any duration) Surface SAR between 8-13	1.00 1.00 0.92	Limitations Saturation < 18" depth Flooding > occasional Ponding (any duration)	1.00 1.00 1.00
Riverwash-----	15	Not rated		Not rated		Not rated	
222: Kelval-----	85	Limitations Flooding >= rare	1.00	No limitations		Limitations Occasional flooding	0.50
223: Kelval-----	70	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.21	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 0.21	Limitations Fragments >10" >3% Occasional flooding Surface sand fractions 70-90% by wt.	1.00 0.50 0.21

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
224: Inyo-----	85	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt. Slopes 2 to 6% Occasional flooding	0.82 0.74 0.50
238: Cinco-----	85	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.55 0.05	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.55 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.55
240: Dune land-----	85	Not rated		Not rated		Not rated	
241: Inyo-----	75	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt. Slopes 2 to 6% Surface fragments (<3") 10-25%	0.82 0.26 0.22
242: Inyo-----	80	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.82 0.16	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.82 0.16	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.82 0.22
243: Kernfork, saline-sodic, occasionally flooded---	85	Limitations Saturation < 18" depth Flooding >= rare Ponding (any duration)	1.00 1.00 1.00	Limitations Saturation < 12" depth Ponding (any duration) Surface SAR >13	1.00 1.00 1.00	Limitations Saturation < 18" depth Ponding (any duration) Surface SAR >13	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
245: Chollawell-----	80	Limitations Flooding >= rare Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	1.00 0.92 0.70	Limitations Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	0.92 0.70	Limitations Surface fragments (<3") >25% Surface sand fractions 70-90% by wt. Slopes 2 to 6%	1.00 0.70 0.50
246: Chollawell-----	80	Limitations Flooding >= rare Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	1.00 0.92 0.70	Limitations Fragments (<3") 25-50% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.92 0.70 0.16	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
247: Inyo-----	45	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.82 0.16	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.82 0.16	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.82 0.22
Tips-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
249: Hoffman-----	65	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
250:							
Hoffman-----	40	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
Tips-----	30	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67
253:							
Sorrell-----	40	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
Martee-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
254:							
Martee-----	60	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
255: Kernfork, occasionally flooded-----	45	Limitations Flooding >= rare Ponding (any duration)	1.00 1.00	Limitations Ponding (any duration)	1.00	Limitations Ponding (any duration) Occasional flooding Slopes 2 to 6%	1.00 0.50 0.02
Kernfork, frequently flooded-----	40	Limitations Saturation < 18" depth Flooding >= rare Ponding (any duration)	1.00 1.00 1.00	Limitations Saturation < 12" depth Ponding (any duration) Frequent flooding	1.00 1.00 0.50	Limitations Saturation < 18" depth Flooding > occasional Ponding (any duration)	1.00 1.00 1.00
257: Hoffman-----	50	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
Tips-----	20	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
259: Cowspring-----	80	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.74 0.26	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.74 0.26	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74
260: Cowspring-----	45	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.74 0.26	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.74 0.26	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
260:							
Tips-----	20	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
261:							
Blasingame-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Fragments >3" 5 to 30% Surface fragments (<3") 10-25%	1.00 0.03 0.01
Arujo-----	25	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 6% Fragments >10" .1 to 3% Surface fragments (<3") 10-25%	1.00 0.19 0.07
Cieneba-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76
264:							
Arujo-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
Walong-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.96
Tunis-----	20	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.78

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
265: Arujo-----	80	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15%	0.16	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
266: Tunis-----	50	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.78
Rock outcrop-----	30	Not rated		Not rated		Not rated	
267: Cieneba-----	40	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
Vista-----	25	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.42	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.42	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.68 0.42
Rock outcrop-----	15	Not rated		Not rated		Not rated	
268: Tunis-----	35	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.14
Tollhouse-----	25	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
268: Sorrell-----	20	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
269: Tollhouse-----	45	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") >25%	1.00 1.00 1.00
Sorrell-----	25	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
Rock outcrop-----	15	Not rated		Not rated		Not rated	
270: Locobill-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.04
Backcanyon-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.32	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.32	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
271: Walong-----	35	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 6% Fragments >10" .1 to 3%	1.00 0.19

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
271:							
Tunis-----	30	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.78
Rock outcrop-----	15	Not rated		Not rated		Not rated	
272:							
Tollhouse-----	35	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
Edmundston-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.47
Sorrell-----	20	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
274:							
Sesame-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
Tweedy-----	20	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 15% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 6% Fragments >10" .1 to 3% Surface fragments (<3") 10-25%	1.00 0.76 0.27
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
275:							
Strahle-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.04	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.04	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
Tweedy-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
276:							
Tips-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Hoffman-----	30	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.70 0.31	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
Cinco-----	15	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.44 0.05	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.44 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.44
277:							
Feethill-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
277:							
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.14
Walong-----	20	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3%	1.00 1.00
279:							
Strahle-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.16	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.16	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Sesame-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
280:							
Tollhouse-----	40	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.75
Martee-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Edmundston-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25% Fragments >3" 5 to 30%	1.00 0.45 0.01

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
281:							
Havala-----	55	Limitations Fragments >10" .1 to 3% Slopes 8 to 15%	0.76 0.04	Limitations Fragments >10" .1 to 3% Slopes 8 to 15%	0.76 0.04	Limitations Slopes > 6% Fragments >10" .1 to 3% Surface fragments (<3") 10-25%	1.00 0.76 0.75
Walong-----	15	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.05	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.05	Limitations Slopes > 6% Surface fragments (<3") >25%	1.00 1.00
Kernfork-----	15	Limitations Flooding >= rare Saturation from 18 to 30" depth	1.00 0.39	Limitations Saturation from 12 to 30" depth	0.19	Limitations Occasional flooding Saturation from 18 to 30" depth Slopes 2 to 6%	0.50 0.39 0.26
282:							
Tollhouse-----	35	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >3" 5 to 30%	1.00 1.00 0.54
Sesame-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
Friant-----	20	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
283:							
Tollhouse-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.20	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.20	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Martee-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
283: Rock outcrop-----	15	Not rated		Not rated		Not rated	
284: Tollhouse-----	70	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >3" 5 to 30%	1.00 1.00 0.88
Rock outcrop-----	15	Not rated		Not rated		Not rated	
285: Inyo-----	50	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt. Occasional flooding Surface fragments (<3") 10-25%	0.82 0.50 0.22
Kelval-----	40	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt. Occasional flooding Slopes 2 to 6%	0.81 0.50 0.02
286: Tollhouse-----	40	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.75
Tweedy-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
Locobill-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
287:							
Tweedy-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
Strahle-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.16	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.16	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
288:							
Sorrell-----	45	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
Arujo-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
Rock outcrop-----	15	Not rated		Not rated		Not rated	
289:							
Erskine-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Hyte-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
294:							
Edmundston-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25% Fragments >3" 5 to 30%	1.00 0.45 0.01
Tweedy-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3" 10-25%	1.00 0.27
Walong-----	20	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.05	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.05	Limitations Slopes > 6% Surface fragments (<3") >25%	1.00 1.00
295:							
Tweedy-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
Tunis-----	30	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.78
Rankor-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.18
296:							
Arujo-----	40	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.10

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
296:							
Walong-----	30	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.02	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.02	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00
Tunis-----	15	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.78
297:							
Walong-----	30	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00
Blasingame-----	25	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.03
Rock outcrop-----	15	Not rated		Not rated		Not rated	
298:							
Arujo-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
Feethill-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32
Sesame-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
299:							
Arujo-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
Feethill-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32
Sesame-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
300:							
Stineway-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.76	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.67	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.67	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
301:							
Feethill-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.14
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
302: Feethill-----	30	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 6% Dusty Surface fragments (<3") 10-25%	1.00 0.50 0.32
Cibo-----	25	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Bedrock 20-40" and slope > 2% Permeability .06-.6"/hr	1.00 0.50 0.46
Cieneba-----	20	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
303: Steuber-----	80	Limitations Flooding >= rare	1.00	No limitations		Limitations Surface fragments (<3") 10-25% Occasional flooding Slopes 2 to 6%	0.81 0.50 0.14
304: Cibo-----	80	Limitations Slopes > 15% Surface clay >= 40% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Slopes > 15% Surface clay >= 40% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Slopes > 6% Surface clay >= 40% Bedrock 20-40" and slope > 2%	1.00 1.00 0.50
305: Chanac-----	45	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 15% Dusty	1.00 0.50	Limitations Slopes > 6% Dusty Surface fragments (<3") 10-25%	1.00 0.50 0.14

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
305: Pleito-----	20	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.77 0.46
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
306: Xerofluents, occasionally flooded---	60	Limitations Flooding >= rare Dusty	1.00 0.50	Limitations Dusty	0.50	Limitations Occasional flooding Dusty Slopes 2 to 6%	0.50 0.50 0.26
Riverwash-----	25	Not rated		Not rated		Not rated	
307: Typic Xeropsamments-----	80	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.55	Limitations Surface sand fractions 70-90% by wt.	0.55	Limitations Surface sand fractions 70-90% by wt. Occasional flooding	0.55 0.50
308: Rankor-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.18
Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25% Fragments >3" 5 to 30%	1.00 0.45 0.01
Tweedy-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
309: Rankor-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.18
Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25% Fragments >3" 5 to 30%	1.00 0.45 0.01
Tweedy-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
310: Stineway-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
311: Xerorthents-----	50	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") >25%	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
312: Havala-----	85	Limitations Fragments >10" .1 to 3%	0.76	Limitations Fragments >10" .1 to 3%	0.76	Limitations Surface fragments (<3") 10-25% Fragments >10" .1 to 3% Slopes 2 to 6%	0.81 0.76 0.50
313: Dumps-----	80	Not rated		Not rated		Not rated	
314: Premier-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6%	1.00
Haplodurids-----	35	Limitations Slopes > 15% Depth to pan between 20 and 40"	1.00 0.84	Limitations Slopes > 15% Depth to pan between 20 and 40"	1.00 0.84	Limitations Slopes > 6%	1.00
315: Premier-----	45	No limitations		No limitations		Limitations Slopes 2 to 6%	0.98
Haplodurids-----	40	Limitations Depth to pan between 20 and 40"	0.84	Limitations Depth to pan between 20 and 40"	0.84	Limitations Slopes 2 to 6%	0.98
316: Premier-----	85	No limitations		No limitations		Limitations Slopes > 6%	1.00
317: Premier-----	85	No limitations		No limitations		Limitations Slopes 2 to 6%	0.38
320: Southlake-----	80	Limitations Flooding >= rare Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.26	Limitations Fragments >10" >3% Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.26 0.04	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
325: Walong-----	75	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00
326: Walong-----	80	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 15% Fragments >10" >3% Fragments (<3") 25-50%	1.00 1.00 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00
330: Kernville-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Faycreek-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
350: Southlake, stony-----	55	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") 10-25%	1.00 1.00 0.52
Goodale-----	20	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.67 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 0.99

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
352: Goodale-----	65	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.12	Limitations Fragments >10" >3% Fragments > 3" > 30% Surface fragments (<3") >25%	1.00 1.00 0.99
Riverwash-----	20	Not rated		Not rated		Not rated	
360: Kernville, bouldery-----	40	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Surface fragments (<3") >25% Bedrock depth < 20" Slopes > 6%	1.00 1.00 1.00
Hogeye-----	30	Limitations Fragments >10" >3% Slopes > 15%	1.00 1.00	Limitations Fragments >10" >3% Slopes > 15%	1.00 1.00	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") 10-25%	1.00 1.00 0.27
Southlake-----	15	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.52
380: Delvar-----	40	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.78 0.46
Pleito-----	40	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 15% Permeability .06-.6"/hr	1.00 0.46	Limitations Slopes > 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	1.00 0.85 0.46

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
407: Centerville-----	90	Limitations SAR > 12 Surface clay >= 40% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Surface SAR >13 Surface clay >= 40% Permeability .06-.6"/hr	1.00 1.00 0.46	Limitations Surface SAR >13 Surface clay >= 40% Slopes 2 to 6%	1.00 1.00 0.50
410: Stineway-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.81	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.81	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Kiscove-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.68	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
411: Delvar-----	85	Limitations SAR > 12 Permeability .06-.6"/hr	1.00 0.46	Limitations Permeability .06-.6"/hr	0.46	Limitations Slopes 2 to 6% Surface fragments (<3") 10-25% Permeability .06-.6"/hr	0.98 0.78 0.46
412: Chollawell-----	70	Limitations Flooding >= rare Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.39 0.16	Limitations Fragments (<3") 25-50% Slopes 8 to 15%	0.39 0.16	Limitations Slopes > 6% Surface fragments (<3") >25%	1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
417: Southlake-----	40	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.52

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
417: Southlake, gravelly-----	20	Limitations Flooding >= rare Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.32 0.16	Limitations Fragments (<3") 25-50% Slopes 8 to 15%	0.32 0.16	Limitations Surface fragments (<3") >25% Slopes > 6% Occasional flooding	1.00 1.00 0.50
Goodale-----	15	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.67 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 0.99
Urban land-----	15	Not rated		Not rated		Not rated	
420: Southlake-----	65	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.04	Limitations Fragments >10" >3% Slopes 8 to 15% Fragments (<3") 25-50%	1.00 0.04 0.04	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >10" >3%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
422: Kelval-----	70	Limitations Flooding >= rare	1.00	No limitations		Limitations Occasional flooding	0.50
Urban land-----	15	Not rated		Not rated		Not rated	
423: Auberry-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.01
Crouch-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
424: Inyo-----	70	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	1.00 0.82 0.05	Limitations Surface sand fractions 70-90% by wt. Fragments (<3") 25-50%	0.82 0.05	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.82
Urban land-----	15	Not rated		Not rated		Not rated	
430: Friant-----	70	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432: Alberti, gravelly-----	70	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
441: Inyo-----	65	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt. Slopes 2 to 6% Surface fragments (<3") 10-25%	0.82 0.26 0.22
Urban land-----	15	Not rated		Not rated		Not rated	
442: Inyo-----	70	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.82 0.63	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.82 0.63	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.82 0.22

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
442: Urban land-----	15	Not rated		Not rated		Not rated	
445: Chollawell-----	70	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	0.92 0.70	Limitations Surface fragments (<3") >25% Surface sand fractions 70-90% by wt. Slopes 2 to 6%	1.00 0.70 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
450: Southlake, stony-----	45	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") 10-25%	1.00 1.00 0.52
Goodale-----	15	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.67 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 0.99
Urban land-----	15	Not rated		Not rated		Not rated	
460: Kernville, bouldery-----	30	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Surface fragments (<3") >25% Bedrock depth < 20" Slopes > 6%	1.00 1.00 1.00
Hogeye-----	25	Limitations Fragments >10" >3% Slopes > 15%	1.00 1.00	Limitations Fragments >10" >3% Slopes > 15%	1.00 1.00	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") 10-25%	1.00 1.00 0.27

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
460: Southlake-----	15	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.52
Urban land-----	15	Not rated		Not rated		Not rated	
465: Arujo-----	65	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15%	0.16	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.08
Urban land-----	15	Not rated		Not rated		Not rated	
485: Inyo-----	45	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt. Occasional flooding Surface fragments (<3") 10-25%	0.82 0.50 0.22
Kelval-----	30	Limitations Flooding >= rare Surface sand fractions 70-90% by wt.	1.00 0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt. Occasional flooding	0.81 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
488: Tweedy-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
Tollhouse-----	20	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.27

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
488: Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.32
Urban land-----	15	Not rated		Not rated		Not rated	
501: Hyte-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Erskine-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Sorrell-----	25	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.88
503: Tips-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94
Erskine-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
505: Chollawell-----	85	Limitations Flooding >= rare Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.92 0.84	Limitations Fragments (<3") 25-50% Slopes 8 to 15% Surface sand fractions 70-90% by wt.	0.92 0.84 0.70	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
507: Xyno-----	40	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67
508: Pilotwell-----	45	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67
Xyno-----	25	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 0.99
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
509:							
Xyno-----	40	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
510:							
Xyno-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell, bouldery----	15	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67
512:							
Chollawell, cobbly substratum-----	60	Limitations Flooding >= rare Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.39 0.16	Limitations Fragments (<3") 25-50% Slopes 8 to 15%	0.39 0.16	Limitations Slopes > 6% Surface fragments (<3") >25%	1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
512: Chollawell, gravelly----	15	Limitations Flooding >= rare Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	1.00 0.85 0.70	Limitations Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	0.85 0.70	Limitations Surface fragments (<3") >25% Slopes 2 to 6% Surface sand fractions 70-90% by wt.	1.00 0.74 0.70
514: Chollawell-----	50	Limitations Flooding >= rare Fragments (<3") 25-50% Surface sand fractions 70-90% by wt.	1.00 0.92 0.70	Limitations Fragments (<3") 25-50% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.92 0.70 0.16	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70
Inyo-----	35	Limitations Flooding >= rare Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.82 0.16	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.82 0.16	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.82 0.32
515: Scodie-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Xyno-----	20	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
516:							
Xyno-----	45	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Canebrake-----	20	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
517:							
Southlake-----	55	Limitations Flooding >= rare Fragments >10" >3% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Fragments >10" >3% Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 6% Fragments >10" >3% Fragments >3" 5 to 30%	1.00 1.00 0.38
Southlake, gravelly----	20	Limitations Flooding >= rare Fragments (<3") 25-50% Slopes 8 to 15%	1.00 0.59 0.16	Limitations Fragments (<3") 25-50% Slopes 8 to 15%	0.59 0.16	Limitations Surface fragments (<3") >25% Slopes > 6% Occasional flooding	1.00 1.00 0.50
Goodale-----	15	Limitations Flooding >= rare Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 8 to 15%	1.00 0.67 0.16	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 0.99
518:							
Backcanyon-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.32	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.32	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
520:							
Kernville-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.27
Rock outcrop-----	15	Not rated		Not rated		Not rated	
523:							
Kernville, bouldery-----	45	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
525:							
Hungrygulch-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25% Fragments >3" 5 to 30%	1.00 0.04 0.01
Kernville-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
525: Hogeye-----	20	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 15% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Surface fragments (<3") 10-25%	1.00 1.00 0.27
530: Alberti, cobbly-----	45	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.93
Alberti, gravelly-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
531: Tweedy-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 6% Surface fragments (<3") 10-25%	1.00 0.27
Erskine-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Alberti, gravelly-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
532: Alberti, gravelly-----	80	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.94	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
540:							
Canebrake-----	60	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Lachim-----	20	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 6% Surface fragments (<3") 10-25% Surface sand fractions 70-90% by wt.	1.00 0.96 0.74
541:							
Canebrake-----	45	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Lachim-----	20	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.84	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.84	Limitations Slopes > 6% Surface sand fractions 70-90% by wt.	1.00 0.84
Rock outcrop-----	15	Not rated		Not rated		Not rated	
543:							
Wortley-----	45	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.46
Indiano-----	25	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.01	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.01	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >3" 5 to 30%	1.00 1.00 0.68
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
544:							
Xeric Haplargids-----	60	Limitations Flooding >= rare Fragments >10" >3% Slopes > 15%	1.00 1.00 1.00	Limitations Fragments >10" >3% Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 1.00 0.60	Limitations Fragments >10" >3% Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 1.00
Lithic Xeric Haplargids	20	Limitations Flooding >= rare Slopes > 15% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments (<3") 25-50%	1.00 1.00 0.26	Limitations Surface fragments (<3") >25% Slopes > 6% Bedrock depth < 20"	1.00 1.00 1.00
545:							
Sacatar-----	50	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.67 0.01
Canebrake-----	30	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
549:							
Tunawee-----	60	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Fragments >10" >3% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
550:							
Kenypeak-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
550: Rubble land-----	20	Not rated		Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated		Not rated	
551: Tunawee-----	70	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 6%	1.00
		Fragments >10" >3%	1.00	Fragments >10" >3%	1.00	Fragments >10" >3%	1.00
		Bedrock depth < 20"	1.00	Bedrock depth < 20"	1.00	Bedrock depth < 20"	1.00
552: Kenypeak-----	60	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 6%	1.00
		Bedrock depth < 20"	1.00	Bedrock depth < 20"	1.00	Surface fragments (<3")	1.00
		Fragments >10" >3%	1.00	Fragments >10" >3%	1.00	>25%	
						Bedrock depth < 20"	1.00
Torriorthentic Haploxerolls-----	25	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 6%	1.00
		Fragments >10" >3%	1.00	Fragments >10" >3%	1.00	Surface fragments (<3")	1.00
		Fragments (<3") > 50%	0.99	Fragments (<3") > 50%	0.99	>25%	
						Fragments >10" >3%	1.00
553: Tibbcreek-----	75	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 6%	1.00
		Bedrock depth < 20"	1.00	Bedrock depth < 20"	1.00	Surface fragments (<3")	1.00
		Fragments (<3") 25-50%	0.83	Fragments (<3") 25-50%	0.83	>25%	
						Bedrock depth < 20"	1.00
554: Deerspring-----	85	Limitations		No limitations		Limitations	
		Flooding >= rare	1.00			Occasional flooding	0.50
						Surface fragments (<3") 10-	0.32
						25%	
						Slopes 2 to 6%	0.26

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
555: Cumulic Endoaquolls, frigid-----	75	Limitations Saturation < 18" depth Flooding >= rare	1.00 1.00	Limitations Saturation < 12" depth Frequent flooding	1.00 0.50	Limitations Saturation < 18" depth Flooding > occasional Slopes 2 to 6%	1.00 1.00 0.26
556: Toll-----	80	Limitations Flooding >= rare Surface sand fractions 70- 90% by wt.	1.00 0.82	Limitations Surface sand fractions 70- 90% by wt.	0.82	Limitations Slopes 2 to 6% Surface sand fractions 70- 90% by wt. Surface fragments (<3") 10- 25%	0.98 0.82 0.78
557: Scodie-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Canabrake-----	25	Limitations Slopes > 15% Surface sand fractions > 90% by wt. Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 15% Surface sand fractions > 90% by wt. Bedrock depth < 20"	1.00 1.00 1.00	Limitations Slopes > 6% Surface sand fractions > 90% by wt. Surface fragments (<3") >25%	1.00 1.00 1.00
Deadfoot-----	20	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70- 90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70- 90% by wt.	1.00 1.00 0.74	Limitations Slopes > 6% Fragments >10" >3% Fragments > 3" > 30%	1.00 1.00 1.00
558: Indiano-----	60	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.03	Limitations Slopes > 15% Fragments (<3") 25-50%	1.00 0.03	Limitations Slopes > 6% Surface fragments (<3") >25% Fragments >3" 5 to 30%	1.00 1.00 0.32

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
558: Wortley-----	20	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.46
560: Sacatar-----	30	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.67 0.01
Wortley-----	30	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20"	1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") 10-25%	1.00 1.00 0.32
Calpine-----	20	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.70 0.16	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	0.70 0.16	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.70 0.02
561: Scodie-----	30	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Bedrock depth < 20" Slopes > 15% Fragments >10" >3%	1.00 1.00 1.00	Limitations Bedrock depth < 20" Slopes > 6% Surface fragments (<3") >25%	1.00 1.00 1.00
Sacatar-----	25	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.67 0.01

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
561: Canebrake-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
562: Deerspring, partially drained-----	85	Limitations Flooding >= rare Dusty	1.00 0.50	Limitations Frequent flooding Dusty	0.50 0.50	Limitations Flooding > occasional Dusty Surface fragments (<3") 10-25%	1.00 0.50 0.32
570: Deadfoot-----	40	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 6% Fragments >10" >3% Fragments > 3" > 30%	1.00 1.00 1.00
Scodie-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
590: Xyno-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	25	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
590: Pilotwell-----	20	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 15% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 6% Surface fragments (<3") >25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67
591: Xyno-----	50	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	20	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated		Not rated	
610: Hyte-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
Erskine-----	35	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00	Limitations Slopes > 6% Bedrock depth < 20" Fragments >10" >3%	1.00 1.00 1.00

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
650:							
Stineway-----	40	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" Fragments >10" .1 to 3%	1.00 1.00 0.76	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes > 15% Bedrock depth < 20" Dusty	1.00 1.00 0.50	Limitations Slopes > 15% Bedrock depth < 20" Dusty	1.00 1.00 0.50	Limitations Slopes > 6% Bedrock depth < 20" Surface fragments (<3") >25%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
3250:							
Jawbone-----	50	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.88	Limitations Slopes > 15% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.88	Limitations Slopes > 6% Bedrock depth < 20" Surface sand fractions 70-90% by wt.	1.00 1.00 0.88
Jawbone, moderately deep	40	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.88	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.88	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Bedrock 20-40" and slope > 2%	1.00 0.88 0.50
4432:							
Koehn, occasionally flooded-----	70	Limitations Flooding >= rare Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Surface sand fractions > 90% by wt.	1.00	Limitations Surface sand fractions > 90% by wt. Occasional flooding Slopes 2 to 6%	1.00 0.50 0.26
Koehn, frequently flooded-----	15	Limitations Flooding >= rare Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Surface sand fractions > 90% by wt. Frequent flooding	1.00 0.50	Limitations Flooding > occasional Surface sand fractions > 90% by wt. Slopes 2 to 6%	1.00 1.00 0.26

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
5201: Wingap-----	55	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.68	Limitations Slopes > 15% Surface sand fractions 70-90% by wt.	1.00 0.68	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	1.00 0.68 0.22
Pinyonpeak-----	30	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	1.00 1.00 0.84	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	1.00 1.00 0.84	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
5210: Grandora-----	30	Limitations Slopes > 15% Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Slopes > 15% Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Slopes > 6% Surface sand fractions > 90% by wt. Surface fragments (<3") 10-25%	1.00 1.00 0.32
Grandora, warm-----	30	Limitations Slopes > 15% Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Slopes > 15% Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Slopes > 6% Surface sand fractions > 90% by wt. Surface fragments (<3") 10-25%	1.00 1.00 0.32
Pinyonpeak-----	30	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	1.00 1.00 0.84	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	1.00 1.00 0.84	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	1.00 1.00 1.00
6001: Goldpeak-----	55	Limitations Surface sand fractions 70-90% by wt.	0.76	Limitations Surface sand fractions 70-90% by wt.	0.76	Limitations Surface fragments (<3") >25% Surface sand fractions 70-90% by wt. Slopes 2 to 6%	0.99 0.76 0.50

Table 11a.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Limitations	Value	Limitations	Value	Limitations	Value
6001:							
Pinyonpeak-----	15	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	 1.00 1.00 0.84	Limitations Bedrock depth < 20" Slopes > 15% Fragments (<3") 25-50%	 1.00 1.00 0.84	Limitations Slopes > 6% Surface fragments (<3") >25% Bedrock depth < 20"	 1.00 1.00 1.00
Wingap-----	15	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	 0.68 0.16	Limitations Surface sand fractions 70-90% by wt. Slopes 8 to 15%	 0.68 0.16	Limitations Slopes > 6% Surface sand fractions 70-90% by wt. Surface fragments (<3") 10-25%	 1.00 0.68 0.22
W: Water-----	100	Not rated		Not rated		Not rated	

The interpretation for camp areas evaluates the following soil properties at variable depths in the soil: flooding; ponding; wetness; slope; depth to bedrock; depth to a cemented pan; fragments less than, equal to, or more than 3 inches in size; sodium content (SAR); salinity (EC); a clayey surface layer; Unified classes for a high content of organic matter (PT, OL, and OH); soil dustiness; and permeability (Ksat) that is too rapid, allowing seepage in some climates.

The interpretation for picnic areas evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, depth to bedrock, depth to a cemented pan, salinity (EC), pH, soil dustiness, fragments more than 3 inches in size, surface fragments more than 10 inches in size, the amount of sand or clay in the surface layer, Unified classes for a high content of organic matter (PT, OL, and OH), and permeability (Ksat) that is too rapid, allowing seepage in some climates.

The interpretation for playgrounds evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, depth to bedrock, depth to a cemented pan, surface fragments more than 10 inches in size, fragments equal to or less than 3 inches in size, Unified classes for a high content of organic matter (PT, OL, and OH), soil dustiness, sand or clay content in the surface layer, pH, salinity (EC), and permeability (Ksat) that is too rapid, allowing seepage in some climates.

Table 11b.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15%	1.00
128: Pits-----	35	Not rated		Not rated		Not rated	
Delano-----	30	No limitations		No limitations		No limitations	
Oil waste land-----	15	Not rated		Not rated		Not rated	
136: Hesperia-----	75	No limitations		No limitations		No limitations	
138: Hesperia-----	85	No limitations		No limitations		No limitations	
139: Riverwash-----	80	Not rated		Not rated		Not rated	
143: Calicreek-----	85	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Loamy coarse sand surface AWC 2-4" to a depth of 40"	0.50 0.11
144: Calicreek-----	85	No limitations		No limitations		Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.56
145: Delano-----	85	Limitations Surface sand fractions 70-90% by wt.	0.30	Limitations Surface sand fractions 70-90% by wt.	0.30	No limitations	
146: Delano-----	80	No limitations		No limitations		No limitations	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
147: Chanac-----	80	No limitations		No limitations		No limitations	
148: Delano-----	85	No limitations		No limitations		No limitations	
149: Delano-----	85	No limitations		No limitations		No limitations	
150: Pits-----	50	Not rated		Not rated		Not rated	
Dumps-----	40	Not rated		Not rated		Not rated	
152: Pleito-----	85	No limitations		No limitations		No limitations	
153: Chanac-----	85	No limitations		No limitations		Limitations Slopes 8 to 15%	0.63
154: Dam-----	100	Not rated		Not rated		Not rated	
166: Delano-----	60	No limitations		No limitations		No limitations	
Urban land-----	20	Not rated		Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations K factor >.35 and slopes > 8%	1.00	Limitations Slopes > 40% Dusty	1.00 0.50	Limitations Slopes > 15% SAR > 12	1.00 1.00
Calcic Haploxerepts-----	40	Limitations K factor >.35 and slopes > 8%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% SAR > 12	1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
176: Elkhills, eroded-----	75	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15%	1.00
177: Chanac-----	55	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.50	Limitations Slopes > 15%	1.00
Torriorthents, stratified-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.50	Limitations Slopes > 15% SAR > 12 AWC 2-4" to a depth of 40"	1.00 1.00 0.08
178: Delano-----	40	No limitations		No limitations		No limitations	
Cuyama-----	25	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15%	1.00
Premier-----	15	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15%	1.00
179: Torriorthents, stratified, eroded----	50	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations SAR > 12 Slopes > 15% AWC 2-4" to a depth of 40"	1.00 1.00 0.08
Elkhills-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15%	1.00
184: Cuyama-----	85	No limitations		No limitations		No limitations	
185: Brecken-----	40	Limitations Fragments >10" >3% Slopes > 25%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes 25 to 40%	1.00 0.96	Limitations Slopes > 15% Fragments >3" 5 to 30% Fragments (gravel size) 25-50%	1.00 0.20 0.09

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
185:							
Cuyama-----	20	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15%	1.00
Pleito-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.56	Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
186:							
Cuyama-----	85	Limitations Dusty	0.50	Limitations Dusty	0.50	Limitations Slopes 8 to 15%	0.63
187:							
Trigo-----	50	Limitations K factor >.35 and slopes > 8%	1.00	Limitations Slopes 25 to 40%	0.96	Limitations Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00
		Slopes > 25%	1.00			Bedrock depth < 20"	1.00
Chanac-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.56	Limitations Slopes > 15%	1.00
188:							
Tweedy-----	50	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
Tollhouse-----	20	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Locobill-----	15	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.10
189:							
Tweedy-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15%	1.00
Walong-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.99 0.84

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
192:							
Chanac-----	55	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15%	1.00
Pleito-----	30	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
193:							
Chanac-----	50	No limitations		No limitations		No limitations	
Pleito-----	30	No limitations		No limitations		Limitations Fragments >3" 5 to 30%	0.01
194:							
Pleito-----	40	No limitations		No limitations		Limitations Slopes 8 to 15% Fragments >3" 5 to 30%	0.04 0.01
Delvar-----	40	No limitations		No limitations		Limitations Slopes 8 to 15%	0.04
195:							
Centerville-----	60	Limitations Surface clay >= 40% Slopes 15 - 25%	1.00 0.50	Limitations Surface clay >= 40%	1.00	Limitations Slopes > 15% Clay in surface >= 40%	1.00 1.00
Delvar-----	20	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15%	1.00
196:							
Exeter-----	75	No limitations		No limitations		Limitations Depth to pan 20 to < 40" AWC 2-4" to a depth of 40"	0.84 0.01
197:							
Nord-----	85	No limitations		No limitations		No limitations	
198:							
Centerville-----	65	Limitations Surface clay >= 40%	1.00	Limitations Surface clay >= 40%	1.00	Limitations Clay in surface >= 40%	1.00
Delvar-----	20	No limitations		No limitations		No limitations	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
199: Exeter-----	80	No limitations		No limitations		Limitations Depth to pan 20 to < 40"	0.01
200: Urban land-----	60	Not rated		Not rated		Not rated	
Delano-----	25	No limitations		No limitations		No limitations	
201: Pleito-----	30	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
Chanac-----	30	Limitations Dusty Slopes 15 - 25%	0.50 0.18	Limitations Dusty	0.50	Limitations Slopes > 15%	1.00
Raggulch-----	30	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.18	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Bedrock depth < 20" Slopes > 15% AWC 2-4" to a depth of 40"	1.00 1.00 0.90
205: Pleito-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
Trigo-----	25	Limitations K factor >.35 and slopes > 8% Slopes > 25%	1.00 1.00	Limitations Slopes 25 to 40%	0.86	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Chanac-----	20	Limitations Slopes > 25% Dusty	1.00 0.50	Limitations Dusty Slopes 25 to 40%	0.50 0.22	Limitations Slopes > 15%	1.00
207: Whitewolf-----	85	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations AWC 2-4" to a depth of 40"	0.83

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
209: Whitewolf-----	85	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations Surface sand fractions 70-90% by wt.	0.47	Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.68
210: Kernfork-----	85	Limitations Surface sand fractions 70-90% by wt.	0.01	Limitations Surface sand fractions 70-90% by wt.	0.01	Limitations Occasional flooding	0.80
212: Kernfork-----	80	Limitations Ponding (any duration) Frequent flooding Surface sand fractions 70-90% by wt.	1.00 0.50 0.01	Limitations Ponding (any duration) Frequent flooding Surface sand fractions 70-90% by wt.	1.00 0.50 0.01	Limitations Ponding (any duration) Frequent flooding	1.00 0.90
213: Calicreek-----	85	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Occasional flooding Loamy coarse sand surface AWC 2-4" to a depth of 40"	0.80 0.50 0.21
215: Kelval-----	85	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.02
216: Inyo-----	60	Limitations Surface sand fractions 70-90% by wt. Frequent flooding	0.82 0.50	Limitations Surface sand fractions 70-90% by wt. Frequent flooding	0.82 0.50	Limitations AWC 2-4" to a depth of 40" Frequent flooding Loamy coarse sand surface	0.92 0.90 0.50
Riverwash-----	25	Not rated		Not rated		Not rated	
217: Whitewolf-----	55	Limitations Surface sand fractions 70-90% by wt. Frequent flooding	0.82 0.50	Limitations Surface sand fractions 70-90% by wt. Frequent flooding	0.82 0.50	Limitations Frequent flooding AWC 2-4" to a depth of 40" Loamy coarse sand surface	0.90 0.87 0.50
Riverwash-----	25	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
220:							
Aquents-----	40	Limitations		Limitations		Not rated	
		Saturation < 12" depth	1.00	Saturation < 12" depth	1.00		
		Ponding (any duration)	1.00	Ponding (any duration)	1.00		
		Frequent flooding	0.50	Frequent flooding	0.50		
Aquolls-----	35	Limitations		Limitations		Not rated	
		Saturation < 12" depth	1.00	Saturation < 12" depth	1.00		
		Ponding (any duration)	1.00	Ponding (any duration)	1.00		
		Frequent flooding	0.50	Frequent flooding	0.50		
Riverwash-----	15	Not rated		Not rated		Not rated	
222:							
Kelval-----	85	No limitations		No limitations		Limitations	
						Occasional flooding	0.80
223:							
Kelval-----	70	Limitations		Limitations		Limitations	
		Fragments >10" >3%	1.00	Surface fragments (>10")	1.00	AWC 2-4" to a depth of 40"	0.96
		Surface sand fractions 70-90% by wt.	0.21	>3% coverage		Occasional flooding	0.80
				Surface sand fractions 70-90% by wt.	0.21		
224:							
Inyo-----	85	Limitations		Limitations		Limitations	
		Surface sand fractions 70-90% by wt.	0.82	Surface sand fractions 70-90% by wt.	0.82	AWC 2-4" to a depth of 40"	0.92
						Occasional flooding	0.80
						Loamy coarse sand surface	0.50
238:							
Cinco-----	85	Limitations		Limitations		Limitations	
		Slopes > 25%	1.00	Slopes > 40%	1.00	Slopes > 15%	1.00
		Surface sand fractions 70-90% by wt.	0.55	Surface sand fractions 70-90% by wt.	0.55	AWC < 2" to a depth of 40"	0.99
						Fragments (gravel size) 25-50%	0.05
240:							
Dune land-----	85	Not rated		Not rated		Not rated	
241:							
Inyo-----	75	Limitations		Limitations		Limitations	
		Surface sand fractions 70-90% by wt.	0.82	Surface sand fractions 70-90% by wt.	0.82	AWC 2-4" to a depth of 40"	0.92
						Loamy coarse sand surface	0.50

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
242: Inyo-----	80	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Loamy coarse sand surface Slopes 8 to 15%	0.92 0.50 0.16
243: Kernfork, saline-sodic, occasionally flooded---	85	Limitations Saturation < 12" depth Ponding (any duration)	1.00 1.00	Limitations Saturation < 12" depth Ponding (any duration)	1.00 1.00	Limitations Ponding (any duration) Saturation < 12" depth Surface EC > 8 mmhos/cm	1.00 1.00 1.00
245: Chollawell-----	80	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% AWC 2-4" to a depth of 40" Loamy coarse sand surface	0.92 0.55 0.50
246: Chollawell-----	80	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% Loamy coarse sand surface AWC 2-4" to a depth of 40"	0.92 0.50 0.49
247: Inyo-----	45	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Loamy coarse sand surface Slopes 8 to 15%	0.92 0.50 0.16
Tips-----	25	Limitations Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.67 0.18	Limitations Surface sand fractions 70-90% by wt.	0.67	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
249:							
Hoffman-----	65	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Loamy coarse sand surface	1.00 0.86 0.50
Rock outcrop-----	20	Not rated		Not rated		Not rated	
250:							
Hoffman-----	40	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Surface sand fractions 70-90% by wt. Slopes 25 to 40%	0.70 0.56	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Loamy coarse sand surface	1.00 0.86 0.50
Tips-----	30	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Surface sand fractions 70-90% by wt. Slopes 25 to 40%	0.67 0.56	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Surface sand fractions 70-90% by wt. Slopes 25 to 40% Surface fragments (>10") .1-3% coverage	0.67 0.56 0.47	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Loamy coarse sand surface	1.00 0.95 0.50
253:							
Sorrell-----	40	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.95
Martee-----	25	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
254:							
Martee-----	60	Limitations		Limitations		Limitations	
		Slopes > 25%	1.00	Surface fragments (>10")	1.00	Bedrock depth < 20"	1.00
		Fragments >10" >3%	1.00	>3% coverage		Slopes > 15%	1.00
		Surface sand fractions 70-90% by wt.	0.70	Slopes > 40%	1.00	AWC < 2" to a depth of 40"	1.00
				Surface sand fractions 70-90% by wt.	0.70		
Rock outcrop-----	25	Not rated		Not rated		Not rated	
255:							
Kernfork, occasionally flooded-----	45	Limitations		Limitations		Limitations	
		Ponding (any duration)	1.00	Ponding (any duration)	1.00	Ponding (any duration)	1.00
						Occasional flooding	0.80
						AWC 2-4" to a depth of 40"	0.09
Kernfork, frequently flooded-----	40	Limitations		Limitations		Limitations	
		Saturation < 12" depth	1.00	Saturation < 12" depth	1.00	Ponding (any duration)	1.00
		Ponding (any duration)	1.00	Ponding (any duration)	1.00	Saturation < 12" depth	1.00
		Frequent flooding	0.50	Frequent flooding	0.50	Frequent flooding	0.90
257:							
Hoffman-----	50	Limitations		Limitations		Limitations	
		Slopes > 25%	1.00	Surface sand fractions 70-90% by wt.	0.70	Slopes > 15%	1.00
		Surface sand fractions 70-90% by wt.	0.70	Slopes 25 to 40%	0.56	AWC 2-4" to a depth of 40"	0.86
						Loamy coarse sand surface	0.50
Tips-----	20	Limitations		Limitations		Limitations	
		Slopes > 25%	1.00	Surface sand fractions 70-90% by wt.	0.67	Slopes > 15%	1.00
		Surface sand fractions 70-90% by wt.	0.67	Slopes 25 to 40%	0.56	AWC < 2" to a depth of 40"	1.00
						Bedrock depth < 20"	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
259:							
Cowspring-----	80	Limitations		Limitations		Limitations	
		Slopes > 25%	1.00	Surface sand fractions 70-90% by wt.	0.74	Slopes > 15%	1.00
		Surface sand fractions 70-90% by wt.	0.74	Slopes 25 to 40%	0.56	AWC 2-4" to a depth of 40"	0.99
						Bedrock depth 20 to 40"	0.71

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
260:							
Cowspring-----	45	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.99 0.71
Tips-----	20	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.67	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
261:							
Blasingame-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15% Bedrock depth < 20" AWC 2-4" to a depth of 40"	1.00 0.99 0.78
Arujo-----	25	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes 25 to 40% Surface fragments (>10") .1-3% coverage	0.22 0.19	Limitations Slopes > 15%	1.00
Cieneba-----	25	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Surface fragments (>10") .1-3% coverage Slopes 25 to 40%	0.76 0.22	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
264:							
Arujo-----	35	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15%	1.00
Walong-----	25	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.99 0.84
Tunis-----	20	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15% Bedrock depth < 20" AWC < 2" to a depth of 40"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
265: Arujo-----	80	No limitations		No limitations		Limitations Slopes 8 to 15%	0.16
266: Tunis-----	50	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth < 20" AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
267: Cieneba-----	40	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes > 40%	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Vista-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.72 0.71
Rock outcrop-----	15	Not rated		Not rated		Not rated	
268: Tunis-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth < 20" AWC < 2" to a depth of 40"	1.00 1.00 1.00
Tollhouse-----	25	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes > 40%	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Sorrell-----	20	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes > 40%	1.00 1.00	Limitations Slopes > 15% Fragments >3" 5 to 30% AWC 2-4" to a depth of 40"	1.00 0.88 0.37

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
269:							
Tollhouse-----	45	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Sorrell-----	25	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 1.00 0.79	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.90 0.88
Rock outcrop-----	15	Not rated		Not rated		Not rated	
270:							
Locobill-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.10 0.01
Backcanyon-----	30	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.19	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.20
271:							
Walong-----	35	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.19	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.91 0.46
Tunis-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
272:							
Tollhouse-----	35	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes 25 to 40%	1.00 0.78	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Edmundston-----	30	Limitations Slopes 15 - 25%	0.82	No limitations		Limitations Slopes > 15% AWC 2-4" to a depth of 40"	1.00 0.09
Sorrell-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.79	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Slopes 25 to 40%	1.00 0.79 0.78	Limitations Slopes > 15% Fragments >3" 5 to 30% Loamy coarse sand surface	1.00 0.88 0.50
274:							
Sesame-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.90 0.24
Tweedy-----	20	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.76	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.90 0.05
Rock outcrop-----	15	Not rated		Not rated		Not rated	
275:							
Strahle-----	50	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.90 0.12
Tweedy-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.84

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
276:							
Tips-----	35	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.94 0.67	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.94 0.67	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Hoffman-----	30	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 15% Loamy coarse sand surface Fragments (gravel size) 25-50%	1.00 0.50 0.31
Cinco-----	15	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.44	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.44	Limitations Slopes > 15% AWC < 2" to a depth of 40" Loamy coarse sand surface	1.00 0.99 0.50
277:							
Feethill-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.94	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.46
Vista-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.94	Limitations Slopes > 15% Bedrock depth < 20" AWC < 2" to a depth of 40"	1.00 0.99 0.99
Walong-----	20	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes 25 to 40%	1.00 0.94	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.74 0.65
279:							
Strahle-----	50	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Sesame-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.16

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
280:							
Tollhouse-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Martee-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Edmundston-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.78	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.05 0.01
281:							
Havala-----	55	Limitations Fragments >10" .1 to 3%	0.76	Limitations Surface fragments (>10") .1-3% coverage	0.76	Limitations Slopes 8 to 15% Fragments >3" 5 to 30%	0.04 0.01
Walong-----	15	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.68 0.54
Kernfork-----	15	No limitations		No limitations		Limitations Occasional flooding	0.80
282:							
Tollhouse-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Sesame-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.80 0.09

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
282: Friant-----	20	Limitations Slopes > 25% Fragments >10" >3% Fragments >3" 25 to 75%	1.00 1.00 0.01	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface fragments (>3") 25-75%	1.00 1.00 1.00 0.01	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
283: Tollhouse-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Martee-----	30	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
284: Tollhouse-----	70	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
285: Inyo-----	50	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Occasional flooding Loamy coarse sand surface	0.92 0.80 0.50
Kelval-----	40	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.02

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
286: Tollhouse-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Tweedy-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.20
Locobill-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.10
287: Tweedy-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
Strahle-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
288: Sorrell-----	45	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 1.00 0.67	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.95
Arujo-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
289: Erskine-----	35	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
289:							
Hyte-----	30	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.76	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
294:							
Edmundston-----	45	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.01 0.01
Tweedy-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.29
Walong-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.91 0.84
295:							
Tweedy-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.80 0.01
Tunis-----	30	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rankor-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15%	1.00
296:							
Arujo-----	40	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
296:							
Walong-----	30	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.20 0.03
Tunis-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
297:							
Walong-----	30	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.49 0.29
Blasingame-----	25	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" Fragments >3" 5 to 30%	1.00 0.20 0.03
Rock outcrop-----	15	Not rated		Not rated		Not rated	
298:							
Arujo-----	35	Limitations Slopes > 25%	1.00	No limitations		Limitations Slopes > 15%	1.00
Feethill-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
Sesame-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.65
299:							
Arujo-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15%	1.00
Feethill-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
299: Sesame-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.65
300: Stineway-----	50	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.76	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes > 25% Dusty	1.00 0.50	Limitations Slopes > 40% Dusty	1.00 0.50	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
301: Feethill-----	35	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.97 0.30
Vista-----	25	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.91 0.90
Rock outcrop-----	15	Not rated		Not rated		Not rated	
302: Feethill-----	30	Limitations Slopes 15 - 25% Dusty	0.92 0.50	Limitations Dusty	0.50	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.80
Cibo-----	25	Limitations Slopes 15 - 25%	0.92	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40" AWC 2-4" to a depth of 40"	1.00 0.95 0.05
Cieneba-----	20	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.92	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
303: Steuber-----	80	No limitations		No limitations		Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.01
304: Cibo-----	80	Limitations Slopes > 25% Surface clay >= 40%	1.00 1.00	Limitations Surface clay >= 40% Slopes > 40%	1.00 1.00	Limitations Slopes > 15% Clay in surface >= 40% Bedrock depth 20 to 40"	1.00 1.00 0.10
305: Chanac-----	45	Limitations Slopes > 25% Dusty	1.00 0.50	Limitations Slopes > 40% Dusty	1.00 0.50	Limitations Slopes > 15%	1.00
Pleito-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
Premier-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.50	Limitations Slopes > 15%	1.00
306: Xerofluvents, occasionally flooded---	60	Limitations Dusty	0.50	Limitations Dusty	0.50	Limitations Occasional flooding	0.80
Riverwash-----	25	Not rated		Not rated		Not rated	
307: Typic Xeropsamments----	80	Limitations Surface sand fractions 70- 90% by wt.	0.55	Limitations Surface sand fractions 70- 90% by wt.	0.55	Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.64
308: Rankor-----	35	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations Slopes > 15%	1.00
Edmundston-----	25	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.02 0.01

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
308: Tweedy-----	20	Limitations Slopes 15 - 25%	0.41	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
309: Rankor-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15%	1.00
Edmundston-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Fragments >3" 5 to 30%	1.00 0.02 0.01
Tweedy-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
310: Stineway-----	50	Limitations Fragments >10" .1 to 3% Slopes 15 - 25%	0.76 0.12	Limitations Surface fragments (>10") .1-3% coverage	0.76	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes 15 - 25%	0.88	No limitations		Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
311: Xerorthents-----	50	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes > 40%	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
312: Havala-----	85	Limitations Fragments >10" .1 to 3%	0.76	Limitations Surface fragments (>10") .1-3% coverage	0.76	No limitations	
313: Dumps-----	80	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
314:							
Premier-----	45	Limitations Slopes 15 - 25%	0.41	No limitations		Limitations Slopes > 15%	1.00
Haplodurids-----	35	Limitations K factor >.35 and slopes > 8% Slopes 15 - 25%	1.00 0.41	No limitations		Limitations Slopes > 15% Depth to pan 20 to < 40" AWC 2-4" to a depth of 40"	1.00 0.84 0.45
315:							
Premier-----	45	No limitations		No limitations		No limitations	
Haplodurids-----	40	No limitations		No limitations		Limitations Depth to pan 20 to < 40" AWC 2-4" to a depth of 40"	0.84 0.45
316:							
Premier-----	85	No limitations		No limitations		No limitations	
317:							
Premier-----	85	No limitations		No limitations		No limitations	
320:							
Southlake-----	80	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments (gravel size) 25-50% AWC 2-4" to a depth of 40" Slopes 8 to 15%	0.26 0.05 0.04
325:							
Walong-----	75	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.88	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.81 0.71
326:							
Walong-----	80	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.81 0.71

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
330:							
Kernville-----	35	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Faycreek-----	25	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
350:							
Southlake, stony-----	55	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
Goodale-----	20	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.01	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Surface fragments (>3") 25-75%	1.00 0.67 0.01	Limitations AWC < 2" to a depth of 40" Fragments >3" 5 to 30% Occasional flooding	1.00 0.99 0.80
352:							
Goodale-----	65	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.12	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Surface fragments (>3") 25-75%	1.00 0.67 0.12	Limitations AWC < 2" to a depth of 40" Fragments > 3" > 30% Occasional flooding	1.00 1.00 0.80
Riverwash-----	20	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
360:							
Kernville, bouldery-----	40	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.70 0.18	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
Hogeye-----	30	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.18	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.79 0.54
Southlake-----	15	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
380:							
Delvar-----	40	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15%	1.00
Pleito-----	40	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Fragments >3" 5 to 30%	1.00 0.01
407:							
Centerville-----	90	Limitations Surface clay >= 40%	1.00	Limitations Surface clay >= 40%	1.00	Limitations SAR > 12 Clay in surface >= 40% Surface EC 4 to 6 mmhos/cm	1.00 1.00 0.01
410:							
Stineway-----	40	Limitations Fragments >10" .1 to 3% Slopes 15 - 25%	0.76 0.12	Limitations Surface fragments (>10") .1-3% coverage	0.76	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Kiscove-----	25	Limitations Slopes 15 - 25%	0.88	No limitations		Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
411: Delvar-----	85	No limitations		No limitations		Limitations SAR > 12	1.00
412: Chollawell-----	70	No limitations		No limitations		Limitations Fragments (gravel size) 25-50% Slopes 8 to 15% AWC 2-4" to a depth of 40"	0.38 0.16 0.09
Urban land-----	15	Not rated		Not rated		Not rated	
417: Southlake-----	40	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
Southlake, gravelly-----	20	No limitations		No limitations		Limitations Occasional flooding Fragments (gravel size) 25-50% Slopes 8 to 15%	0.80 0.32 0.16
Goodale-----	15	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.01	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Surface fragments (>3") 25-75%	1.00 0.67 0.01	Limitations AWC < 2" to a depth of 40" Fragments >3" 5 to 30% Occasional flooding	1.00 0.99 0.80
Urban land-----	15	Not rated		Not rated		Not rated	
420: Southlake-----	65	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations AWC 2-4" to a depth of 40" Slopes 8 to 15% Fragments (gravel size) 25-50%	0.05 0.04 0.04
Urban land-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
422: Kelval-----	70	No limitations		No limitations		Limitations Occasional flooding	0.80
Urban land-----	15	Not rated		Not rated		Not rated	
423: Auberry-----	45	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.22	Limitations Slopes > 15%	1.00
Crouch-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.56	Limitations Slopes > 15%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
424: Inyo-----	70	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Occasional flooding Loamy coarse sand surface	0.92 0.80 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
430: Friant-----	70	Limitations Fragments >10" >3% Slopes > 25% Fragments >3" 25 to 75%	1.00 1.00 0.01	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface fragments (>3") 25-75%	1.00 1.00 1.00 0.01	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432: Alberti, gravelly-----	70	Limitations Fragments >10" .1 to 3% Dusty Slopes 15 - 25%	0.94 0.50 0.18	Limitations Surface fragments (>10") .1-3% coverage Dusty	0.94 0.50 0.50	Limitations Bedrock depth < 20" Slopes > 15% AWC 2-4" to a depth of 40"	1.00 1.00 0.97
Urban land-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
441:							
Inyo-----	65	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Loamy coarse sand surface	0.92 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
442:							
Inyo-----	70	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Slopes 8 to 15% Loamy coarse sand surface	0.92 0.63 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
445:							
Chollawell-----	70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% AWC 2-4" to a depth of 40" Loamy coarse sand surface	0.92 0.55 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
450:							
Southlake, stony-----	45	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
Goodale-----	15	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.01	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Surface fragments (>3") 25-75%	1.00 0.67 0.01	Limitations AWC < 2" to a depth of 40" Fragments >3" 5 to 30% Occasional flooding	1.00 0.99 0.80
Urban land-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
460: Kernville, bouldery-----	30	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.70 0.18	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
Hogeye-----	25	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.18	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.79 0.54
Southlake-----	15	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
Urban land-----	15	Not rated		Not rated		Not rated	
465: Arujo-----	65	No limitations		No limitations		Limitations Slopes 8 to 15%	0.16
Urban land-----	15	Not rated		Not rated		Not rated	
485: Inyo-----	45	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Occasional flooding Loamy coarse sand surface	0.92 0.80 0.50
Kelval-----	30	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Surface sand fractions 70-90% by wt.	0.81	Limitations Occasional flooding AWC 2-4" to a depth of 40"	0.80 0.02
Urban land-----	15	Not rated		Not rated		Not rated	
488: Tweedy-----	35	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.01
Tollhouse-----	20	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
488:							
Locobill-----	15	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.10
Urban land-----	15	Not rated		Not rated		Not rated	
501:							
Hyte-----	35	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.76	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Erskine-----	25	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Sorrell-----	25	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70- 90% by wt.	1.00 1.00 0.79	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70- 90% by wt.	1.00 1.00 0.79	Limitations Slopes > 15% Fragments >3" 5 to 30% Loamy coarse sand surface	1.00 0.88 0.50
503:							
Tips-----	40	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70- 90% by wt.	1.00 0.94 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70- 90% by wt.	1.00 0.94 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Erskine-----	30	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
505: Chollawell-----	85	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% Slopes 8 to 15% Loamy coarse sand surface	0.92 0.84 0.50
507: Xyno-----	40	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.70 0.19	Limitations Slopes > 40% Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	1.00 0.70 0.19	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 40% Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	1.00 0.67 0.47	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Loamy coarse sand surface	1.00 0.95 0.50
508: Pilotwell-----	45	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 40% Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	1.00 0.67 0.47	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.86
Xyno-----	25	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
509:							
Xyno-----	40	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
510:							
Xyno-----	35	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Pilotwell, bouldery-----	15	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.67 0.47	Limitations Slopes > 40% Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	1.00 0.67 0.47	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.84
512:							
Chollawell, cobbly substratum-----	60	No limitations		No limitations		Limitations Fragments (gravel size) 25-50% Slopes 8 to 15% AWC 2-4" to a depth of 40"	0.38 0.16 0.09

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
512: Chollawell, gravelly----	15	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% Loamy coarse sand surface AWC 2-4" to a depth of 40"	0.85 0.50 0.49
514: Chollawell-----	50	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Fragments (gravel size) 25-50% Loamy coarse sand surface AWC 2-4" to a depth of 40"	0.92 0.50 0.49
Inyo-----	35	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Loamy coarse sand surface Slopes 8 to 15%	0.92 0.50 0.16
515: Scodie-----	35	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Xyno-----	20	Limitations Slopes > 25% Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3%	1.00 0.70 0.19	Limitations Slopes > 40% Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	1.00 0.70 0.19	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
516:							
Xyno-----	45	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Canebrake-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
517:							
Southlake-----	55	Limitations Fragments >10" >3%	1.00	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Fragments >3" 5 to 30% Slopes 8 to 15%	0.38 0.16
Southlake, gravelly----	20	No limitations		No limitations		Limitations Occasional flooding Fragments (gravel size) 25-50% Fragments >3" 5 to 30%	0.80 0.58 0.38
Goodale-----	15	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Fragments >3" 25 to 75%	1.00 0.67 0.01	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Surface fragments (>3") 25-75%	1.00 0.67 0.01	Limitations AWC < 2" to a depth of 40" Fragments >3" 5 to 30% Occasional flooding	1.00 0.99 0.80
518:							
Backcanyon-----	50	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.19	Limitations Slopes 25 to 40% Surface fragments (>10") .1-3% coverage	0.56 0.19	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
520: Kernville-----	50	Limitations Fragments >10" >3% Slopes 15 - 25% Surface sand fractions 70-90% by wt.	1.00 0.92 0.70	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Hogeye-----	20	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.92	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.79 0.54
Rock outcrop-----	15	Not rated		Not rated		Not rated	
523: Kernville, bouldery----	45	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
525: Hungrygulch-----	35	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.88 0.80
Kernville-----	30	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.70	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
525: Hogeye-----	20	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Surface fragments (>10") >3% coverage Slopes > 40%	1.00 1.00 1.00	Limitations Slopes > 15% AWC 2-4" to a depth of 40" Bedrock depth 20 to 40"	1.00 0.79 0.54
530: Alberti, cobbly-----	45	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.76	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.76	Limitations Slopes > 15% Bedrock depth < 20" AWC 2-4" to a depth of 40"	1.00 1.00 0.98
Alberti, gravelly-----	40	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.94	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" AWC < 2" to a depth of 40"	1.00 1.00 0.99
531: Tweedy-----	40	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40"	1.00 0.05
Erskine-----	25	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Alberti, gravelly-----	20	Limitations Slopes > 25% Fragments >10" .1 to 3%	1.00 0.94	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage	1.00 0.94	Limitations Slopes > 15% Bedrock depth < 20" AWC 2-4" to a depth of 40"	1.00 1.00 0.93
532: Alberti, gravelly-----	80	Limitations Fragments >10" .1 to 3% Dusty Slopes 15 - 25%	0.94 0.50 0.18	Limitations Surface fragments (>10") .1-3% coverage Dusty	0.94 0.50 0.50	Limitations Bedrock depth < 20" Slopes > 15% AWC 2-4" to a depth of 40"	1.00 1.00 0.97
540: Canebrake-----	60	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
540: Lachim-----	20	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.80
541: Canebrake-----	45	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Lachim-----	20	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.84	Limitations Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 0.84	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.80
Rock outcrop-----	15	Not rated		Not rated		Not rated	
543: Wortley-----	45	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Indiano-----	25	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Fragments >3" 5 to 30% Bedrock depth 20 to 40"	1.00 0.68 0.65
Rock outcrop-----	15	Not rated		Not rated		Not rated	
544: Xeric Haplargids-----	60	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.60 0.12	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.60	Limitations Slopes > 15% Fragments >3" 5 to 30% AWC 2-4" to a depth of 40"	1.00 0.38 0.21
Lithic Xeric Haplargids	20	Limitations Slopes 15 - 25%	0.12	No limitations		Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
545: Sacatar-----	50	Limitations Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.67 0.18	Limitations Surface sand fractions 70-90% by wt.	0.67	Limitations Slopes > 15% Loamy coarse sand surface AWC 2-4" to a depth of 40"	1.00 0.50 0.27
Canebrake-----	30	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.74 0.18	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
549: Tunawee-----	60	Limitations Fragments >10" >3% Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Slopes 25 to 40%	1.00 0.67 0.06	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
550: Kenypeak-----	40	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.01	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.01	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rubble land-----	20	Not rated		Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated		Not rated	
551: Tunawee-----	70	Limitations Fragments >10" >3% Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 1.00 0.67	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt. Slopes 25 to 40%	1.00 0.67 0.50	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
552: Kenypeak-----	60	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.01	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.01	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Torriorthetic Haploxerolls-----	25	Limitations Slopes > 25% Fragments >10" >3%	1.00 1.00	Limitations Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00	Limitations Slopes > 15% Fragments (gravel-size) >50% AWC 2-4" to a depth of 40"	1.00 0.99 0.73
553: Tibbcreek-----	75	Limitations Dusty Slopes 15 - 25%	0.50 0.18	Limitations Dusty	0.50	Limitations Bedrock depth < 20" Slopes > 15% AWC 2-4" to a depth of 40"	1.00 1.00 0.92
554: Deerspring-----	85	No limitations		No limitations		Limitations Occasional flooding	0.80
555: Cumulic Endoaquolls, frigid-----	75	Limitations Saturation < 12" depth Frequent flooding	1.00 0.50	Limitations Saturation < 12" depth Frequent flooding	1.00 0.50	Limitations Saturation < 12" depth Frequent flooding	1.00 0.90
556: Toll-----	80	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations Surface sand fractions 70-90% by wt.	0.82	Limitations AWC 2-4" to a depth of 40" Loamy coarse sand surface	0.98 0.50
557: Scodie-----	35	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
557: Canebrake-----	25	Limitations Slopes > 25% Surface sand fractions > 90% by wt. Fragments >10" >3%	1.00 1.00 1.00	Limitations Surface sand fractions > 90% by wt. Slopes > 40% Surface fragments (>10") >3% coverage	1.00 1.00 1.00	Limitations Slopes > 15% Coarse sand or sand surface AWC < 2" to a depth of 40"	1.00 1.00 1.00
Deadfoot-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Fragments > 3" > 30%	1.00 1.00 1.00
558: Indiano-----	60	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% Bedrock depth 20 to 40" Fragments >3" 5 to 30%	1.00 0.65 0.32
Wortley-----	20	Limitations Slopes > 25%	1.00	Limitations Slopes > 40%	1.00	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
560: Sacatar-----	30	Limitations Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.67 0.18	Limitations Surface sand fractions 70-90% by wt.	0.67	Limitations Slopes > 15% Loamy coarse sand surface Bedrock depth 20 to 40"	1.00 0.50 0.16
Wortley-----	30	Limitations Slopes 15 - 25%	0.18	No limitations		Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Calpine-----	20	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Surface sand fractions 70-90% by wt.	0.70	Limitations Loamy coarse sand surface Slopes 8 to 15%	0.50 0.16

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
561: Scodie-----	30	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.74 0.18	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
Sacatar-----	25	Limitations Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.67 0.18	Limitations Surface sand fractions 70-90% by wt.	0.67	Limitations Slopes > 15% Loamy coarse sand surface Bedrock depth 20 to 40"	1.00 0.50 0.16
Canebrake-----	20	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.84 0.18	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.84	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
562: Deerspring, partially drained-----	85	Limitations Frequent flooding Dusty	0.50 0.50	Limitations Frequent flooding Dusty	0.50 0.50	Limitations Frequent flooding	0.90
570: Deadfoot-----	40	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Surface fragments (>10") >3% coverage Slopes > 40% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Fragments > 3" > 30%	1.00 1.00 1.00
Scodie-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
590:							
Xyno-----	35	Limitations Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.76 0.70 0.50	Limitations Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	0.76 0.70	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Canebrake-----	25	Limitations Fragments >10" >3% Surface sand fractions 70-90% by wt. Slopes 15 - 25%	1.00 0.74 0.41	Limitations Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 0.74	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
Pilotwell-----	20	Limitations Surface sand fractions 70-90% by wt. Fragments >10" .1 to 3% Slopes 15 - 25%	0.67 0.47 0.18	Limitations Surface sand fractions 70-90% by wt. Surface fragments (>10") .1-3% coverage	0.67 0.47	Limitations AWC < 2" to a depth of 40" Slopes > 15% Bedrock depth 20 to 40"	1.00 1.00 0.80
591:							
Xyno-----	50	Limitations Slopes > 25% Fragments >10" .1 to 3% Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Surface sand fractions 70-90% by wt.	1.00 0.76 0.70	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Canebrake-----	20	Limitations Slopes > 25% Fragments >10" >3% Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 40% Surface fragments (>10") >3% coverage Surface sand fractions 70-90% by wt.	1.00 1.00 0.74	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
599:							
Rock outcrop-----	80	Not rated		Not rated		Not rated	
610:							
Hyte-----	40	Limitations Fragments >10" .1 to 3% Slopes 15 - 25%	0.76 0.18	Limitations Surface fragments (>10") .1-3% coverage	0.76	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
610: Erskine-----	35	Limitations Fragments >10" >3% Slopes 15 - 25%	1.00 0.18	Limitations Surface fragments (>10") >3% coverage	1.00	Limitations AWC < 2" to a depth of 40" Bedrock depth < 20" Slopes > 15%	1.00 1.00 1.00
650: Stineway-----	40	Limitations Slopes > 25% Fragments >10" .1 to 3% Dusty	1.00 0.76 0.50	Limitations Slopes > 40% Surface fragments (>10") .1-3% coverage Dusty	1.00 0.76 0.50	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth < 20"	1.00 1.00 1.00
Kiscove-----	30	Limitations Slopes > 25% Dusty	1.00 0.50	Limitations Slopes > 40% Dusty	1.00 0.50	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
3250: Jawbone-----	50	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.88	Limitations Surface sand fractions 70-90% by wt. Slopes 25 to 40%	0.88 0.22	Limitations Bedrock depth < 20" Slopes > 15% AWC < 2" to a depth of 40"	1.00 1.00 1.00
Jawbone, moderately deep	40	Limitations Slopes > 25% Surface sand fractions 70-90% by wt.	1.00 0.88	Limitations Slopes 25 to 40% Surface sand fractions 70-90% by wt.	0.96 0.88	Limitations Slopes > 15% AWC < 2" to a depth of 40" Bedrock depth 20 to 40"	1.00 1.00 0.16
4432: Koehn, occasionally flooded-----	70	Limitations Surface sand fractions > 90% by wt.	1.00	Limitations Surface sand fractions > 90% by wt.	1.00	Limitations AWC 2-4" to a depth of 40" Occasional flooding Loamy coarse sand surface	0.92 0.80 0.50
Koehn, frequently flooded-----	15	Limitations Surface sand fractions > 90% by wt. Frequent flooding	1.00 0.50	Limitations Surface sand fractions > 90% by wt. Frequent flooding	1.00 0.50	Limitations AWC 2-4" to a depth of 40" Frequent flooding Loamy coarse sand surface	0.92 0.90 0.50

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
5201:							
Wingap-----	55	Limitations Surface sand fractions 70-90% by wt. Slopes 15 - 25%	0.68 0.50	Limitations Surface sand fractions 70-90% by wt.	0.68	Limitations Slopes > 15% Loamy coarse sand surface AWC 2-4" to a depth of 40"	1.00 0.50 0.27
Pinyonpeak-----	30	No limitations		No limitations		Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
5210:							
Grandora-----	30	Limitations Slopes > 25% Surface sand fractions > 90% by wt.	1.00 1.00	Limitations Surface sand fractions > 90% by wt. Slopes > 40%	1.00 1.00	Limitations Slopes > 15% Coarse sand or sand surface AWC < 2" to a depth of 40"	1.00 1.00 0.99
Grandora, warm-----	30	Limitations Surface sand fractions > 90% by wt. Slopes > 25%	1.00 1.00	Limitations Surface sand fractions > 90% by wt. Slopes 25 to 40%	1.00 0.22	Limitations Slopes > 15% Coarse sand or sand surface AWC < 2" to a depth of 40"	1.00 1.00 0.99
Pinyonpeak-----	30	Limitations Slopes 15 - 25%	0.50	No limitations		Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
6001:							
Goldpeak-----	55	Limitations Surface sand fractions 70-90% by wt.	0.76	Limitations Surface sand fractions 70-90% by wt.	0.76	No limitations	
Pinyonpeak-----	15	Limitations Slopes > 25%	1.00	Limitations Slopes 25 to 40%	0.04	Limitations Bedrock depth < 20" AWC < 2" to a depth of 40" Slopes > 15%	1.00 1.00 1.00
Wingap-----	15	Limitations Surface sand fractions 70-90% by wt.	0.68	Limitations Surface sand fractions 70-90% by wt.	0.68	Limitations Loamy coarse sand surface AWC 2-4" to a depth of 40" Slopes 8 to 15%	0.50 0.27 0.16

Table 11b.--Recreational Development--Continued

Map symbol and component name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Lawns, landscaping, and golf fairways	
		Limitations	Value	Limitations	Value	Limitations	Value
W: Water-----	100	Not rated		Not rated		Not rated	

The interpretation for paths and trails evaluates the following soil properties at variable depths in the soil: flooding; ponding; wetness; slope; fragments less than, equal to, or more than 3 inches in size; clay and sand content in the surface layer; surface fragments more than or equal to 10 inches in size; Unified classes for a high content of organic matter (PT, OL, and OH); soil dustiness; and the hazard of water erosion.

The interpretation for off-road motorcycle trails evaluates the following soil properties at variable depths in the soil: flooding; ponding; wetness; slope; soil dustiness; fragments less than, equal to, or more than 3 inches in size; sand or clay content in the surface layer; and Unified classes for a high content of organic matter (PT, OL, and OH).

The interpretation for lawns, landscaping, and golf fairways evaluates the following soil properties at variable depths in the soil: flooding; ponding; wetness; slope; depth to bedrock; depth to a cemented pan; fragments less than, equal to, or more than 3 inches in size; Unified class for a high content of organic matter (PT, OL, and OH); soil dustiness; sand or clay content in the surface layer; surface fragments more than or equal to 10 inches in size; pH; salinity (EC); sodium content (SAR); calcium carbonates; and sulfur content.

Table 12a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
128: Pits-----	35	Not rated		Not rated		Not rated	
Delano-----	30	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50
Oil waste land-----	15	Not rated		Not rated		Not rated	
136: Hesperia-----	75	No limitations		No limitations		Limitations Slopes 4 to 8%	0.50
138: Hesperia-----	85	No limitations		No limitations		No limitations	
139: Riverwash-----	80	Not rated		Not rated		Not rated	
143: Calicreek-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
144: Calicreek-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
145: Delano-----	85	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
146: Delano-----	80	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50
147: Chanac-----	80	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes 4 to 8% Shrink-swell (LEP 3-6)	0.50 0.50
148: Delano-----	85	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50
149: Delano-----	85	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8% Shrink-swell (LEP 3-6)	1.00 0.74 0.50
150: Pits-----	50	Not rated		Not rated		Not rated	
Dumps-----	40	Not rated		Not rated		Not rated	
152: Pleito-----	85	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 4 to 8%	1.00 0.50 0.02
153: Chanac-----	85	Limitations Slopes 8 to 15% Shrink-swell (LEP 3-6)	0.63 0.50	Limitations Slopes 8 to 15% Shrink-swell (LEP 3-6)	0.63 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
154: Dam-----	100	Not rated		Not rated		Not rated	
166: Delano-----	60	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
166: Urban land-----	20	Not rated		Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00	Limitations Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00
Calcic Haploxerepts----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
176: Elkhills, eroded-----	75	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
177: Chanac-----	55	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Torriorthents, stratified-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
178: Delano-----	40	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes 4 to 8% Shrink-swell (LEP 3-6)	0.74 0.50
Cuyama-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
179: Torriorthents, stratified, eroded----	50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
179: Elkhills-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
184: Cuyama-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.02
185: Brecken-----	40	Limitations Slopes > 15% Fragments (>3") 25 to 50% Shrink-swell (LEP 3-6)	1.00 0.75 0.50	Limitations Slopes > 15% Fragments (>3") 25 to 50%	1.00 0.75	Limitations Slopes > 8% Fragments (>3") 25 to 50% Shrink-swell (LEP 3-6)	1.00 0.75 0.50
Cuyama-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Pleito-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
186: Cuyama-----	85	Limitations Slopes 8 to 15% Shrink-swell (LEP 3-6)	0.63 0.50	Limitations Slopes 8 to 15%	0.63	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
187: Trigo-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Chanac-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
188: Tweedy-----	50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
188: Tollhouse-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.10	Limitations Slopes > 8%	1.00
189: Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Walong-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.84	Limitations Slopes > 8%	1.00
192: Chanac-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Pleito-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
193: Chanac-----	50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50
Pleito-----	30	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50
194: Pleito-----	40	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.04	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.04	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Delvar-----	40	Limitations Shrink-swell (LEP >6) Slopes 8 to 15%	1.00 0.04	Limitations Shrink-swell (LEP >6) Slopes 8 to 15%	1.00 0.04	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
195:							
Centerville-----	60	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00
Delvar-----	20	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00
196:							
Exeter-----	75	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Pan (thin) from 20-40" Shrink-swell (LEP 3-6)	0.84 0.50	Limitations Slopes 4 to 8% Shrink-swell (LEP 3-6)	0.50 0.50
197:							
Nord-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
198:							
Centerville-----	65	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP >6) Slopes 4 to 8%	1.00 0.50
Delvar-----	20	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP >6) Slopes 4 to 8%	1.00 0.50
199:							
Exeter-----	80	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6) Pan (thin) from 20-40"	0.50 0.01	Limitations Shrink-swell (LEP 3-6)	0.50
200:							
Urban land-----	60	Not rated		Not rated		Not rated	
Delano-----	25	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Shrink-swell (LEP 3-6)	1.00 0.50
201:							
Pleito-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
201:							
Chanac-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Raggulch-----	30	Limitations Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
205:							
Pleito-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Trigo-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Chanac-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
207:							
Whitewolf-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
209:							
Whitewolf-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
210:							
Kernfork-----	85	Limitations Flooding >= rare Saturation from 18 to 30" depth	1.00 0.39	Limitations Flooding >= rare Saturation < 2.5' depth	1.00 1.00	Limitations Flooding >= rare Saturation from 18 to 30" depth	1.00 0.39
212:							
Kernfork-----	80	Limitations Ponding (any duration) Flooding >= rare	1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation from 2.5' to 6' depth	1.00 1.00 0.35	Limitations Ponding (any duration) Flooding >= rare	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
213: Calicreek-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
215: Kelval-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
216: Inyo-----	60	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Riverwash-----	25	Not rated		Not rated		Not rated	
217: Whitewolf-----	55	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Riverwash-----	25	Not rated		Not rated		Not rated	
220: Aquents-----	40	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 2.5' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00
Aquolls-----	35	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 2.5' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00
Riverwash-----	15	Not rated		Not rated		Not rated	
222: Kelval-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
223: Kelval-----	70	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
224: Inyo-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.26

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
238: Cinco-----	85	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
240: Dune land-----	85	Not rated		Not rated		Not rated	
241: Inyo-----	75	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
242: Inyo-----	80	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
243: Kernfork, saline-sodic, occasionally flooded---	85	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 2.5' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00
245: Chollawell-----	80	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.02
246: Chollawell-----	80	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
247: Inyo-----	45	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Tips-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
249:							
Hoffman-----	65	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
250:							
Hoffman-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Tips-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.01	Limitations Slopes > 8%	1.00
253:							
Sorrell-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.95	Limitations Slopes > 8%	1.00
Martee-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
254:							
Martee-----	60	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
255: Kernfork, occasionally flooded-----	45	Limitations Ponding (any duration) Flooding >= rare	1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation from 2.5' to 6' depth	1.00 1.00 0.82	Limitations Ponding (any duration) Flooding >= rare	1.00 1.00
Kernfork, frequently flooded-----	40	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 2.5' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= rare Saturation < 18" depth	1.00 1.00 1.00
257: Hoffman-----	50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Tips-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
259: Cowspring-----	80	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
260: Cowspring-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
Tips-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
261:							
Blasingame-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP 3-6)	1.00 0.99 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Arujo-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Cieneba-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
264:							
Arujo-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Walong-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.84	Limitations Slopes > 8%	1.00
Tunis-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
265:							
Arujo-----	80	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
266:							
Tunis-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
267:							
Cieneba-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
267:							
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
268:							
Tunis-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Tollhouse-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Sorrell-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.06	Limitations Slopes > 8%	1.00
269:							
Tollhouse-----	45	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Sorrell-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
270:							
Locobill-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.10	Limitations Slopes > 8%	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
270:							
Backcanyon-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) from 20 to 40"	1.00 1.00 0.95	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) from 20 to 40"	1.00 1.00 0.95
Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.20	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
271:							
Walong-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.46	Limitations Slopes > 8%	1.00
Tunis-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
272:							
Tollhouse-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Edmundston-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Sorrell-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.01	Limitations Slopes > 8%	1.00
274:							
Sesame-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.90 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
274:							
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.90 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
275:							
Strahle-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.90 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Tweedy-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.84 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
276:							
Tips-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Hoffman-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.01	Limitations Slopes > 8%	1.00
Cinco-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
277:							
Feethill-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.46	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 0.99	Limitations Slopes > 8%	1.00
Walong-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.64	Limitations Slopes > 8%	1.00
279:							
Strahle-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.15	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
280:							
Tollhouse-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Martee-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Edmundston-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
281:							
Havala-----	55	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.04	Limitations Slopes 8 to 15%	0.04	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Walong-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.54	Limitations Slopes > 8%	1.00
Kernfork-----	15	Limitations Flooding >= rare Saturation from 18 to 30" depth	1.00 0.39	Limitations Flooding >= rare Saturation < 2.5' depth	1.00 1.00	Limitations Flooding >= rare Saturation from 18 to 30" depth	1.00 0.39
282:							
Tollhouse-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Sesame-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.79 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Friant-----	20	Limitations Slopes > 15% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Slopes > 15% Bedrock (hard) < 40" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Slopes > 8% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01
283:							
Tollhouse-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Martee-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
284:							
Tollhouse-----	70	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
285:							
Inyo-----	50	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Kelval-----	40	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
286:							
Tollhouse-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Tweedy-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.20	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Locobill-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.10	Limitations Slopes > 8%	1.00
287:							
Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Strahle-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
288:							
Sorrell-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.95	Limitations Slopes > 8%	1.00
Arujo-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
289:							
Erskine-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Hyte-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
294:							
Edmundston-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.29	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Walong-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.84	Limitations Slopes > 8%	1.00
295:							
Tweedy-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.79 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
295:							
Tunis-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rankor-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
296:							
Arujo-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Walong-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.01	Limitations Slopes > 8%	1.00
Tunis-----	15	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
297:							
Walong-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.29	Limitations Slopes > 8%	1.00
Blasingame-----	25	Limitations Slopes > 15% Shrink-swell (LEP >6)	1.00 0.99	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (soft) from 20 to 40"	1.00 1.00 0.20	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 0.99
Rock outcrop-----	15	Not rated		Not rated		Not rated	
298:							
Arujo-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
298:							
Feethill-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Sesame-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.64 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
299:							
Arujo-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Feethill-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Sesame-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.64 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
300:							
Stineway-----	50	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Kiscove-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
301: Feethill-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.97 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.90	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
302: Feethill-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.79 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Cibo-----	25	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (hard) from 20 to 40"	1.00 1.00 0.95	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (hard) < 40" depth	1.00 1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6) Bedrock (hard) from 20 to 40"	1.00 1.00 0.95
Cieneba-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
303: Steuber-----	80	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
304: Cibo-----	80	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (hard) from 20 to 40"	1.00 1.00 0.10	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (hard) < 40" depth	1.00 1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6) Bedrock (hard) from 20 to 40"	1.00 1.00 0.10

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
305:							
Chanac-----	45	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Pleito-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
306:							
Xerofluvents, occasionally flooded---	60	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Saturation from 2.5' to 6' depth	1.00 0.61	Limitations Flooding >= rare	1.00
Riverwash-----	25	Not rated		Not rated		Not rated	
307:							
Typic Xeropsamments-----	80	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
308:							
Rankor-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
309:							
Rankor-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
309: Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
310: Stineway-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Kiscove-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
311: Xerorthents-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Shrink-swell (LEP 3-6)	1.00 1.00 0.22	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP 3-6)	1.00 1.00 0.22	Limitations Bedrock (soft) < 20" depth Slopes > 8% Shrink-swell (LEP 3-6)	1.00 1.00 0.22
Rock outcrop-----	30	Not rated		Not rated		Not rated	
312: Havala-----	85	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP 3-6) Slopes 4 to 8%	0.50 0.02
313: Dumps-----	80	Not rated		Not rated		Not rated	
314: Premier-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Haplodurids-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Pan (thin) from 20-40"	1.00 0.84	Limitations Slopes > 8%	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
315: Premier-----	45	No limitations		No limitations		Limitations Slopes 4 to 8%	0.50
Haplodurids-----	40	No limitations		Limitations Pan (thin) from 20-40"	0.84	Limitations Slopes 4 to 8%	0.50
316: Premier-----	85	No limitations		No limitations		Limitations Slopes 4 to 8%	0.74
317: Premier-----	85	No limitations		No limitations		No limitations	
320: Southlake-----	80	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.04	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.04	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
325: Walong-----	75	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
326: Walong-----	80	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.71	Limitations Slopes > 8%	1.00
330: Kernville-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Faycreek-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
350: Southlake, stony-----	55	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Goodale-----	20	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Slopes > 8% Flooding >= rare Fragments (>3") >50%	1.00 1.00 1.00
352: Goodale-----	65	Limitations Flooding >= rare Fragments (>3") 25 to 50%	1.00 0.97	Limitations Flooding >= rare Fragments (>3") 25 to 50%	1.00 0.97	Limitations Flooding >= rare Fragments (>3") 25 to 50%	1.00 0.97
Riverwash-----	20	Not rated		Not rated		Not rated	
360: Kernville, bouldery----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 0.99
Hogeye-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) from 20 to 40"	1.00 0.99 0.54	Limitations Slopes > 8%	1.00
Southlake-----	15	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
380: Delvar-----	40	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00
Pleito-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
407: Centerville-----	90	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP >6) Slopes 4 to 8%	1.00 0.02
410: Stineway-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Kiscove-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
411: Delvar-----	85	Limitations Shrink-swell (LEP >6)	1.00	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Shrink-swell (LEP >6) Slopes 4 to 8%	1.00 0.50
412: Chollawell-----	70	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
417: Southlake-----	40	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Southlake, gravelly----	20	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Goodale-----	15	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Slopes > 8% Flooding >= rare Fragments (>3") >50%	1.00 1.00 0.99

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
417: Urban land-----	15	Not rated		Not rated		Not rated	
420: Southlake-----	65	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.04	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.04	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
422: Kelval-----	70	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Urban land-----	15	Not rated		Not rated		Not rated	
423: Auberry-----	45	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Crouch-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
424: Inyo-----	70	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.74
Urban land-----	15	Not rated		Not rated		Not rated	
430: Friant-----	70	Limitations Slopes > 15% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Slopes > 15% Bedrock (hard) < 40" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Slopes > 8% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
432:							
Alberti, gravelly-----	70	Limitations Bedrock (soft) < 20" depth Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00 1.00	Limitations Shrink-swell (LEP >6) Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
441:							
Inyo-----	65	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Urban land-----	15	Not rated		Not rated		Not rated	
442:							
Inyo-----	70	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.63	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.63	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	
445:							
Chollawell-----	70	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.02
Urban land-----	15	Not rated		Not rated		Not rated	
450:							
Southlake, stony-----	45	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Goodale-----	15	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Slopes > 8% Flooding >= rare Fragments (>3") >50%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
460:							
Kernville, bouldery-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 0.99
Hogeye-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) from 20 to 40"	1.00 0.99 0.54	Limitations Slopes > 8%	1.00
Southlake-----	15	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
465:							
Arujo-----	65	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
485:							
Inyo-----	45	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Kelval-----	30	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Urban land-----	15	Not rated		Not rated		Not rated	
488:							
Tweedy-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.01	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Tollhouse-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
488: Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.10	Limitations Slopes > 8%	1.00
Urban land-----	15	Not rated		Not rated		Not rated	
501: Hyte-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Erskine-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Sorrell-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.06	Limitations Slopes > 8%	1.00
503: Tips-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Erskine-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
505: Chollawell-----	85	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.84	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.84	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
507: Xyno-----	40	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
507:							
Canebrake-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.01	Limitations Slopes > 8%	1.00
508:							
Pilotwell-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.86	Limitations Slopes > 8%	1.00
Xyno-----	25	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509:							
Xyno-----	40	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Faycreek-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
510:							
Xyno-----	35	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Canebrake-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
510: Pilotwell, bouldery-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.84	Limitations Slopes > 8%	1.00
512: Chollawell, cobbly substratum-----	60	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Chollawell, gravelly----	15	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.26
514: Chollawell-----	50	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Inyo-----	35	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Flooding >= rare Slopes 8 to 15%	1.00 0.16	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
515: Scodie-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Canebrake-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Xyno-----	20	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
516: Xyno-----	45	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
516: Canebrake-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Slopes > 15% Bedrock (soft) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Bedrock (soft) < 20" depth Slopes > 8% Fragments (>3") 25 to 50%	1.00 1.00 0.01
517: Southlake-----	55	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Southlake, gravelly----	20	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Flooding >= rare Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Slopes > 8% Flooding >= rare Shrink-swell (LEP 3-6)	1.00 1.00 0.50
Goodale-----	15	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Flooding >= rare Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Slopes > 8% Flooding >= rare Fragments (>3") >50%	1.00 1.00 0.99
518: Backcanyon-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
520: Kernville-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) from 20 to 40"	1.00 0.99 0.54	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
523:							
Kernville, bouldery-----	45	Limitations		Limitations		Limitations	
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Bedrock (hard) < 40" depth	1.00	Slopes > 8%	1.00
		Bedrock (hard) < 20" depth	0.99	Bedrock (soft) < 20" depth	1.00	Bedrock (hard) < 20" depth	0.99
Faycreek-----	20	Limitations		Limitations		Limitations	
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00	Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
525:							
Hungrygulch-----	35	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 8%	1.00
				Bedrock (soft) from 20 to 40"	0.79		
Kernville-----	30	Limitations		Limitations		Limitations	
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Bedrock (hard) < 40" depth	1.00	Slopes > 8%	1.00
		Bedrock (hard) < 20" depth	0.99	Bedrock (soft) < 20" depth	1.00	Bedrock (hard) < 20" depth	0.99
Hogeye-----	20	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 8%	1.00
				Bedrock (hard) < 40" depth	0.99		
				Bedrock (soft) from 20 to 40"	0.54		
530:							
Alberti, cobbly-----	45	Limitations		Limitations		Limitations	
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Shrink-swell (LEP >6)	1.00	Slopes > 8%	1.00
		Shrink-swell (LEP >6)	1.00	Bedrock (hard) < 40" depth	1.00	Shrink-swell (LEP >6)	1.00
Alberti, gravelly-----	40	Limitations		Limitations		Limitations	
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Shrink-swell (LEP >6)	1.00	Slopes > 8%	1.00
		Shrink-swell (LEP >6)	1.00	Bedrock (hard) < 40" depth	1.00	Shrink-swell (LEP >6)	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
531: Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Shrink-swell (LEP 3-6) Bedrock (soft) from 20 to 40"	1.00 0.50 0.05	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Erskine-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Alberti, gravelly-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Slopes > 15% Shrink-swell (LEP >6) Bedrock (hard) < 40" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00 1.00
532: Alberti, gravelly-----	80	Limitations Bedrock (soft) < 20" depth Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00 1.00	Limitations Shrink-swell (LEP >6) Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Shrink-swell (LEP >6)	1.00 1.00 1.00
540: Canebrake-----	60	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Lachim-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.79	Limitations Slopes > 8%	1.00
541: Canebrake-----	45	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Lachim-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.79	Limitations Slopes > 8%	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
543:							
Wortley-----	45	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Indiano-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.64 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
544:							
Xeric Haplargids-----	60	Limitations Flooding >= rare Slopes > 15%	1.00 1.00	Limitations Flooding >= rare Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00 0.99	Limitations Slopes > 8% Flooding >= rare	1.00 1.00
Lithic Xeric Haplargids	20	Limitations Flooding >= rare Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Flooding >= rare Bedrock (hard) < 40" depth Slopes > 15%	1.00 1.00 1.00	Limitations Slopes > 8% Flooding >= rare Bedrock (hard) < 20" depth	1.00 1.00 1.00
545:							
Sacatar-----	50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Canebrake-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
549:							
Tunawee-----	60	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
550:							
Kenypeak-----	40	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Rubble land-----	20	Not rated		Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated		Not rated	
551:							
Tunawee-----	70	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
552:							
Kenypeak-----	60	Limitations Slopes > 15% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.05	Limitations Slopes > 15% Bedrock (hard) < 40" depth Fragments (>3") 25 to 50%	1.00 1.00 0.05	Limitations Slopes > 8% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.05
Torriorthentic Haploxerolls-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
553:							
Tibbcreek-----	75	Limitations Bedrock (soft) < 20" depth Slopes > 15% Shrink-swell (LEP 3-6)	1.00 1.00 0.50	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Shrink-swell (LEP 3-6)	1.00 1.00 0.50
554:							
Deerspring-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Saturation from 2.5' to 6' depth	1.00 0.61	Limitations Flooding >= rare	1.00
555:							
Cumulic Endoaquolls, frigid-----	75	Limitations Flooding >= rare Saturation < 18" depth	1.00 1.00	Limitations Flooding >= rare Saturation < 2.5' depth	1.00 1.00	Limitations Flooding >= rare Saturation < 18" depth	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
556: Toll-----	80	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Slopes 4 to 8%	1.00 0.50
557: Scodie-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Canebrake-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Deadfoot-----	20	Limitations Slopes > 15% Fragments (>3") 25 to 50%	1.00 0.46	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Fragments (>3") 25 to 50%	1.00 0.54 0.46	Limitations Slopes > 8% Fragments (>3") 25 to 50%	1.00 0.46
558: Indiano-----	60	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Shrink-swell (LEP 3-6)	1.00 0.64 0.50	Limitations Slopes > 8% Shrink-swell (LEP 3-6)	1.00 0.50
Wortley-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
560: Sacatar-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Wortley-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Calpine-----	20	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15%	0.16	Limitations Slopes > 8%	1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
561:							
Scodie-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Sacatar-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.15	Limitations Slopes > 8%	1.00
Canebrake-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
562:							
Deerspring, partially drained-----	85	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare Saturation from 2.5' to 6' depth	1.00 0.03	Limitations Flooding >= rare	1.00
570:							
Deadfoot-----	40	Limitations Slopes > 15% Fragments (>3") 25 to 50%	1.00 0.46	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Fragments (>3") 25 to 50%	1.00 0.95 0.46	Limitations Slopes > 8% Fragments (>3") 25 to 50%	1.00 0.46
Scodie-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
590:							
Xyno-----	35	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Canebrake-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
590: Pilotwell-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 0.79	Limitations Slopes > 8%	1.00
591: Xyno-----	50	Limitations Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00
Canebrake-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated		Not rated	
610: Hyte-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Erskine-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
650: Stineway-----	40	Limitations Slopes > 15% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.49	Limitations Slopes > 15% Bedrock (hard) < 40" depth Fragments (>3") 25 to 50%	1.00 1.00 0.49	Limitations Slopes > 8% Bedrock (hard) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.49
Kiscove-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
3250:							
Jawbone-----	50	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8%	1.00 1.00
Jawbone, moderately deep	40	Limitations Slopes > 15% Bedrock (hard) from 20 to 40"	1.00 0.15	Limitations Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00	Limitations Slopes > 8% Bedrock (hard) from 20 to 40"	1.00 0.15
4432:							
Koehn, occasionally flooded-----	70	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
Koehn, frequently flooded-----	15	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00	Limitations Flooding >= rare	1.00
5201:							
Wingap-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Pinyonpeak-----	30	Limitations Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
5210:							
Grandora-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Grandora, warm-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 8%	1.00
Pinyonpeak-----	30	Limitations Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
6001:							
Goldpeak-----	55	No limitations		No limitations		Limitations Slopes 4 to 8%	0.02

Table 12a.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Limitations	Value	Limitations	Value	Limitations	Value
6001:							
Pinyonpeak-----	15	Limitations Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 8% Bedrock (hard) < 20" depth	1.00 1.00 1.00
Wingap-----	15	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15%	0.16	Limitations Slopes > 8%	1.00
W:							
Water-----	100	Not rated		Not rated		Not rated	

The interpretation for dwellings without basements evaluates the following soil properties, some at variable depths in the soil: flooding, ponding, wetness, slope, subsidence of organic soils, shrink-swell potential expressed as linear extensibility percent (LEP), organic Unified classes for low soil strength (PT, OL, and OH), depth to hard or soft bedrock, depth to a thick or thin cemented pan, and fragments more than 3 inches in size.

The interpretation for dwellings with basements evaluates the following soil properties, some at variable depths in the soil: flooding, ponding, wetness, slope, subsidence of organic soils, shrink-swell potential expressed as linear extensibility percent (LEP), organic Unified classes for low soil strength (PT, OL, and OH), depth to hard or soft bedrock, depth to a thick or thin cemented pan, and fragments more than 3 inches in size.

The interpretation for small commercial buildings evaluates the following soil properties, some at variable depths in the soil: flooding, ponding, wetness, slope, subsidence of organic soils, shrink-swell potential expressed as linear extensibility percent (LEP), depth to hard or soft bedrock, depth to a thick or thin cemented pan, and fragments more than 3 inches in size.

Table 12b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	0.10
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	No limitations		Limitations Caving potential	0.10
138: Hesperia-----	85	No limitations		Limitations Caving potential	0.10
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
144: Calicreek-----	85	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
145: Delano-----	85	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	1.00
146: Delano-----	80	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	0.10
147: Chanac-----	80	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential	0.10
148: Delano-----	85	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	0.10
149: Delano-----	85	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	0.10
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	1.00
153: Chanac-----	85	Limitations Slopes 8 to 15% Shrink-swell (LEP 3-6)	0.63 0.50	Limitations Slopes 8 to 15% Caving potential	0.63 0.10
154: Dam-----	100	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
166: Delano-----	60	Limitations Shrink-swell (LEP 3-6) Rare flooding	0.50 0.50	Limitations Caving potential	0.10
Urban land-----	20	Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations AASHTO GI >8 (low soil strength) Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Slopes > 15% Caving potential	1.00 0.10
Calcic Haploxerepts-----	40	Limitations Slopes > 15% AASHTO GI >8 (low soil strength) Shrink-swell (LEP 3-6)	1.00 1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
176: Elkhills, eroded-----	75	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15%	1.00 1.00
177: Chanac-----	55	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Torriorthents, stratified-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Clay from 40 to 60%	1.00 1.00 0.03
178: Delano-----	40	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential	0.10
Cuyama-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Caving potential Slopes > 15%	1.00 1.00
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
179:					
Torriorthents, stratified, eroded	50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Caving potential Slopes > 15% Clay from 40 to 60%	1.00 1.00 0.03
Elkhills-----	30	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15%	1.00 1.00
184:					
Cuyama-----	85	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
185:					
Brecken-----	40	Limitations Slopes > 15% Fragments (>3") 25 to 50% Shrink-swell (LEP 3-6)	1.00 0.75 0.50	Limitations Slopes > 15% Fragments (>3") 25 to 50% Caving potential	1.00 0.75 0.10
Cuyama-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Pleito-----	20	Limitations Slopes > 15% AASHTO GI 5-8 (soil strength) Shrink-swell (LEP 3-6)	1.00 0.78 0.50	Limitations Slopes > 15% Caving potential	1.00 1.00
186:					
Cuyama-----	85	Limitations Slopes 8 to 15% Shrink-swell (LEP 3-6)	0.63 0.50	Limitations Caving potential Slopes 8 to 15%	1.00 0.63
187:					
Trigo-----	50	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Chanac-----	35	Limitations Slopes > 15% AASHTO GI >8 (low soil strength) Shrink-swell (LEP 3-6)	1.00 1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
188:					
Tweedy-----	50	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
Tollhouse-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 1.00 0.10
189:					
Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Walong-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.84
192:					
Chanac-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 0.10
Pleito-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Caving potential Slopes > 15%	1.00 1.00
193:					
Chanac-----	50	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential	0.10
Pleito-----	30	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential	1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
194:					
Pleito-----	40	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.04	Limitations Caving potential Slopes 8 to 15%	1.00 0.04
Delvar-----	40	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6) Slopes 8 to 15%	1.00 1.00 0.04	Limitations Clay from 40 to 60% Caving potential Slopes 8 to 15%	0.28 0.10 0.04
195:					
Centerville-----	60	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00 1.00	Limitations Caving potential Slopes > 15% Clay from 40 to 60%	1.00 1.00 0.28
Delvar-----	20	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00 1.00	Limitations Slopes > 15% Clay from 40 to 60% Caving potential	1.00 0.28 0.10
196:					
Exeter-----	75	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Pan (thin) from 20-40" Caving potential	0.84 0.10
197:					
Nord-----	85	Limitations Rare flooding	0.50	Limitations Caving potential	0.10
198:					
Centerville-----	65	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6)	1.00 1.00	Limitations Caving potential Clay from 40 to 60%	1.00 0.28
Delvar-----	20	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6)	1.00 1.00	Limitations Clay from 40 to 60% Caving potential	0.28 0.10
199:					
Exeter-----	80	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential Pan (thin) from 20-40"	0.10 0.01

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
200:					
Urban land-----	60	Not rated		Not rated	
Delano-----	25	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Caving potential	0.10
		Rare flooding	0.50		
201:					
Pleito-----	30	Limitations		Limitations	
		Slopes > 15%	1.00	Caving potential	1.00
		Shrink-swell (LEP 3-6)	0.50	Slopes > 15%	1.00
Chanac-----	30	Limitations		Limitations	
		AASHTO GI >8 (low soil strength)	1.00	Slopes > 15%	1.00
		Slopes > 15%	1.00	Caving potential	0.10
		Shrink-swell (LEP 3-6)	0.50		
Raggulch-----	30	Limitations		Limitations	
		Bedrock (hard) < 20" depth	1.00	Bedrock (hard) < 40" depth	1.00
		Bedrock (soft) < 20" depth	1.00	Bedrock (soft) < 20" depth	1.00
		Slopes > 15%	1.00	Slopes > 15%	1.00
205:					
Pleito-----	40	Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00
		Shrink-swell (LEP 3-6)	0.50	Caving potential	1.00
Trigo-----	25	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 20" depth	1.00
		Bedrock (soft) < 20" depth	1.00	Slopes > 15%	1.00
				Caving potential	0.10
Chanac-----	20	Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00
		AASHTO GI 5-8 (soil strength)	0.78	Caving potential	0.10
		Shrink-swell (LEP 3-6)	0.50		
207:					
Whitewolf-----	85	Limitations		Limitations	
		Rare flooding	0.50	Caving potential	1.00
209:					
Whitewolf-----	85	Limitations		Limitations	
		Flooding >= occasional	1.00	Caving potential	1.00
				Frequent or occasional flooding	0.50

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
210: Kernfork-----	85	Limitations Flooding >= occasional Saturation from 12 to 30" depth	1.00 0.19	Limitations Saturation < 2.5' depth Caving potential Frequent or occasional flooding	1.00 1.00 0.50
212: Kernfork-----	80	Limitations Ponding (any duration) Flooding >= occasional	1.00 1.00	Limitations Ponding (any duration) Caving potential Frequent or occasional flooding	1.00 1.00 0.50
213: Calicreek-----	85	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
215: Kelval-----	85	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
216: Inyo-----	60	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Riverwash-----	25	Not rated		Not rated	
217: Whitewolf-----	55	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Riverwash-----	25	Not rated		Not rated	
220: Aquents-----	40	Limitations Ponding (any duration) Saturation < 12" depth Flooding >= occasional	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 2.5' depth Caving potential	1.00 1.00 1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
220: Aquolls-----	35	Limitations Ponding (any duration) Saturation < 12" depth Flooding >= occasional	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 2.5' depth Caving potential	1.00 1.00 1.00
Riverwash-----	15	Not rated		Not rated	
222: Kelval-----	85	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
223: Kelval-----	70	Limitations Flooding >= occasional	1.00	Limitations Frequent or occasional flooding Caving potential	0.50 0.10
224: Inyo-----	85	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
238: Cinco-----	85	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
240: Dune land-----	85	Not rated		Not rated	
241: Inyo-----	75	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
242: Inyo-----	80	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
243: Kernfork, saline-sodic, occasionally flooded-----	85	Limitations Ponding (any duration) Saturation < 12" depth Flooding >= occasional	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 2.5' depth Caving potential	1.00 1.00 1.00
245: Chollawell-----	80	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
246: Chollawell-----	80	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
247: Inyo-----	45	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
Tips-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
249: Hoffman-----	65	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.15
Rock outcrop-----	20	Not rated		Not rated	
250: Hoffman-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.15

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
250:					
Tips-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Pilotwell-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.01
253:					
Sorrell-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.95 0.10
Martee-----	25	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
254:					
Martee-----	60	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	
255:					
Kernfork, occasionally flooded----	45	Limitations Ponding (any duration) Flooding >= occasional	1.00 1.00	Limitations Ponding (any duration) Caving potential Saturation from 2.5' to 6' depth	1.00 1.00 0.82
Kernfork, frequently flooded-----	40	Limitations Ponding (any duration) Saturation < 12" depth Flooding >= occasional	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 2.5' depth Caving potential	1.00 1.00 1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
257:					
Hoffman-----	50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.15
Tips-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
259:					
Cowspring-----	80	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.71
260:					
Cowspring-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.71
Tips-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
261:					
Blasingame-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) < 20" depth Caving potential	1.00 0.99 0.10
Arujo-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
261: Cieneba-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
264: Arujo-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Walong-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.84
Tunis-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
265: Arujo-----	80	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Slopes 8 to 15% Caving potential	0.16 0.10
266: Tunis-----	50	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	30	Not rated		Not rated	
267: Cieneba-----	40	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.71 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
267: Rock outcrop-----	15	Not rated		Not rated	
268: Tunis-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
			1.00		1.00
			1.00		0.10
Tollhouse-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
			1.00		1.00
			1.00		0.10
Sorrell-----	20	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	
			1.00		1.00
					0.10
					0.06
269: Tollhouse-----	45	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
			1.00		1.00
			1.00		1.00
					0.10
Sorrell-----	25	Limitations Slopes > 15%		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
			1.00		1.00
					0.71
					0.10
Rock outcrop-----	15	Not rated		Not rated	
270: Locobill-----	35	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	
			1.00		1.00
					1.00
					0.10
Backcanyon-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth Bedrock (hard) from 20 to 40"		Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	
			1.00		1.00
			1.00		1.00
			0.95		1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
270: Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.20 0.10
271: Walong-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.46 0.10
Tunis-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
272: Tollhouse-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Edmundston-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Sorrell-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
274: Sesame-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.90 0.10
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.90 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
274: Rock outcrop-----	15	Not rated		Not rated	
275: Strahle-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	
Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
Tweedy-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
276: Tips-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
Hoffman-----	30	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	
Cinco-----	15	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential	
277: Feethill-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
Vista-----	25	Limitations Slopes > 15%		Limitations Slopes > 15% Bedrock (soft) < 20" depth Caving potential	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
277: Walong-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.64 0.10
279: Strahle-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
Sesame-----	15	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.15 0.10
280: Tollhouse-----	40	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Martee-----	20	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Edmundston-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
281: Havala-----	55	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.04	Limitations Caving potential Slopes 8 to 15%	1.00 0.04
Walong-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.54

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
281: Kernfork-----	15	Limitations Flooding >= occasional Saturation from 12 to 30" depth	1.00 0.19	Limitations Saturation < 2.5' depth Caving potential Frequent or occasional flooding	1.00 1.00 0.50
282: Tollhouse-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Sesame-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.79 0.10
Friant-----	20	Limitations Bedrock (hard) < 20" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
283: Tollhouse-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Martee-----	30	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
284: Tollhouse-----	70	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
285:					
Inyo-----	50	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Kelval-----	40	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
286:					
Tollhouse-----	40	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Tweedy-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.20 0.10
Locobill-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.10
287:					
Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
Strahle-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
288:					
Sorrell-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.95 0.10
Arujo-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
288: Rock outcrop-----	15	Not rated		Not rated	
289: Erskine-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
Hyte-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
Rock outcrop-----	20	Not rated		Not rated	
294: Edmundston-----	45	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential	
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
Walong-----	20	Limitations Slopes > 15%		Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	
295: Tweedy-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	
Tunis-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth		Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	
Rankor-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)		Limitations Slopes > 15% Caving potential	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
296:					
Arujo-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Walong-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.01
Tunis-----	15	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
297:					
Walong-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.29
Blasingame-----	25	Limitations Slopes > 15% Shrink-swell (LEP >6)	1.00 0.99	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.20 0.10
Rock outcrop-----	15	Not rated		Not rated	
298:					
Arujo-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Feethill-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
Sesame-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.64 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
299:					
Arujo-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Feethill-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
Sesame-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.64 0.10
300:					
Stineway-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Kiscove-----	30	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
301:					
Feethill-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.97 0.10
Vista-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.90 0.10
Rock outcrop-----	15	Not rated		Not rated	
302:					
Feethill-----	30	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.79 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
302: Cibo-----	25	Limitations AASHTO GI >8 (low soil strength) Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 1.00
Cieneba-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
303: Steuber-----	80	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
304: Cibo-----	80	Limitations AASHTO GI >8 (low soil strength) Slopes > 15% Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 1.00
305: Chanac-----	45	Limitations Slopes > 15% AASHTO GI >8 (low soil strength) Shrink-swell (LEP 3-6)	1.00 1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Pleito-----	20	Limitations Slopes > 15% AASHTO GI 5-8 (soil strength) Shrink-swell (LEP 3-6)	1.00 0.78 0.50	Limitations Slopes > 15% Caving potential	1.00 1.00
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 0.10
306: Xerofluvents, occasionally flooded	60	Limitations Flooding >= occasional	1.00	Limitations Caving potential Saturation from 2.5' to 6' depth Frequent or occasional flooding	1.00 0.61 0.50
Riverwash-----	25	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
307:					
Typic Xeropsamments-----	80	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
308:					
Rankor-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
309:					
Rankor-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Edmundston-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Tweedy-----	20	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
310:					
Stineway-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Kiscove-----	30	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
311:					
Xerorthents-----	50	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP 3-6)	1.00 1.00 0.22	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	30	Not rated		Not rated	
312:					
Havala-----	85	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Caving potential	1.00
313:					
Dumps-----	80	Not rated		Not rated	
314:					
Premier-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 0.10
Haplodurids-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Pan (thin) from 20-40" Caving potential	1.00 0.84 0.10
315:					
Premier-----	45	No limitations		Limitations Caving potential	0.10
Haplodurids-----	40	No limitations		Limitations Pan (thin) from 20-40" Caving potential	0.84 0.10
316:					
Premier-----	85	No limitations		Limitations Caving potential	0.10
317:					
Premier-----	85	No limitations		Limitations Caving potential	0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
320: Southlake-----	80	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.04	Limitations Caving potential Slopes 8 to 15%	1.00 0.04
325: Walong-----	75	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.71
326: Walong-----	80	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.71
330: Kernville-----	35	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Faycreek-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony-----	55	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential Fragments (>3") 25 to 50%	0.16 0.10 0.01
Goodale-----	20	Limitations Flooding >= occasional Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Caving potential Fragments (>3") >50% Frequent or occasional flooding	1.00 1.00 0.50

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
352:					
Goodale-----	65	Limitations Flooding >= occasional Fragments (>3") 25 to 50%	1.00 0.97	Limitations Caving potential Fragments (>3") 25 to 50% Frequent or occasional flooding	1.00 0.97 0.50
Riverwash-----	20	Not rated		Not rated	
360:					
Kernville, bouldery-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Hogeye-----	30	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00 0.99
Southlake-----	15	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential Fragments (>3") 25 to 50%	0.16 0.10 0.01
380:					
Delvar-----	40	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6) Slopes > 15%	1.00 1.00 1.00	Limitations Slopes > 15% Clay from 40 to 60% Caving potential	1.00 0.28 0.10
Pleito-----	40	Limitations Slopes > 15% AASHTO GI 5-8 (soil strength) Shrink-swell (LEP 3-6)	1.00 0.78 0.50	Limitations Caving potential Slopes > 15%	1.00 1.00
407:					
Centerville-----	90	Limitations Shrink-swell (LEP >6) AASHTO GI >8 (low soil strength)	1.00 1.00	Limitations Caving potential Clay from 40 to 60%	1.00 0.28
410:					
Stineway-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
410:					
Kiscove-----	25	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
411:					
Delvar-----	85	Limitations AASHTO GI >8 (low soil strength) Shrink-swell (LEP >6)	1.00 1.00	Limitations Clay from 40 to 60% Caving potential	0.28 0.10
412:					
Chollawell-----	70	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
Urban land-----	15	Not rated		Not rated	
417:					
Southlake-----	40	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential Fragments (>3") 25 to 50%	0.16 0.10 0.01
Southlake, gravelly-----	20	Limitations Flooding >= occasional Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Caving potential Frequent or occasional flooding Slopes 8 to 15%	1.00 0.50 0.16
Goodale-----	15	Limitations Flooding >= occasional Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Caving potential Fragments (>3") >50% Frequent or occasional flooding	1.00 0.99 0.50
Urban land-----	15	Not rated		Not rated	
420:					
Southlake-----	65	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.04	Limitations Caving potential Slopes 8 to 15%	1.00 0.04
Urban land-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
422:					
Kelval-----	70	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Urban land-----	15	Not rated		Not rated	
423:					
Auberry-----	45	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential	1.00 0.10
Crouch-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
424:					
Inyo-----	70	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Urban land-----	15	Not rated		Not rated	
430:					
Friant-----	70	Limitations Bedrock (hard) < 20" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
432:					
Alberti, gravelly-----	70	Limitations Bedrock (soft) < 20" depth Shrink-swell (LEP >6) AASHTO GI >8 (low soil strength)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
441:					
Inyo-----	65	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
Urban land-----	15	Not rated		Not rated	
442:					
Inyo-----	70	Limitations Slopes 8 to 15% Rare flooding	0.63 0.50	Limitations Caving potential Slopes 8 to 15%	1.00 0.63
Urban land-----	15	Not rated		Not rated	
445:					
Chollawell-----	70	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
Urban land-----	15	Not rated		Not rated	
450:					
Southlake, stony-----	45	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential Fragments (>3") 25 to 50%	0.16 0.10 0.01
Goodale-----	15	Limitations Flooding >= occasional Fragments (>3") >50% Slopes 8 to 15%	1.00 1.00 0.16	Limitations Caving potential Fragments (>3") >50% Frequent or occasional flooding	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated	
460:					
Kernville, bouldery-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15% Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Hogeye-----	25	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00 0.99

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
460:					
Southlake-----	15	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential Fragments (>3") 25 to 50%	0.16 0.10 0.01
Urban land-----	15	Not rated		Not rated	
465:					
Arujo-----	65	Limitations Shrink-swell (LEP 3-6) Slopes 8 to 15%	0.50 0.16	Limitations Slopes 8 to 15% Caving potential	0.16 0.10
Urban land-----	15	Not rated		Not rated	
485:					
Inyo-----	45	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Kelval-----	30	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Urban land-----	15	Not rated		Not rated	
488:					
Tweedy-----	35	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.01
Tollhouse-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Locobill-----	15	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 1.00 0.10
Urban land-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
501:					
Hyte-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Erskine-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Sorrell-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.06
503:					
Tips-----	40	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Erskine-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
505:					
Chollawell-----	85	Limitations Slopes 8 to 15% Rare flooding	0.84 0.50	Limitations Caving potential Slopes 8 to 15%	1.00 0.84
507:					
Xyno-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Canebrake-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
507: Pilotwell-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.01
508: Pilotwell-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.86
Xyno-----	25	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
509: Xyno-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Faycreek-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
510: Xyno-----	35	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Canebrake-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
510: Pilotwell, bouldery-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.84
512: Chollawell, cobbly substratum----	60	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
Chollawell, gravelly-----	15	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
514: Chollawell-----	50	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
Inyo-----	35	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
515: Scodie-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Canebrake-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Xyno-----	20	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
516: Xyno-----	45	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
516: Rock outcrop-----	20	Not rated		Not rated	
Canebrake-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth Fragments (>3") 25 to 50%	1.00 1.00 0.01	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
517: Southlake-----	55	Limitations Shrink-swell (LEP 3-6) Rare flooding Slopes 8 to 15%	0.50 0.50 0.16	Limitations Slopes 8 to 15% Caving potential	0.16 0.10
Southlake, gravelly-----	20	Limitations Flooding >= occasional Shrink-swell (LEP 3-6) Slopes 8 to 15%	1.00 0.50 0.16	Limitations Caving potential Frequent or occasional flooding Slopes 8 to 15%	1.00 0.50 0.16
Goodale-----	15	Limitations Flooding >= occasional Fragments (>3") >50% Slopes 8 to 15%	1.00 0.99 0.16	Limitations Caving potential Fragments (>3") >50% Frequent or occasional flooding	1.00 0.99 0.50
518: Backcanyon-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
520: Kernville-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (hard) < 40" depth	1.00 1.00 0.99
Rock outcrop-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
523:					
Kernville, bouldery-----	45	Limitations Slopes > 15% Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
525:					
Hungrygulch-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.79
Kernville-----	30	Limitations Slopes > 15% Bedrock (soft) < 20" depth Bedrock (hard) < 20" depth	1.00 1.00 0.99	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (hard) < 40" depth	1.00 1.00 0.99
530:					
Alberti, cobbly-----	45	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Alberti, gravelly-----	40	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
531:					
Tweedy-----	40	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 0.10 0.05

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
531: Erskine-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Alberti, gravelly-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth Shrink-swell (LEP >6)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
532: Alberti, gravelly-----	80	Limitations Bedrock (soft) < 20" depth Shrink-swell (LEP >6) AASHTO GI >8 (low soil strength)	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
540: Canebrake-----	60	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Lachim-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.79
541: Canebrake-----	45	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Lachim-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.79
Rock outcrop-----	15	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
543:					
Wortley-----	45	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Indiano-----	25	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.64
Rock outcrop-----	15	Not rated		Not rated	
544:					
Xeric Haplargids-----	60	Limitations Slopes > 15% Rare flooding	1.00 0.50	Limitations Caving potential Slopes > 15% Bedrock (hard) < 40" depth	1.00 1.00 0.99
Lithic Xeric Haplargids-----	20	Limitations Bedrock (hard) < 20" depth Slopes > 15% Rare flooding	1.00 1.00 0.50	Limitations Bedrock (hard) < 40" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.12
545:					
Sacatar-----	50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.15 0.10
Canebrake-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
549:					
Tunawee-----	60	Limitations Slopes > 15% Bedrock (soft) < 20" depth Frost action possible	1.00 1.00 0.50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	25	Not rated		Not rated	

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
550: Kenypeak-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	
551: Tunawee-----	70	Limitations Slopes > 15% Bedrock (soft) < 20" depth Frost action possible	1.00 1.00 0.50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
552: Kenypeak-----	60	Limitations Bedrock (hard) < 20" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.05	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Torriorthentic Haploxerolls-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.15
553: Tibbcreek-----	75	Limitations Bedrock (soft) < 20" depth Slopes > 15% Shrink-swell (LEP 3-6)	1.00 1.00 0.50	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
554: Deerspring-----	85	Limitations Flooding >= occasional	1.00	Limitations Saturation from 2.5' to 6' depth Frequent or occasional flooding Caving potential	0.61 0.50 0.10
555: Cumulic Endoaquolls, frigid-----	75	Limitations Saturation < 12" depth Frost action very likely Flooding >= occasional	1.00 1.00 1.00	Limitations Saturation < 2.5' depth Frequent or occasional flooding Caving potential	1.00 0.50 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
556: Toll-----	80	Limitations Rare flooding	0.50	Limitations Caving potential	1.00
557: Scodie-----	35	Limitations Slopes > 15% Bedrock (soft) < 20" depth Frost action possible	1.00 1.00 0.50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Canebrake-----	25	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Deadfoot-----	20	Limitations Slopes > 15% Fragments (>3") 25 to 50%	1.00 0.46	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.54
558: Indiano-----	60	Limitations Slopes > 15% Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.64
Wortley-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
560: Sacatar-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.15 0.10
Wortley-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Calpine-----	20	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15% Caving potential	0.16 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
561:					
Scodie-----	30	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Sacatar-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Bedrock (soft) from 20 to 40" Caving potential	1.00 0.15 0.10
Canebrake-----	20	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
562:					
Deerspring, partially drained----	85	Limitations Flooding >= occasional	1.00	Limitations Frequent or occasional flooding Caving potential Saturation from 2.5' to 6' depth	0.50 0.10 0.03
570:					
Deadfoot-----	40	Limitations Slopes > 15% Fragments (>3") 25 to 50%	1.00 0.46	Limitations Slopes > 15% Caving potential Bedrock (soft) from 20 to 40"	1.00 1.00 0.95
Scodie-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth Frost action possible	1.00 1.00 0.50	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	20	Not rated		Not rated	
590:					
Xyno-----	35	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
590:					
Canebrake-----	25	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Pilotwell-----	20	Limitations Slopes > 15%	1.00	Limitations Caving potential Slopes > 15% Bedrock (soft) from 20 to 40"	1.00 1.00 0.79
591:					
Xyno-----	50	Limitations Bedrock (hard) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Canebrake-----	20	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Rock outcrop-----	15	Not rated		Not rated	
599:					
Rock outcrop-----	80	Not rated		Not rated	
610:					
Hyte-----	40	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Erskine-----	35	Limitations Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
650:					
Stineway-----	40	Limitations Bedrock (hard) < 20" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.49	Limitations Bedrock (hard) < 40" depth Slopes > 15% Fragments (>3") 25 to 50%	1.00 1.00 0.49

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
650:					
Kiscove-----	30	Limitations Bedrock (hard) < 20" depth Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
3250:					
Jawbone-----	50	Limitations Slopes > 15% Bedrock (soft) < 20" depth	1.00 1.00	Limitations Bedrock (soft) < 20" depth Slopes > 15% Caving potential	1.00 1.00 0.10
Jawbone, moderately deep-----	40	Limitations Slopes > 15% Bedrock (hard) from 20 to 40"	1.00 0.15	Limitations Bedrock (hard) < 40" depth Slopes > 15% Caving potential	1.00 1.00 1.00
4432:					
Koehn, occasionally flooded-----	70	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
Koehn, frequently flooded-----	15	Limitations Flooding >= occasional	1.00	Limitations Caving potential Frequent or occasional flooding	1.00 0.50
5201:					
Wingap-----	55	Limitations Slopes > 15% Frost action possible	1.00 0.50	Limitations Caving potential Slopes > 15%	1.00 1.00
Pinyonpeak-----	30	Limitations Bedrock (hard) < 20" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
5210:					
Grandora-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00

Table 12b.--Building Site Development--Continued

Map symbol and component name	Pct. of map unit	Local roads and streets		Shallow excavations	
		Limitations	Value	Limitations	Value
5210:					
Grandora, warm-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Caving potential	1.00 1.00
Pinyonpeak-----	30	Limitations Bedrock (hard) < 20" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
6001:					
Goldpeak-----	55	Limitations Frost action possible	0.50	Limitations Caving potential	1.00
Pinyonpeak-----	15	Limitations Bedrock (hard) < 20" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 20" depth Slopes > 15%	1.00 1.00 1.00
Wingap-----	15	Limitations Frost action possible Slopes 8 to 15%	0.50 0.16	Limitations Caving potential Slopes 8 to 15%	1.00 0.16
W:					
Water-----	100	Not rated		Not rated	

The interpretation for local roads and streets evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, organic Unified classes for low soil strength (PT, OL, and OH), amount of clay, depth to hard or soft bedrock, depth to a thick or thin cemented pan, fragments more than 3 inches in size, bulk density, and the caving potential of the soil.

The interpretation for shallow excavations evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, subsidence of organic soils, shrink-swell potential expressed as linear extensibility percent (LEP), potential for frost action, depth to hard or soft bedrock, depth to a thick or thin cemented pan, fragments more than 3 inches in size, and soil strength expressed as the AASHTO group index number (AASHTO GI).

Table 13a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.50
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding Slopes 2 to 8%	1.00 0.50 0.17
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	Limitations Seepage in bottom layer	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 0.67
138: Hesperia-----	85	Limitations Seepage in bottom layer	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	Limitations Seepage in bottom layer Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
144: Calicreek-----	85	Limitations Flooding Seepage in bottom layer	1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
145: Delano-----	85	Limitations Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
146: Delano-----	80	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
147: Chanac-----	80	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Slopes 2 to 8% Permeability .6-2"/hr (some seepage)	0.67 0.50
148: Delano-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
149: Delano-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8% Rare flooding	1.00 0.83 0.50
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability .6-2"/hr (some seepage) Rare flooding Slopes 2 to 8%	0.53 0.50 0.33

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
153: Chanac-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes 8 to 15%	1.00 0.63	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.50
154: Dam-----	100	Not rated		Not rated	
166: Delano-----	60	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
Urban land-----	20	Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.50
Calcalc Haploxerepts-----	40	Limitations Slopes > 15% Permeability .6 - 2"/hr (slow perc)	1.00 0.50	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.50
176: Elkhills, eroded-----	75	Limitations Seepage in bottom layer Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
177: Chanac-----	55	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00
Torriorthents, stratified-----	25	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
178:					
Delano-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Slopes 2 to 8% Permeability .6-2"/hr (some seepage)	0.83 0.53
Cuyama-----	25	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
Premier-----	15	Limitations Slopes > 15% Seepage in bottom layer	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00
179:					
Torriorhents, stratified, eroded	50	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8%	1.00
Elkhills-----	30	Limitations Seepage in bottom layer Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
184:					
Cuyama-----	85	Limitations Permeability .6 - 2"/hr (slow perc) Rare flooding	0.46 0.40	Limitations Permeability .6-2"/hr (some seepage) Rare flooding Slopes 2 to 8%	0.53 0.50 0.33
185:					
Brecken-----	40	Limitations Slopes > 15% Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Fragments (>3") 20-35%	1.00 1.00 0.94
Cuyama-----	20	Limitations Slopes > 15% Permeability .6 - 2"/hr (slow perc)	1.00 0.46	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
185: Pleito-----	20	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8%	1.00
186: Cuyama-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes 8 to 15%	1.00 0.63	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
187: Trigo-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Chanac-----	35	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00
188: Tweedy-----	50	Limitations Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tollhouse-----	20	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Locobill-----	15	Limitations Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
189:					
Tweedy-----	40	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.99	Limitations Slopes > 8% Bedrock (soft) < 40" depth	1.00 0.99
Walong-----	35	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
192:					
Chanac-----	55	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
Pleito-----	30	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
193:					
Chanac-----	50	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Slopes 2 to 8%	0.25
Pleito-----	30	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Permeability .6-2"/hr (some seepage) Slopes 2 to 8%	0.53 0.25
194:					
Pleito-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes 8 to 15%	1.00 0.04	Limitations Slopes > 8%	1.00
Delvar-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes 8 to 15%	1.00 0.04	Limitations Slopes > 8%	1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
195: Centerville-----	60	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8%	1.00
Delvar-----	20	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.28
196: Exeter-----	75	Limitations Depth to pan < 40" Seepage in bottom layer Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Depth to pan < 40" Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.67
197: Nord-----	85	Limitations Permeability .6 - 2"/hr (slow perc) Rare flooding	0.46 0.40	Limitations Permeability .6-2"/hr (some seepage) Rare flooding	0.53 0.50
198: Centerville-----	65	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Slopes 2 to 8%	0.67
Delvar-----	20	Limitations Permeability < .6"/hr in 24-60" (slow perc)	1.00	Limitations Slopes 2 to 8% Permeability .6-2"/hr (some seepage)	0.67 0.28
199: Exeter-----	80	Limitations Depth to pan < 40" Permeability .6 - 2"/hr (slow perc)	1.00 0.72	Limitations Depth to pan < 40" Permeability .6-2"/hr (some seepage)	1.00 0.53

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
200: Urban land-----	60	Not rated		Not rated	
Delano-----	25	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	1.00 0.50
201: Pleito-----	30	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8%	1.00
Chanac-----	30	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
Raggulch-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
205: Pleito-----	40	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00
Trigo-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Chanac-----	20	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
207: Whitewolf-----	85	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer Rare flooding	 1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding	 1.00 0.50
209: Whitewolf-----	85	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	 1.00 1.00
210: Kernfork-----	85	Limitations Flooding Saturation < 4' depth Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Saturation from 3.5 to 5' depth	 1.00 1.00 0.48
212: Kernfork-----	80	Limitations Flooding Ponding (any duration) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= occasional Permeability > 2"/hr (seepage)	 1.00 1.00 1.00
213: Calicreek-----	85	Limitations Flooding Seepage in bottom layer	 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	 1.00 1.00
215: Kelval-----	85	Limitations Flooding Seepage in bottom layer	 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	 1.00 1.00
216: Inyo-----	60	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	 1.00 1.00 0.17
Riverwash-----	25	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
217: Whitewolf-----	55	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.17
Riverwash-----	25	Not rated		Not rated	
220: Aquents-----	40	Limitations Flooding Ponding (any duration) Saturation < 4' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Aquolls-----	35	Limitations Flooding Ponding (any duration) Saturation < 4' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Riverwash-----	15	Not rated		Not rated	
222: Kelval-----	85	Limitations Flooding Seepage in bottom layer	1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00
223: Kelval-----	70	Limitations Flooding Seepage in bottom layer	1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00
224: Inyo-----	85	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.50

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
238: Cinco-----	85	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
240: Dune land-----	85	Not rated		Not rated	
241: Inyo-----	75	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer Rare flooding	1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding Slopes 2 to 8%	1.00 0.50 0.17
242: Inyo-----	80	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer Rare flooding	1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
243: Kernfork, saline-sodic, occasionally flooded-----	85	Limitations Flooding Ponding (any duration) Saturation < 4' depth	1.00 1.00 1.00	Limitations Ponding (any duration) Flooding >= occasional Saturation at < 3.5' depth	1.00 1.00 1.00
245: Chollawell-----	80	Limitations Seepage in bottom layer Rare flooding	1.00 0.40	Limitations Permeability > 2"/hr (seepage) Rare flooding Slopes 2 to 8%	1.00 0.50 0.33
246: Chollawell-----	80	Limitations Seepage in bottom layer Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
247:					
Inyo-----	45	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer Rare flooding	1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
Tips-----	25	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
249:					
Hoffman-----	65	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
250:					
Hoffman-----	40	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tips-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Pilotwell-----	15	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
253:					
Sorrell-----	40	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00
Martee-----	25	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00
Rock outcrop-----	20	Not rated		Not rated	
254:					
Martee-----	60	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00
Rock outcrop-----	25	Not rated		Not rated	
255:					
Kernfork, occasionally flooded----	45	Limitations		Limitations	
		Flooding	1.00	Ponding (any duration)	1.00
		Ponding (any duration)	1.00	Flooding >= occasional	1.00
		Saturation < 4' depth	1.00	Saturation at < 3.5' depth	0.99
Kernfork, frequently flooded-----	40	Limitations		Limitations	
		Flooding	1.00	Ponding (any duration)	1.00
		Ponding (any duration)	1.00	Flooding >= occasional	1.00
		Saturation < 4' depth	1.00	Saturation at < 3.5' depth	1.00
257:					
Hoffman-----	50	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
257: Tips-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
259: Cowspring-----	80	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
260: Cowspring-----	45	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tips-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
261: Blasingame-----	30	Limitations Slopes > 15% Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Arujo-----	25	Limitations Slopes > 15% Permeability .6 - 2"/hr (slow perc) Depth to bedrock 40 - 72"	1.00 0.46 0.36	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.01

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
261: Cieneba-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
264: Arujo-----	35	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock 40 - 72"	1.00 1.00 0.36	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.01
Walong-----	25	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tunis-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
265: Arujo-----	80	Limitations Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72" Slopes 8 to 15%	1.00 0.36 0.16	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.01
266: Tunis-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
267:					
Cieneba-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Vista-----	25	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
268:					
Tunis-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tollhouse-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Sorrell-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
269:					
Tollhouse-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Sorrell-----	25	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
269: Rock outcrop-----	15	Not rated		Not rated	
270: Locobill-----	35	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Backcanyon-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
271: Walong-----	35	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tunis-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
272: Tollhouse-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
272:					
Edmundston-----	30	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock 40 - 72"	1.00 1.00 0.41	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.02
Sorrell-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
274:					
Sesame-----	40	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tweedy-----	20	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
275:					
Strahle-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Sesame-----	15	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Tweedy-----	15	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
276:					
Tips-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Hoffman-----	30	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Cinco-----	15	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
277:					
Feethill-----	30	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Vista-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Walong-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
279:					
Strahle-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
279:					
Sesame-----	15	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00
280:					
Tollhouse-----	40	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00		
Martee-----	20	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00
Edmundston-----	15	Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Depth to bedrock 40 - 72"	0.96	Bedrock (soft) from 40 to 60"	0.88
281:					
Havala-----	55	Limitations		Limitations	
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Slopes > 8%	1.00
		Slopes 8 to 15%	0.04		
Walong-----	15	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00
Kernfork-----	15	Limitations		Limitations	
		Flooding	1.00	Flooding >= occasional	1.00
		Saturation < 4' depth	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Saturation from 3.5 to 5' depth	0.48

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
282:					
Tollhouse-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Sesame-----	25	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Friant-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
283:					
Tollhouse-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Martee-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
284:					
Tollhouse-----	70	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
285:					
Inyo-----	50	Limitations		Limitations	
		Flooding	1.00	Flooding >= occasional	1.00
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Slopes 2 to 8%	0.08
Kelval-----	40	Limitations		Limitations	
		Flooding	1.00	Flooding >= occasional	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
286:					
Tollhouse-----	40	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00		
Tweedy-----	25	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00		
Locobill-----	20	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00
287:					
Tweedy-----	40	Limitations		Limitations	
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Permeability > 2"/hr (seepage)	1.00
Strahle-----	40	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
288:					
Sorrell-----	45	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Arujo-----	25	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock 40 - 72"	1.00 1.00 0.86	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.61
Rock outcrop-----	15	Not rated		Not rated	
289:					
Erskine-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Hyte-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
294:					
Edmundston-----	45	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock 40 - 72"	1.00 1.00 0.78	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.42
Tweedy-----	20	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Walong-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
295:					
Tweedy-----	30	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Tunis-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rankor-----	20	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.36	Limitations Slopes > 8% Bedrock (soft) from 40 to 60"	1.00 0.01
296:					
Arujo-----	40	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.69	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.26
Walong-----	30	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Tunis-----	15	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
297:					
Walong-----	30	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
297:					
Blasingame-----	25	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Rock outcrop-----	15	Not rated		Not rated	
298:					
Arujo-----	35	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.47	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage) Bedrock (soft) from 40 to 60"	1.00 0.53 0.05
Feethill-----	25	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Sesame-----	20	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
299:					
Arujo-----	40	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.47	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage) Bedrock (soft) from 40 to 60"	1.00 0.53 0.05
Feethill-----	25	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
299: Sesame-----	20	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
300: Stineway-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Kiscove-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
301: Feethill-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Vista-----	25	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
302: Feethill-----	30	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

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Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
302:					
Cibo-----	25	Limitations Slopes > 15% Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
Cieneba-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
303:					
Steuber-----	80	Limitations Flooding Seepage in bottom layer	1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.08
304:					
Cibo-----	80	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
305:					
Chanac-----	45	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00	Limitations Slopes > 8%	1.00
Pleito-----	20	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
Premier-----	15	Limitations Slopes > 15% Seepage in bottom layer	1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
306: Xerofluents, occasionally flooded	60	Limitations Flooding Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.17
Riverwash-----	25	Not rated		Not rated	
307: Typic Xeropsamments-----	80	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	1.00 1.00
308: Rankor-----	35	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock 40 - 72"	1.00 1.00 0.91	Limitations Slopes > 8% Bedrock (soft) from 40 to 60"	1.00 0.77
Edmundston-----	25	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock 40 - 72"	1.00 1.00 0.86	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.61
Tweedy-----	20	Limitations Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
309: Rankor-----	35	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72"	1.00 1.00 0.91	Limitations Slopes > 8% Bedrock (soft) from 40 to 60"	1.00 0.77

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
309:					
Edmundston-----	25	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock 40 - 72"	1.00 1.00 0.86	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.61
Tweedy-----	20	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
310:					
Stineway-----	50	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Kiscove-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
311:					
Xerorthents-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
312:					
Havala-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Seepage in bottom layer	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 0.33
313:					
Dumps-----	80	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
314: Premier-----	45	Limitations Slopes > 15% Seepage in bottom layer	1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
Haplodurids-----	35	Limitations Depth to pan < 40" Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Depth to pan < 40" Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
315: Premier-----	45	Limitations Seepage in bottom layer	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 0.67
Haplodurids-----	40	Limitations Depth to pan < 40" Seepage in bottom layer Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Depth to pan < 40" Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.67
316: Premier-----	85	Limitations Seepage in bottom layer	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 0.83
317: Premier-----	85	Limitations Seepage in bottom layer	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 0.25
320: Southlake-----	80	Limitations Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
325: Walong-----	75	Limitations Slopes > 15% Depth to bedrock < 40" Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
326: Walong-----	80	Limitations Slopes > 15% Depth to bedrock < 40" Seepage in bottom layer	 1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	 1.00 1.00 1.00
330: Kernville-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	 1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	 1.00 1.00 1.00
Faycreek-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	 1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony-----	55	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	 1.00 0.40 0.16	Limitations Slopes > 8% Rare flooding Fragments (>3") 20-35%	 1.00 0.50 0.12
Goodale-----	20	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes > 8%	 1.00 1.00 1.00
352: Goodale-----	65	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Fragments (>3") > 35%	 1.00 1.00 1.00
Riverwash-----	20	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
360: Kernville, bouldery-----	40	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Hogeye-----	30	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Southlake-----	15	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Slopes > 8% Rare flooding Fragments (>3") 20-35%	1.00 0.50 0.12
380: Delvar-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.28
Pleito-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15%	1.00 1.00	Limitations Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 0.53
407: Centerville-----	90	Limitations Permeability < .6"/hr in 24-60" (slow perc) Very rare flooding	1.00 0.20	Limitations Slopes 2 to 8%	0.33
410: Stineway-----	40	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53

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Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
410: Kiscove-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
411: Delvar-----	85	Limitations Permeability < .6"/hr in 24-60" (slow perc) Very rare flooding	1.00 0.20	Limitations Slopes 2 to 8% Permeability .6-2"/hr (some seepage)	0.67 0.28
412: Chollawell-----	70	Limitations Seepage in bottom layer Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated	
417: Southlake-----	40	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
Southlake, gravelly-----	20	Limitations Flooding Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Goodale-----	15	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
420: Southlake-----	65	Limitations Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc) Rare flooding	 1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	 1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated	
422: Kelval-----	70	Limitations Flooding Seepage in bottom layer	 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage)	 1.00 1.00
Urban land-----	15	Not rated		Not rated	
423: Auberry-----	45	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	 1.00 1.00 0.05
Crouch-----	15	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Seepage in bottom layer	 1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
424: Inyo-----	70	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	 1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	 1.00 1.00 0.83
Urban land-----	15	Not rated		Not rated	

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Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
430:					
Friant-----	70	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00
Rock outcrop-----	15	Not rated		Not rated	
432:					
Alberti, gravelly-----	70	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
Urban land-----	15	Not rated		Not rated	
441:					
Inyo-----	65	Limitations		Limitations	
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Rare flooding	0.50
		Rare flooding	0.40	Slopes 2 to 8%	0.17
Urban land-----	15	Not rated		Not rated	
442:					
Inyo-----	70	Limitations		Limitations	
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Slopes > 8%	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Slopes 8 to 15%	0.63	Rare flooding	0.50
Urban land-----	15	Not rated		Not rated	
445:					
Chollawell-----	70	Limitations		Limitations	
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Rare flooding	0.40	Rare flooding	0.50
				Slopes 2 to 8%	0.33
Urban land-----	15	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
450:					
Southlake, stony-----	45	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Slopes > 8% Rare flooding Fragments (>3") 20-35%	1.00 0.50 0.12
Goodale-----	15	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Fragments (>3") > 35% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated	
460:					
Kernville, bouldery-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Hogeye-----	25	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Southlake-----	15	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Slopes > 8% Rare flooding Fragments (>3") 20-35%	1.00 0.50 0.12
Urban land-----	15	Not rated		Not rated	
465:					
Arujo-----	65	Limitations Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock 40 - 72" Slopes 8 to 15%	1.00 0.36 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Bedrock (soft) from 40 to 60"	1.00 1.00 0.01
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
485:					
Inyo-----	45	Limitations		Limitations	
		Flooding	1.00	Flooding >= occasional	1.00
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Slopes 2 to 8%	0.08
Kelval-----	30	Limitations		Limitations	
		Flooding	1.00	Flooding >= occasional	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
Urban land-----	15	Not rated		Not rated	
488:					
Tweedy-----	35	Limitations		Limitations	
		Seepage in bottom layer	1.00	Bedrock (soft) < 40" depth	1.00
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Slopes > 8%	1.00
		Depth to bedrock < 40"	1.00	Permeability > 2"/hr (seepage)	1.00
Tollhouse-----	20	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
Locobill-----	15	Limitations		Limitations	
		Permeability < .6"/hr in 24-60" (slow perc)	1.00	Bedrock (soft) < 40" depth	1.00
		Depth to bedrock < 40"	1.00	Slopes > 8%	1.00
		Slopes > 15%	1.00	Permeability > 2"/hr (seepage)	1.00
Urban land-----	15	Not rated		Not rated	
501:					
Hyte-----	35	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
501: Erskine-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Sorrell-----	25	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
503: Tops-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Erskine-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
505: Chollawell-----	85	Limitations Seepage in bottom layer Slopes 8 to 15% Rare flooding	1.00 0.84 0.40	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50
507: Xyno-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
507: Canebrake-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Pilotwell-----	15	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
508: Pilotwell-----	45	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Xyno-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
509: Xyno-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Faycreek-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
510:					
Xyno-----	35	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00		
Canebrake-----	30	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00
Pilotwell, bouldery-----	15	Limitations		Limitations	
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
512:					
Chollawell, cobbly substratum----	60	Limitations		Limitations	
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Rare flooding	0.40	Slopes > 8%	1.00
		Slopes 8 to 15%	0.16	Rare flooding	0.50
Chollawell, gravelly-----	15	Limitations		Limitations	
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Rare flooding	0.40	Slopes 2 to 8%	0.50
				Rare flooding	0.50
514:					
Chollawell-----	50	Limitations		Limitations	
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Rare flooding	0.40	Slopes > 8%	1.00
		Slopes 8 to 15%	0.16	Rare flooding	0.50
Inyo-----	35	Limitations		Limitations	
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
		Rare flooding	0.40	Rare flooding	0.50

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
515: Scodie-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Canebrake-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Xyno-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
516: Xyno-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
Canebrake-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
517: Southlake-----	55	Limitations Permeability < .6"/hr in 24-60" (slow perc) Rare flooding Slopes 8 to 15%	1.00 0.40 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Rare flooding	1.00 1.00 0.50

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
517: Southlake, gravelly-----	20	Limitations Flooding Seepage in bottom layer Permeability < .6"/hr in 24-60" (slow perc)	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Goodale-----	15	Limitations Flooding Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Fragments (>3") > 35%	1.00 1.00 1.00
518: Backcanyon-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
520: Kernville-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
523: Kernville, bouldery-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
523:					
Faycreek-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
525:					
Hungrygulch-----	35	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Kernville-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
530:					
Alberti, cobbly-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Alberti, gravelly-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
531:					
Tweedy-----	40	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
531: Erskine-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Alberti, gravelly-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
532: Alberti, gravelly-----	80	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
540: Canebrake-----	60	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Lachim-----	20	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
541: Canebrake-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
541: Lachim-----	20	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
543: Wortley-----	45	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Indiano-----	25	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
544: Xeric Haplargids-----	60	Limitations Permeability < .6"/hr in 24-60" (slow perc) Slopes > 15% Depth to bedrock 40 - 72"	1.00 1.00 0.99	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Bedrock (hard) < 40" depth	1.00 1.00 0.99
Lithic Xeric Haplargids-----	20	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
545: Sacatar-----	50	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
545: Canebrake-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
549: Tunawee-----	60	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	
550: Kenypeak-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	
551: Tunawee-----	70	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
552: Kenypeak-----	60	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
552: Torriorthentic Haploxerolls-----	25	Limitations Slopes > 15% Depth to bedrock < 40" Permeability .6 - 2"/hr (slow perc)	1.00 1.00 0.46	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
553: Tibbcreek-----	75	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
554: Deerspring-----	85	Limitations Flooding Saturation < 4' depth Permeability .6 - 2"/hr (slow perc)	1.00 0.99 0.46	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Saturation from 3.5 to 5' depth	1.00 1.00 0.71
555: Cumulic Endoaquolls, frigid-----	75	Limitations Flooding Saturation < 4' depth Seepage in bottom layer	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Saturation from 3.5 to 5' depth	1.00 1.00 0.48
556: Toll-----	80	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Seepage in bottom layer Rare flooding	1.00 1.00 1.00 0.40	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 8% Rare flooding	1.00 0.67 0.50
557: Scodie-----	35	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
557:					
Canebrake-----	25	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Deadfoot-----	20	Limitations Permeability > 6"/hr in 24-60" (seepage and poor filter) Slopes > 15% Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
558:					
Indiano-----	60	Limitations Slopes > 15% Permeability < .6"/hr in 24-60" (slow perc) Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Wortley-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
560:					
Sacatar-----	30	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Wortley-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Calpine-----	20	Limitations Seepage in bottom layer Slopes 8 to 15%	1.00 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
561:					
Scodie-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Sacatar-----	25	Limitations Seepage in bottom layer Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Permeability > 2"/hr (seepage) Slopes > 8%	1.00 1.00 1.00
Canebrake-----	20	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
562:					
Deerspring, partially drained----	85	Limitations Flooding Seepage in bottom layer Saturation from 4 to 6' depth	1.00 1.00 0.08	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.17
570:					
Deadfoot-----	40	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Scodie-----	20	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
590:					
Xyno-----	35	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8%	1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
590:					
Canebrake-----	25	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Slopes > 8%	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
Pilotwell-----	20	Limitations		Limitations	
		Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00	Bedrock (soft) < 40" depth	1.00
		Seepage in bottom layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Depth to bedrock < 40"	1.00	Slopes > 8%	1.00
591:					
Xyno-----	50	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (hard) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00		
Canebrake-----	20	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Slopes > 15%	1.00	Slopes > 8%	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00
Rock outcrop-----	15	Not rated		Not rated	
599:					
Rock outcrop-----	80	Not rated		Not rated	
610:					
Hyte-----	40	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00
Erskine-----	35	Limitations		Limitations	
		Depth to bedrock < 40"	1.00	Bedrock (soft) < 40" depth	1.00
		Restricted permeability due to bedrock or hardpan	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage in bottom layer	1.00	Slopes > 8%	1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
650:					
Stineway-----	40	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Fragments (>3") 20-35%	1.00 1.00 0.83
Kiscove-----	30	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
3250:					
Jawbone-----	50	Limitations Depth to bedrock < 40" Slopes > 15% Restricted permeability due to bedrock or hardpan	1.00 1.00 1.00	Limitations Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00
Jawbone, moderately deep-----	40	Limitations Slopes > 15% Seepage in bottom layer Depth to bedrock < 40"	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00 1.00
4432:					
Koehn, occasionally flooded-----	70	Limitations Flooding Seepage in bottom layer Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.17
Koehn, frequently flooded-----	15	Limitations Flooding Seepage in bottom layer Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00 1.00 1.00	Limitations Flooding >= occasional Permeability > 2"/hr (seepage) Slopes 2 to 8%	1.00 1.00 0.17

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
5201: Wingap-----	55	Limitations Seepage in bottom layer Slopes > 15% Depth to bedrock 40 - 72"	1.00 1.00 0.59	Limitations Slopes > 8% Permeability > 2"/hr (seepage) Bedrock (soft) from 40 to 60"	1.00 1.00 0.13
Pinyonpeak-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
5210: Grandora-----	30	Limitations Slopes > 15% Seepage in bottom layer Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
Grandora, warm-----	30	Limitations Slopes > 15% Seepage in bottom layer Permeability > 6"/hr in 24-60" (seepage and poor filter)	1.00 1.00 1.00	Limitations Slopes > 8% Permeability > 2"/hr (seepage)	1.00 1.00
Pinyonpeak-----	30	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00
6001: Goldpeak-----	55	Limitations Permeability .6 - 2"/hr (slow perc)	0.32	Limitations Permeability .6-2"/hr (some seepage) Slopes 2 to 8%	0.68 0.33
Pinyonpeak-----	15	Limitations Depth to bedrock < 40" Restricted permeability due to bedrock or hardpan Seepage in bottom layer	1.00 1.00 1.00	Limitations Bedrock (hard) < 40" depth Bedrock (soft) < 40" depth Slopes > 8%	1.00 1.00 1.00

Table 13a.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Limitations	Value	Limitations	Value
6001: Wingap-----	15	Limitations Seepage in bottom layer Depth to bedrock 40 - 72" Slopes 8 to 15%	 1.00 0.59 0.16	Limitations Permeability > 2"/hr (seepage) Slopes > 8% Bedrock (soft) from 40 to 60"	 1.00 1.00 0.13
W: Water-----	100	Not rated		Not rated	

The interpretation for septic tank absorption fields evaluates the following soil properties at variable depths in the soil: flooding; ponding; wetness; slope; subsidence of organic soils; depth to hard or soft bedrock; depth to a cemented pan; permeability that is too rapid, allowing seepage; and permeability that is too slow or an impermeable layer at a shallow depth.

The interpretation for sewage lagoons evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, organic Unified classes for low strength (PT, OL, and OH), depth to hard or soft bedrock, depth to a cemented pan, fragments larger than 3 inches in size, and permeability that is too rapid, allowing seepage.

Table 13b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
128: Pits-----	35	Not rated		Not rated		Not rated	
Delano-----	30	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
Oil waste land-----	15	Not rated		Not rated		Not rated	
136: Hesperia-----	75	No limitations		No limitations		Limitations Permeability > 2.0 in/hr	0.50
138: Hesperia-----	85	No limitations		No limitations		Limitations Permeability > 2.0 in/hr	0.50
139: Riverwash-----	80	Not rated		Not rated		Not rated	
143: Calicreek-----	85	Limitations Sandy textures Rare flooding	1.00 0.50	Limitations Rare flooding	0.40	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 0.52
144: Calicreek-----	85	Limitations Flooding >= occasional Sandy textures	1.00 1.00	Limitations Occasional flooding	0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 0.52
145: Delano-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
146: Delano-----	80	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
147: Chanac-----	80	No limitations		No limitations		No limitations	
148: Delano-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
149: Delano-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
150: Pits-----	50	Not rated		Not rated		Not rated	
Dumps-----	40	Not rated		Not rated		Not rated	
152: Pleito-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
153: Chanac-----	85	Limitations Slopes 8 to 15%	0.63	Limitations Slopes 8 to 15%	0.63	Limitations Slopes 8 to 15%	0.63
154: Dam-----	100	Not rated		Not rated		Not rated	
166: Delano-----	60	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
Urban land-----	20	Not rated		Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations Slopes > 15% EC > 16 dS/m	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
174: Calcic Haploxerepts-----	40	Limitations Slopes > 15% SAR >13 and not aridic climate	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% SAR >13 and not aridic climate	1.00 1.00
176: Elkhills, eroded-----	75	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Fragments (<75mm) 25-50%	1.00 0.52 0.18
177: Chanac-----	55	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
Torriorthents, stratified-----	25	Not rated		Limitations Slopes > 15%	1.00	Not rated	
178: Delano-----	40	No limitations		No limitations		No limitations	
Cuyama-----	25	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr	1.00 0.50
179: Torriorthents, stratified, eroded-----	50	Not rated		Limitations Slopes > 15%	1.00	Not rated	
Elkhills-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr	1.00 0.52
184: Cuyama-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
185:							
Brecken-----	40	Limitations Slopes > 15% Seepage in bottom layer Fragments (3-10") 15-35%	1.00 1.00 0.98	Limitations Slopes > 15% Seepage in 20-40" depth	1.00 1.00	Limitations Slopes > 15% Fragments (>3") 25-50% Permeability > 2.0 in/hr	1.00 0.68 0.52
Cuyama-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
Pleito-----	20	Limitations Slopes > 15% Clay loam, silty clay, silty clay loam	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Silt or clay textures from 10-60" Clay loam, silty clay, silty clay loam	1.00 0.50 0.50
186:							
Cuyama-----	85	Limitations Slopes 8 to 15%	0.63	Limitations Slopes 8 to 15%	0.63	Limitations Slopes 8 to 15%	0.63
187:							
Trigo-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Chanac-----	35	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
188:							
Tweedy-----	50	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Bedrock depth < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15%	1.00 1.00
Tollhouse-----	20	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
195: Centerville-----	60	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Packing (OL, OH, CH, or MH) Slopes > 15%	1.00 1.00
Delvar-----	20	Limitations Clay or silty clay Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Silty clay or clay 10-60" Packing (OL, OH, CH, or MH) Clay or silty clay	1.00 1.00 1.00
196: Exeter-----	75	Limitations Seepage in bottom layer Depth to thin cemented pan	1.00 0.50	Limitations Depth to pan < 40" Seepage in 20-40" depth	1.00 1.00	Limitations Depth to pan < 40"	1.00
197: Nord-----	85	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
198: Centerville-----	65	No limitations		No limitations		No limitations	
Delvar-----	20	Limitations Clay or silty clay	1.00	No limitations		Limitations Silty clay or clay 10-60" Packing (OL, OH, CH, or MH) Clay or silty clay	1.00 1.00 1.00
199: Exeter-----	80	Limitations Depth to thin cemented pan	0.50	Limitations Depth to pan < 40"	1.00	Limitations Depth to pan < 40"	1.00
200: Urban land-----	60	Not rated		Not rated		Not rated	
Delano-----	25	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	No limitations	
201: Pleito-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
Chanac-----	30	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
201: Raggulch-----	30	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15%	1.00 1.00
205: Pleito-----	40	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
Trigo-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Chanac-----	20	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00
207: Whitewolf-----	85	Limitations Sandy textures Rare flooding	1.00 0.50	Limitations Rare flooding	0.40	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 1.00
209: Whitewolf-----	85	Limitations Flooding >= occasional Sandy textures	1.00 1.00	Limitations Occasional flooding	0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 1.00
210: Kernfork-----	85	Limitations Flooding >= occasional Saturation < 6' depth Seepage in bottom layer	1.00 1.00 1.00	Limitations Saturation < 5' depth Seepage in 20-40" depth Occasional flooding	1.00 1.00 0.60	Limitations Saturation from 18 to 40" depth Permeability > 2.0 in/hr	0.86 0.52
212: Kernfork-----	80	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Seepage in 20-40" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Permeability > 2.0 in/hr	1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
213: Calicreek-----	85	Limitations Flooding >= occasional Sandy textures	1.00 1.00	Limitations Occasional flooding	0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 0.52
215: Kelval-----	85	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.52
216: Inyo-----	60	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Frequent flooding	0.80	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
Riverwash-----	25	Not rated		Not rated		Not rated	
217: Whitewolf-----	55	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Frequent flooding	0.80	Limitations Permeability > 2.0 in/hr Sandy textures	1.00 0.50
Riverwash-----	25	Not rated		Not rated		Not rated	
220: Aquents-----	40	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Seepage in 20-40" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 18" depth Permeability > 2.0 in/hr	1.00 1.00 0.52
Aquolls-----	35	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Seepage in 20-40" depth	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 18" depth Permeability > 2.0 in/hr	1.00 1.00 0.52
Riverwash-----	15	Not rated		Not rated		Not rated	
222: Kelval-----	85	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
223: Kelval-----	70	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.52
224: Inyo-----	85	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Occasional flooding	0.60	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
238: Cinco-----	85	Limitations Slopes > 15% Sandy textures	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Sandy textures	1.00 1.00 0.50
240: Dune land-----	85	Not rated		Not rated		Not rated	
241: Inyo-----	75	Limitations Rare flooding Sandy textures	0.50 0.50	Limitations Rare flooding	0.40	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
242: Inyo-----	80	Limitations Rare flooding Sandy textures Slopes 8 to 15%	0.50 0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Permeability > 2.0 in/hr Sandy textures Slopes 8 to 15%	1.00 0.50 0.16
243: Kernfork, saline-sodic, occasionally flooded---	85	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Occasional flooding	1.00 1.00 0.60	Limitations Ponding (any duration) Saturation < 18" depth Sandy textures	1.00 1.00 0.50
245: Chollawell-----	80	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	Limitations Fragments (<75mm) 25-50% Permeability > 2.0 in/hr	0.87 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
246: Chollawell-----	80	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Fragments (<75mm) 25-50% Permeability > 2.0 in/hr Slopes 8 to 15%	0.89 0.52 0.16
247: Inyo-----	45	Limitations Rare flooding Sandy textures Slopes 8 to 15%	0.50 0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Permeability > 2.0 in/hr Sandy textures Slopes 8 to 15%	1.00 0.50 0.16
Tips-----	25	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.68
Rock outcrop-----	15	Not rated		Not rated		Not rated	
249: Hoffman-----	65	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	20	Not rated		Not rated		Not rated	
250: Hoffman-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Tips-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
253:							
Sorrell-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Martee-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
254:							
Martee-----	60	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
255:							
Kernfork, occasionally flooded-----	45	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Occasional flooding	1.00 1.00 0.60	Limitations Ponding (any duration) Sandy textures	1.00 0.50
Kernfork, frequently flooded-----	40	Limitations Flooding >= occasional Saturation < 6' depth Ponding (any duration)	1.00 1.00 1.00	Limitations Ponding (any duration) Saturation < 5' depth Frequent flooding	1.00 1.00 0.80	Limitations Ponding (any duration) Saturation < 18" depth Sandy textures	1.00 1.00 0.50
257:							
Hoffman-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
257:							
Tips-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
259:							
Cowspring-----	80	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
260:							
Cowspring-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Tips-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.61
Rock outcrop-----	15	Not rated		Not rated		Not rated	
261:							
Blasingame-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Arujo-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.01	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.01
Cieneba-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
264:							
Arujo-----	35	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.01	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.01
Walong-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Tunis-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.22
265:							
Arujo-----	80	Limitations Lithic or paralithic bedrock < 72" Slopes 8 to 15%	1.00 0.16	Limitations Slopes 8 to 15% Bedrock depth from 40-60"	0.16 0.01	Limitations Slopes 8 to 15% Depth to bedrock from 40-60"	0.16 0.01
266:							
Tunis-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.22
Rock outcrop-----	30	Not rated		Not rated		Not rated	
267:							
Cieneba-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Vista-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
267: Rock outcrop-----	15	Not rated		Not rated		Not rated	
268: Tunis-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.22
Tollhouse-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Sorrell-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
269: Tollhouse-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Sorrell-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
270: Locobill-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
270:							
Backcanyon-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Sesame-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
271:							
Walong-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Tunis-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
272:							
Tollhouse-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Edmundston-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.02	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock from 40-60"	1.00 0.52 0.02

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
272: Sorrell-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
274: Sesame-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Tweedy-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
275: Strahle-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.01
Sesame-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Tweedy-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
276: Tips-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.62

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
276:							
Hoffman-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Cinco-----	15	Limitations Slopes > 15% Sandy textures	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Sandy textures	1.00 1.00 0.50
277:							
Feethill-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Vista-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Walong-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
279:							
Strahle-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.25
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Sesame-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
280:							
Tollhouse-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Martee-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Edmundston-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.88	Limitations Slopes > 15% Depth to bedrock from 40-60" Permeability > 2.0 in/hr	1.00 0.88 0.52
281:							
Havala-----	55	Limitations Seepage in bottom layer Slopes 8 to 15%	1.00 0.04	Limitations Seepage in 20-40" depth Slopes 8 to 15%	1.00 0.04	Limitations Permeability > 2.0 in/hr Slopes 8 to 15%	0.52 0.04
Walong-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Kernfork-----	15	Limitations Flooding >= occasional Saturation < 6' depth Seepage in bottom layer	1.00 1.00 1.00	Limitations Saturation < 5' depth Seepage in 20-40" depth Occasional flooding	1.00 1.00 0.60	Limitations Saturation from 18 to 40" depth Permeability > 2.0 in/hr Sandy textures	0.86 0.52 0.50
282:							
Tollhouse-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
282:							
Sesame-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Friant-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
283:							
Tollhouse-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Martee-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
284:							
Tollhouse-----	70	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
285:							
Inyo-----	50	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Occasional flooding	0.60	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
Kelval-----	40	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.52

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Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
286:							
Tollhouse-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Tweedy-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Locobill-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
287:							
Tweedy-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Strahle-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
288:							
Sorrell-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Arujo-----	25	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Seepage in 20-40" depth Slopes > 15% Bedrock depth from 40-60"	1.00 1.00 0.61	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.61
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
289:							
Erskine-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Hyte-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	20	Not rated		Not rated		Not rated	
294:							
Edmundston-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.42	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock from 40-60"	1.00 0.52 0.42
Tweedy-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Walong-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
295:							
Tweedy-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Tunis-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.22

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
295: Rankor-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.01	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.01
296: Arujo-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.26	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.26
Walong-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Tunis-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.22
297: Walong-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Blasingame-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
298: Arujo-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.05	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.05

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
298:							
Feethill-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Sesame-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
299:							
Arujo-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.05	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.05
Feethill-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Sesame-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
300:							
Stineway-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.76
Kiscove-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.67
301:							
Feethill-----	35	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15%	1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
301: Vista-----	25	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Bedrock depth < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
302: Feethill-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Cibo-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Cieneba-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
303: Steuber-----	80	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.50
304: Cibo-----	80	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Packing (OL, OH, CH, or MH) Depth to bedrock < 40"	1.00 1.00 1.00
305: Chanac-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
305: Pleito-----	20	Limitations Slopes > 15% Clay loam, silty clay, silty clay loam	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Silt or clay textures from 10-60" Clay loam, silty clay, silty clay loam	1.00 0.50 0.50
Premier-----	15	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr	1.00 0.50
306: Xerofluvents, occasionally flooded---	60	Not rated		Limitations Saturation < 5' depth Seepage in 20-40" depth Occasional flooding	1.00 1.00 0.60	Not rated	
Riverwash-----	25	Not rated		Not rated		Not rated	
307: Typic Xeropsamments-----	80	Limitations Flooding >= occasional Sandy textures Seepage in bottom layer	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 1.00
308: Rankor-----	35	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.77	Limitations Slopes > 15% Depth to bedrock from 40- 60"	1.00 0.77
Edmundston-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.61	Limitations Slopes > 15% Depth to bedrock from 40- 60" Permeability > 2.0 in/hr	1.00 0.61 0.52
Tweedy-----	20	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15%	1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
309:							
Rankor-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.77	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.77
Edmundston-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth from 40-60"	1.00 1.00 0.61	Limitations Slopes > 15% Depth to bedrock from 40-60" Permeability > 2.0 in/hr	1.00 0.61 0.52
Tweedy-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
310:							
Stineway-----	50	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.77
Kiscove-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.67
311:							
Xerorthents-----	50	Not rated		Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Not rated	
Rock outcrop-----	30	Not rated		Not rated		Not rated	
312:							
Havala-----	85	Limitations Seepage in bottom layer	1.00	Limitations Seepage in 20-40" depth	1.00	No limitations	
313:							
Dumps-----	80	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
314:							
Premier-----	45	Limitations Slopes > 15%	1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr	1.00 0.50
Haplodurids-----	35	Limitations Slopes > 15% Depth to thin cemented pan	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to pan < 40" Slopes > 15%	1.00 1.00
315:							
Premier-----	45	No limitations		No limitations		Limitations Permeability > 2.0 in/hr	0.50
Haplodurids-----	40	Limitations Depth to thin cemented pan	0.50	No limitations		Limitations Depth to pan < 40"	1.00
316:							
Premier-----	85	No limitations		No limitations		Limitations Permeability > 2.0 in/hr	0.50
317:							
Premier-----	85	No limitations		No limitations		Limitations Permeability > 2.0 in/hr	0.50
320:							
Southlake-----	80	Limitations Rare flooding Slopes 8 to 15%	0.50 0.04	Limitations Rare flooding Slopes 8 to 15%	0.40 0.04	Limitations Fragments (<75mm) 25-50% Slopes 8 to 15%	0.78 0.04
325:							
Walong-----	75	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40" Seepage in 20-40" depth	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.50
326:							
Walong-----	80	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40" Seepage in 20-40" depth	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.50

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
330:							
Kernville-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Faycreek-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
350:							
Southlake, stony-----	55	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15% Fragments (>3") 25-50%	0.16 0.01
Goodale-----	20	Limitations Flooding >= occasional Sandy textures Fragments (3-10") 15-35%	1.00 0.50 0.18	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Permeability > 2.0 in/hr Fragments (>3") > 50% Sandy textures	1.00 1.00 0.50
352:							
Goodale-----	65	Limitations Flooding >= occasional Fragments (3-10") > 35% Sandy textures	1.00 0.99 0.50	Limitations Occasional flooding	0.60	Limitations Permeability > 2.0 in/hr Fragments (>3") 25-50% Sandy textures	1.00 0.98 0.50
Riverwash-----	20	Not rated		Not rated		Not rated	
360:							
Kernville, bouldery-----	40	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
360:							
Hogeye-----	30	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Bedrock depth < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Southlake-----	15	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15% Fragments (>3") 25-50%	0.16 0.01
380:							
Delvar-----	40	Limitations Clay or silty clay Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Silty clay or clay 10-60" Packing (OL, OH, CH, or MH) Clay or silty clay	1.00 1.00 1.00
Pleito-----	40	Limitations Slopes > 15% Clay loam, silty clay, silty clay loam	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Silt or clay textures from 10-60" Clay loam, silty clay, silty clay loam	1.00 0.50 0.50
407:							
Centerville-----	90	No limitations		Limitations Very rare flooding	0.20	Limitations Packing (OL, OH, CH, or MH)	1.00
410:							
Stineway-----	40	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.87
Kiscove-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.67
Urban land-----	15	Not rated		Not rated		Not rated	
411:							
Delvar-----	85	Limitations SAR >13 and not aridic climate	1.00	Limitations Very rare flooding	0.20	Limitations SAR >13 and not aridic climate	1.00

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Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
412: Chollawell-----	70	Limitations Rare flooding Sandy textures Slopes 8 to 15%	0.50 0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Permeability > 2.0 in/hr Sandy textures Slopes 8 to 15%	0.52 0.50 0.16
Urban land-----	15	Not rated		Not rated		Not rated	
417: Southlake-----	40	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15% Fragments (>3") 25-50%	0.16 0.01
Southlake, gravelly----	20	Limitations Flooding >= occasional Slopes 8 to 15%	1.00 0.16	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Fragments (<75mm) 25-50% Slopes 8 to 15%	0.98 0.16
Goodale-----	15	Limitations Flooding >= occasional Sandy textures Fragments (3-10") 15-35%	1.00 0.50 0.19	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Permeability > 2.0 in/hr Fragments (>3") > 50% Sandy textures	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
420: Southlake-----	65	Limitations Rare flooding Slopes 8 to 15%	0.50 0.04	Limitations Rare flooding Slopes 8 to 15%	0.40 0.04	Limitations Fragments (<75mm) > 50% Slopes 8 to 15%	0.99 0.04
Urban land-----	15	Not rated		Not rated		Not rated	
422: Kelval-----	70	Limitations Flooding >= occasional Sandy textures Seepage in bottom layer	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 0.52
Urban land-----	15	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
423: Auberry-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth from 40-60"	1.00 0.05	Limitations Slopes > 15% Depth to bedrock from 40-60"	1.00 0.05
Crouch-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth	1.00 1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Sandy textures	1.00 0.50 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
424: Inyo-----	70	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Occasional flooding	0.60	Limitations Permeability > 2.0 in/hr Sandy textures	1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
430: Friant-----	70	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432: Alberti, gravelly-----	70	Limitations Lithic or paralithic bedrock < 72" Clay or silty clay Slopes > 15%	1.00 1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Silty clay or clay 10-60" Clay or silty clay	1.00 1.00 1.00
Urban land-----	15	Not rated		Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
441:							
Inyo-----	65	Limitations Rare flooding Sandy textures	0.50 0.50	Limitations Rare flooding	0.40	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
Urban land-----	15	Not rated		Not rated		Not rated	
442:							
Inyo-----	70	Limitations Slopes 8 to 15% Rare flooding Sandy textures	0.63 0.50 0.50	Limitations Slopes 8 to 15% Rare flooding	0.63 0.40	Limitations Permeability > 2.0 in/hr Slopes 8 to 15% Sandy textures	1.00 0.63 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
445:							
Chollawell-----	70	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	Limitations Fragments (<75mm) 25-50% Permeability > 2.0 in/hr	0.89 0.52
Urban land-----	15	Not rated		Not rated		Not rated	
450:							
Southlake, stony-----	45	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15% Fragments (>3") 25-50%	0.16 0.01
Goodale-----	15	Limitations Flooding >= occasional Sandy textures Fragments (3-10") 15-35%	1.00 0.50 0.18	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Permeability > 2.0 in/hr Fragments (>3") > 50% Sandy textures	1.00 1.00 0.50
Urban land-----	15	Not rated		Not rated		Not rated	
460:							
Kernville, bouldery-----	30	Limitations Lithic or paralthic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
460:							
Hogeye-----	25	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Bedrock depth < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Southlake-----	15	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15% Fragments (>3") 25-50%	0.16 0.01
Urban land-----	15	Not rated		Not rated		Not rated	
465:							
Arujo-----	65	Limitations Lithic or paralithic bedrock < 72" Slopes 8 to 15%	1.00 0.16	Limitations Slopes 8 to 15% Bedrock depth from 40-60"	0.16 0.01	Limitations Slopes 8 to 15% Depth to bedrock from 40-60"	0.16 0.01
Urban land-----	15	Not rated		Not rated		Not rated	
485:							
Inyo-----	45	Limitations Flooding >= occasional Sandy textures	1.00 0.50	Limitations Occasional flooding	0.60	Limitations Permeability > 2.0 in/hr Sandy textures Fragments (<75mm) 25-50%	1.00 0.50 0.01
Kelval-----	30	Limitations Flooding >= occasional Seepage in bottom layer	1.00 1.00	Limitations Seepage in 20-40" depth Occasional flooding	1.00 0.60	Limitations Permeability > 2.0 in/hr	0.52
Urban land-----	15	Not rated		Not rated		Not rated	
488:							
Tweedy-----	35	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Bedrock depth < 40" Slopes > 15%	1.00 1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15%	1.00 1.00
Tollhouse-----	20	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
488:							
Locobill-----	15	Limitations		Limitations		Limitations	
		Lithic or paralithic bedrock < 72"	1.00	Seepage in 20-40" depth	1.00	Depth to bedrock < 40"	1.00
		Slopes > 15%	1.00	Bedrock depth < 40"	1.00	Slopes > 15%	1.00
				Slopes > 15%	1.00	Permeability > 2.0 in/hr	0.52
Urban land-----	15	Not rated		Not rated		Not rated	
501:							
Hyte-----	35	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Depth to bedrock < 40"	1.00
		Lithic or paralithic bedrock < 72"	1.00	Bedrock depth < 40"	1.00	Slopes > 15%	1.00
		Seepage in bottom layer	1.00			Permeability > 2.0 in/hr	0.52
Erskine-----	25	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Depth to bedrock < 40"	1.00
		Lithic or paralithic bedrock < 72"	1.00	Bedrock depth < 40"	1.00	Slopes > 15%	1.00
		Seepage in bottom layer	1.00			Permeability > 2.0 in/hr	0.52
Sorrell-----	25	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Slopes > 15%	1.00
		Lithic or paralithic bedrock < 72"	1.00	Seepage in 20-40" depth	1.00	Depth to bedrock < 40"	1.00
		Seepage in bottom layer	1.00	Bedrock depth < 40"	1.00	Permeability > 2.0 in/hr	0.52
503:							
Tips-----	40	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Depth to bedrock < 40"	1.00
		Lithic or paralithic bedrock < 72"	1.00			Slopes > 15%	1.00
						Permeability > 2.0 in/hr	0.52
Erskine-----	30	Limitations		Limitations		Limitations	
		Slopes > 15%	1.00	Slopes > 15%	1.00	Depth to bedrock < 40"	1.00
		Lithic or paralithic bedrock < 72"	1.00	Bedrock depth < 40"	1.00	Slopes > 15%	1.00
		Seepage in bottom layer	1.00			Permeability > 2.0 in/hr	0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
505: Chollawell-----	85	Limitations Slopes 8 to 15% Rare flooding	0.84 0.50	Limitations Slopes 8 to 15% Rare flooding	0.84 0.40	Limitations Fragments (<75mm) 25-50% Slopes 8 to 15% Permeability > 2.0 in/hr	0.89 0.84 0.52
507: Xyno-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Pilotwell-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
508: Pilotwell-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
Xyno-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
509:							
Xyno-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Faycreek-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
510:							
Xyno-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Pilotwell, bouldery-----	15	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
512:							
Chollawell, cobbly substratum-----	60	Limitations Rare flooding Sandy textures Slopes 8 to 15%	0.50 0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Permeability > 2.0 in/hr Sandy textures Slopes 8 to 15%	0.52 0.50 0.16
Chollawell, gravelly----	15	Limitations Rare flooding	0.50	Limitations Rare flooding	0.40	Limitations Fragments (<75mm) 25-50% Permeability > 2.0 in/hr	0.83 0.52

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
514: Chollawell-----	50	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Fragments (<75mm) 25-50% Permeability > 2.0 in/hr Slopes 8 to 15%	0.89 0.52 0.16
Inyo-----	35	Limitations Rare flooding Sandy textures Slopes 8 to 15%	0.50 0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Permeability > 2.0 in/hr Sandy textures Slopes 8 to 15%	1.00 0.50 0.16
515: Scodie-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Canebrake-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Xyno-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
516: Xyno-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Canebrake-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
517:							
Southlake-----	55	Limitations Rare flooding Slopes 8 to 15%	0.50 0.16	Limitations Rare flooding Slopes 8 to 15%	0.40 0.16	Limitations Slopes 8 to 15%	0.16
Southlake, gravelly----	20	Limitations Flooding >= occasional Slopes 8 to 15%	1.00 0.16	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Fragments (<75mm) 25-50% Slopes 8 to 15%	0.99 0.16
Goodale-----	15	Limitations Flooding >= occasional Sandy textures Fragments (3-10") 15-35%	1.00 0.50 0.19	Limitations Occasional flooding Slopes 8 to 15%	0.60 0.16	Limitations Permeability > 2.0 in/hr Fragments (>3") > 50% Sandy textures	1.00 1.00 0.50
518:							
Backcanyon-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	30	Not rated		Not rated		Not rated	
520:							
Kernville-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Rock outcrop-----	15	Not rated		Not rated		Not rated	
523:							
Kernville, bouldery----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
523:							
Faycreek-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
525:							
Hungrygulch-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
Kernville-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Hogeye-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Permeability > 2.0 in/hr	1.00 1.00 0.52
530:							
Alberti, cobbly-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Clay or silty clay	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Silty clay or clay 10-60"	1.00 1.00 1.00
Alberti, gravelly-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Clay or silty clay	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Silty clay or clay 10-60"	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
531: Tweedy-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40"	1.00 1.00
Erskine-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Alberti, gravelly-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Clay or silty clay	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Silty clay or clay 10-60"	1.00 1.00 1.00
532: Alberti, gravelly-----	80	Limitations Lithic or paralithic bedrock < 72" Clay or silty clay Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Silty clay or clay 10-60" Clay or silty clay	1.00 1.00 1.00
540: Canebrake-----	60	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Lachim-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
541: Canebrake-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
541:							
Lachim-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
543:							
Wortley-----	45	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Indiano-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock < 40" Fragments (<75mm) 25-50%	1.00 1.00 0.40
Rock outcrop-----	15	Not rated		Not rated		Not rated	
544:							
Xeric Haplargids-----	60	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Rare flooding	1.00 1.00 0.50	Limitations Slopes > 15% Rare flooding	1.00 0.40	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock from 40-60"	1.00 1.00 0.99
Lithic Xeric Haplargids	20	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Fragments (3-10") 15-35%	1.00 1.00 0.92	Limitations Slopes > 15% Rare flooding	1.00 0.40	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.50
545:							
Sacatar-----	50	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
545: Canebrake-----	30	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00
549: Tunawee-----	60	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated		Not rated	
550: Kenypeak-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.85
Rubble land-----	20	Not rated		Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated		Not rated	
551: Tunawee-----	70	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
552: Kenypeak-----	60	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Fragments (3-10") 15-35%	1.00 1.00 0.30	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.78
Torriorthentic Haploxerolls-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Slopes > 15% Depth to bedrock < 40" Fragments (<75mm) 25-50%	1.00 1.00 0.98

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
553: Tibbcreek-----	75	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.83
554: Deerspring-----	85	Limitations Flooding >= occasional Saturation < 6' depth	1.00 1.00	Limitations Saturation < 5' depth Seepage in 20-40" depth Occasional flooding	1.00 1.00 0.60	No limitations	
555: Cumulic Endoaquolls, frigid-----	75	Limitations Flooding >= occasional Saturation < 6' depth Seepage in bottom layer	1.00 1.00 1.00	Limitations Saturation < 5' depth Seepage in 20-40" depth Frequent flooding	1.00 1.00 0.80	Limitations Saturation < 18" depth Permeability > 2.0 in/hr	1.00 0.52
556: Toll-----	80	Limitations Rare flooding Sandy textures	0.50 0.50	Limitations Rare flooding	0.40	Limitations Permeability > 2.0 in/hr Sandy textures	1.00 0.50
557: Scodie-----	35	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Canebrake-----	25	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Deadfoot-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
558:							
Indiano-----	60	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock < 40" Fragments (<75mm) 25-50%	1.00 1.00 0.20
Wortley-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
560:							
Sacatar-----	30	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Wortley-----	30	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Calpine-----	20	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15%	0.16	Limitations Permeability > 2.0 in/hr Slopes 8 to 15%	0.52 0.16
561:							
Scodie-----	30	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Sacatar-----	25	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Canebrake-----	20	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
562: Deerspring, partially drained-----	85	Limitations Flooding >= occasional Saturation < 6' depth Seepage in bottom layer	1.00 1.00 1.00	Limitations Seepage in 20-40" depth Frequent flooding	1.00 0.80	Limitations Permeability > 2.0 in/hr	0.52
570: Deadfoot-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Seepage in 20-40" depth Bedrock depth < 40"	1.00 1.00 1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Depth to bedrock < 40"	1.00 1.00 1.00
Scodie-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Seepage in bottom layer	1.00 1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
590: Xyno-----	35	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00
Canebrake-----	25	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Permeability > 2.0 in/hr Slopes > 15%	1.00 1.00 1.00
Pilotwell-----	20	Limitations Lithic or paralithic bedrock < 72" Slopes > 15% Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Permeability > 2.0 in/hr Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
591: Xyno-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Canebrake-----	20	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated		Not rated	
610: Hyte-----	40	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
Erskine-----	35	Limitations Lithic or paralithic bedrock < 72" Seepage in bottom layer Slopes > 15%	1.00 1.00 1.00	Limitations Bedrock depth < 40" Slopes > 15%	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 0.52
650: Stineway-----	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Fragments (3-10") 15-35%	1.00 1.00 0.84	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (>3") 25-50%	1.00 1.00 0.49
Kiscove-----	30	Limitations Slopes > 15% Lithic or paralithic bedrock < 72"	1.00 1.00	Limitations Slopes > 15% Bedrock depth < 40"	1.00 1.00	Limitations Depth to bedrock < 40" Slopes > 15% Fragments (<75mm) 25-50%	1.00 1.00 0.68
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
3250:							
Jawbone-----	50	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Permeability > 2.0 in/hr	1.00 1.00 1.00
Jawbone, moderately deep	40	Limitations Slopes > 15% Lithic or paralithic bedrock < 72" Sandy textures	1.00 1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Depth to bedrock < 40" Slopes > 15% Sandy textures	1.00 1.00 1.00
4432:							
Koehn, occasionally flooded-----	70	Limitations Flooding >= occasional Sandy textures	1.00 1.00	Limitations Occasional flooding	0.60	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 1.00
Koehn, frequently flooded-----	15	Limitations Flooding >= occasional Sandy textures	1.00 1.00	Limitations Frequent flooding	0.80	Limitations Sandy textures Permeability > 2.0 in/hr	1.00 1.00
5201:							
Wingap-----	55	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Depth to bedrock from 40-60" Permeability > 2.0 in/hr	1.00 0.14 0.01
Pinyonpeak-----	30	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Fragments (<75mm) > 50% Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00
5210:							
Grandora-----	30	Limitations Slopes > 15% Sandy textures	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Sandy textures Permeability > 2.0 in/hr	1.00 1.00 1.00

Table 13b.--Sanitary Facilities--Continued

Map symbol and component name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Limitations	Value	Limitations	Value	Limitations	Value
5210: Grandora, warm-----	30	Limitations Slopes > 15% Sandy textures	1.00 0.50	Limitations Slopes > 15%	1.00	Limitations Slopes > 15% Permeability > 2.0 in/hr Sandy textures	1.00 1.00 0.50
Pinyonpeak-----	30	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Fragments (<75mm) > 50% Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00
6001: Goldpeak-----	55	No limitations		No limitations		No limitations	
Pinyonpeak-----	15	Limitations Lithic or paralithic bedrock < 72" Slopes > 15%	1.00 1.00	Limitations Slopes > 15%	1.00	Limitations Fragments (<75mm) > 50% Depth to bedrock < 40" Slopes > 15%	1.00 1.00 1.00
Wingap-----	15	Limitations Lithic or paralithic bedrock < 72" Slopes 8 to 15%	1.00 0.16	Limitations Slopes 8 to 15%	0.16	Limitations Slopes 8 to 15% Depth to bedrock from 40-60" Permeability > 2.0 in/hr	0.16 0.14 0.01
W: Water-----	100	Not rated		Not rated		Not rated	

The interpretation for trench sanitary landfill evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, depth to hard or soft bedrock, depth to a thick or thin cemented pan, fragments 3 to 10 inches in size, sodium content (SAR), pH, clayey or sandy textures, and permeability that is too rapid, allowing seepage in some climates.

The interpretation for area sanitary landfill evaluates the following soil properties at variable depths in the soil: flooding, ponding, wetness, slope, depth to bedrock, depth to a cemented pan, and permeability that is too rapid, allowing seepage in some climates.

The interpretation for daily cover for landfill evaluates the following soil properties at variable depths in the soil: ponding; wetness; slope; depth to bedrock; depth to a cemented pan; fragments more than, equal to, or less than 3 inches in size; Unified class for peat (PT); Unified classes for packing (OL, OH, CH, and MH); sandy or clayey textures; pH; carbonates; sodium content (SAR); salinity (EC); soil climate; kaolinitic mineralogy; and permeability that is too rapid, allowing seepage.

Table 14a.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The closer the value is to 0.00, the greater the limitation. A value of 0.00 indicates an absolute limitation based on the soil property criteria used to develop the interpretation. Values closer to 1.00 indicate lesser limitations. Limiting features with values of 1.00 have absolutely no limitation and are not shown in the table. Rating classes are determined by the most limiting value. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
115: Chanac-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
128: Pits-----	35	Not rated		Not rated		Not rated	
Delano-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
Oil waste land-----	15	Not rated		Not rated		Not rated	
136: Hesperia-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Good source	
138: Hesperia-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Good source	
139: Riverwash-----	80	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
143: Calicreek-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.46 0.51	Poor source Sand fractions > 85% Rock fragment content	0.00 0.50
144: Calicreek-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.46	Poor source Sand fractions > 85% Rock fragment content	0.00 0.59
145: Delano-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.10	Good source	
146: Delano-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
147: Chanac-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Rock fragment content	0.92
148: Delano-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
149: Delano-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
150: Pits-----	50	Not rated		Not rated		Not rated	
Dumps-----	40	Not rated		Not rated		Not rated	
152: Pleito-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Fair source Rock fragment content	0.18
153: Chanac-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Slope 12 to 15% Rock fragment content	0.37 0.92
154: Dam-----	100	Not rated		Not rated		Not rated	
166: Delano-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
Urban land-----	20	Not rated		Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% EC > 8 dS/m SAR > 13	0.00 0.00 0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
174: Calcic Haploxerepts-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% SAR > 13 EC > 8 dS/m	0.00 0.00 0.00
176: Elkhills, eroded-----	75	Poor source Thickest layer not a source due to fines or thin layer Bottom layer not a source	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.05	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.00 0.46
177: Chanac-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content SAR < 4	0.00 0.92 0.99
Torriorhents, stratified-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% SAR > 13 EC > 8 dS/m Rock fragment content	0.00 0.00 0.00 0.82
178: Delano-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Good source	
Cuyama-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Rock fragment content Slope > 15% Hard to reclaim	0.00 0.00 0.18
Premier-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15%	0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
179: Torriorthents, stratified, eroded-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source SAR > 13 EC > 8 dS/m Slope > 15% Rock fragment content	0.00 0.00 0.00 0.82
Elkhills-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.41 0.46
184: Cuyama-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Fair source Rock fragment content Hard to reclaim	0.88 0.95
185: Brecken-----	40	Fair source Thickest layer a possible source Bottom layer a possible source	0.14 0.14	Fair source Thickest layer a possible source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.00 0.00
Cuyama-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.41 0.95
Pleito-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.32
186: Cuyama-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Rock fragment content Hard to reclaim Slope 12 to 15%	0.00 0.18 0.37

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
187: Trigo-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions < 75%	0.00 0.00 1.00
Chanac-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Rock fragment content	0.00 0.92
188: Tweedy-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.94
Tollhouse-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.00
Locobill-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.50 0.78
189: Tweedy-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.76
Walong-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.28

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192: Chanac-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.95
Pleito-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Rock fragment content	0.00 0.41
193: Chanac-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Fair source Rock fragment content	0.92
Pleito-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Fair source Rock fragment content Hard to reclaim	0.41 0.61
194: Pleito-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Rock fragment content Clay 27 to 40% Slope 8 to 12%	0.32 0.76 0.96
Delvar-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Clay > 40% Rock fragment content Slope 8 to 12% EC 4 to 8 dS/m	0.00 0.50 0.96 0.97
195: Centerville-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Thickest layer not a source Bottom layer a possible source	0.00 0.00	Poor source Clay > 40% Slope > 15%	0.00 0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
195: Delvar-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Clay > 40% Slope > 15% Rock fragment content	0.00 0.00 0.50
196: Exeter-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Fair source Depth to pan 20 to 40"	0.16
197: Nord-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.01 0.03	Fair source Rock fragment content	0.82
198: Centerville-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Clay > 40%	0.00
Delvar-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Rock fragment content Clay 27 to 40%	0.50 0.76
199: Exeter-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Good source Depth to pan > 40" Rock fragment content	0.99 0.99

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
200: Urban land-----	60	Not rated		Not rated		Not rated	
Delano-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
201: Fleito-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Rock fragment content	0.00 0.32
Chanac-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Raggulch-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.76
205: Fleito-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.32 0.61
Trigo-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions < 75%	0.00 0.00 1.00
Chanac-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Rock fragment content	0.00 0.92

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
207: Whitewolf-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.08 0.82	Poor source Sand fractions > 85% Rock fragment content	0.00 0.59
209: Whitewolf-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.08 0.82	Fair source Sand fractions 75-85%	0.25
210: Kernfork-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.02 0.04	Fair source Saturation from 1 to 3' Rock fragment content SAR 4 to 13 Sand fractions < 75%	0.53 0.95 0.98 1.00
212: Kernfork-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.04	Fair source Rock fragment content SAR 4 to 13	0.95 0.98
213: Calicreek-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.46 0.51	Poor source Sand fractions > 85% Rock fragment content	0.00 0.41
215: Kelval-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.00 0.01	Good source	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
216: Inyo-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
Riverwash-----	25	Not rated		Not rated		Not rated	
217: Whitewolf-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Sand fractions 75-85% Rock fragment content	0.01 0.24
Riverwash-----	25	Not rated		Not rated		Not rated	
220: Aquents-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.01 0.02	Poor source Saturation < 1' depth Sand fractions 75-85%	0.00 0.28
Aquolls-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.07	Poor source Saturation < 1' depth Sand fractions 75-85% SAR 4 to 13	0.00 0.01 0.70
Riverwash-----	15	Not rated		Not rated		Not rated	
222: Kelval-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Thickest layer not a source Bottom layer a possible source	0.00 0.00	Good source	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
223: Kelval-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.07	Good source	
224: Inyo-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
238: Cinco-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.08 0.08	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Hard to reclaim	0.00 0.01 0.18 0.95
240: Dune land-----	85	Not rated		Not rated		Not rated	
241: Inyo-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
242: Inyo-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Slope 8 to 12% Hard to reclaim	0.01 0.01 0.84 0.95

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
243: Kernfork, saline-sodic, occasionally flooded---	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Saturation < 1' depth SAR > 13 EC 4 to 8 dS/m	0.00 0.00 0.88
245: Chollawell-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.57	Poor source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.00 0.06 0.12
246: Chollawell-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.13	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.12 0.84
247: Inyo-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Slope 8 to 12% Hard to reclaim	0.01 0.01 0.84 0.95
Tips-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15%	0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
249: Hoffman-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.72
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
250: Hoffman-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.72
Tips-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.09
Pilotwell-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.06 0.94
253: Sorrell-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.16 0.68
Martee-----	25	Poor source Thickest layer not a source due to fines or thin layer Bottom layer not a source	0.00 0.00	Poor source Thickest layer not a source Bottom layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	20	Not rated		Not rated		Not rated	
254: Martee-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	25	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255: Kernfork, occasionally flooded-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Good source	
Kernfork, frequently flooded-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.03 0.10	Poor source Saturation < 1' depth Sand fractions 75-85%	0.00 0.14
257: Hoffman-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.72
Tips-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.09
Rock outcrop-----	15	Not rated		Not rated		Not rated	
259: Cowspring-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.38
260: Cowspring-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.38

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260: Tips-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
261: Blasingame-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.06 0.98
Arujo-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Cieneba-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.82
264: Arujo-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Walong-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.24 0.28
Tunis-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
265: Arujo-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Slope 8 to 12% Rock fragment content	0.84 0.92
266: Tunis-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41
Rock outcrop-----	30	Not rated		Not rated		Not rated	
267: Cieneba-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.68
Vista-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.38 0.59
Rock outcrop-----	15	Not rated		Not rated		Not rated	
268: Tunis-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.82
Tollhouse-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.92

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
268: Sorrell-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.68 0.82
269: Tollhouse-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Sorrell-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.38 0.68
Rock outcrop-----	15	Not rated		Not rated		Not rated	
270: Locobill-----	35	Poor source Thickest layer not a source due to fines or thin layer Bottom layer not a source	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.78
Backcanyon-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Calcium carbonates 15-40% Sand fractions < 75%	0.00 0.00 0.00 0.92 1.00
Sesame-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.68

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
271: Walong-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.52 0.95
Tunis-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.50
Rock outcrop-----	15	Not rated		Not rated		Not rated	
272: Tollhouse-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41
Edmundston-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.68 0.88
Sorrell-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.68 0.98
274: Sesame-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.22

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274:							
Tweedy-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.22 0.76
Rock outcrop-----	15	Not rated		Not rated		Not rated	
275:							
Strahle-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.08
Sesame-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.22
Tweedy-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.28 0.76
276:							
Tips-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Hoffman-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.98
Cinco-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.10 0.10	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Hard to reclaim	0.00 0.01 0.28 0.95

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
277: Feethill-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.52
Vista-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.06 0.92
Walong-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.42
279: Strahle-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Sesame-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.72
280: Tollhouse-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280: Martee-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.06
Edmundston-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.00 0.88
281: Havala-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Fair source Rock fragment content Slope 8 to 12%	0.32 0.96
Walong-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.48
Kernfork-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.02 0.05	Fair source Saturation from 1 to 3' Rock fragment content Sand fractions < 75%	0.53 0.95 1.00
282: Tollhouse-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.92
Sesame-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.32

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Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
282: Friant-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.01
283: Tollhouse-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Martee-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	15	Not rated		Not rated		Not rated	
284: Tollhouse-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.95
Rock outcrop-----	15	Not rated		Not rated		Not rated	
285: Inyo-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
Kelval-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.01 0.10	Good source Sand fractions < 75%	0.99

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
286: Tollhouse-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41
Tweedy-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.68 0.76
Locobill-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.50 0.78
287: Tweedy-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.94
Strahle-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
288: Sorrell-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.16 0.68
Arujo-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.00 0.03	Poor source Slope > 15% Rock fragment content	0.00 0.95
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
289:							
Erskine-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.76
Hyte-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Rock outcrop-----	20	Not rated		Not rated		Not rated	
294:							
Edmundston-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.68 0.88
Tweedy-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.62 0.76
Walong-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.04	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.28
295:							
Tweedy-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.32 0.76
Tunis-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.41

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
295: Rankor-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.88
296: Arujo-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Walong-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.98
Tunis-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.50
297: Walong-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.62
Blasingame-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.68 0.98
Rock outcrop-----	15	Not rated		Not rated		Not rated	
298: Arujo-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
298: Feethill-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.94
Sesame-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.42
299: Arujo-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Feethill-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.94
Sesame-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40"	0.00 0.42
300: Stineway-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20"	0.00 0.00 0.00
Kiscove-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
301: Feethill-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.12 0.82
Vista-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.22 0.92
Rock outcrop-----	15	Not rated		Not rated		Not rated	
302: Feethill-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.32 0.76
Cibo-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Clay 27 to 40% Depth to bedrock 20 to 40"	0.00 0.08 0.16
Cieneba-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.82
303: Steuber-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.04	Fair source Rock fragment content	0.41
304: Cibo-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Clay > 40% Depth to bedrock 20 to 40"	0.00 0.00 0.78

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
305: Chanac-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.92
Pleito-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.41
Premier-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15%	0.00
306: Xerofluvents, occasionally flooded---	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.37 0.61	Poor source Sand fractions > 85% Rock fragment content	0.00 0.41
Riverwash-----	25	Not rated		Not rated		Not rated	
307: Typic Xeropsamments-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.08 0.82	Poor source Sand fractions > 85%	0.00
308: Rankor-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.88

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
308: Edmundston-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.68 0.88
Tweedy-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.98
309: Rankor-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.88
Edmundston-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Rock fragment content Hard to reclaim	0.00 0.68 0.88
Tweedy-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.98
310: Stineway-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15%	0.00 0.00 0.00
Kiscove-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
311: Xerorthents-----	50	Poor source Thickest layer not a source due to fines or thin layer Bottom layer not a source	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
312: Havala-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Fair source Rock fragment content	0.41
313: Dumps-----	80	Not rated		Not rated		Not rated	
314: Premier-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Poor source Slope > 15%	0.00
Haplodurids-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.01 0.02	Poor source Slope > 15% Depth to pan 20 to 40"	0.00 0.16
315: Premier-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.02	Good source	
Haplodurids-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.01 0.02	Fair source Depth to pan 20 to 40"	0.16

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
316: Premier-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.05	Good source	
317: Premier-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.02 0.05	Good source	
320: Southlake-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.08 0.96
325: Walong-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.04	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.38
326: Walong-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.38
330: Kernville-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
330: Faycreek-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	20	Not rated		Not rated		Not rated	
350: Southlake, stony-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.82 0.84
Goodale-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Rock fragment content Hard to reclaim Sand fractions 75-85% Slope 8 to 12%	0.00 0.08 0.09 0.84
352: Goodale-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Hard to reclaim Rock fragment content Sand fractions 75-85%	0.00 0.00 0.09
Riverwash-----	20	Not rated		Not rated		Not rated	
360: Kernville, bouldery-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Rock fragment content Depth to bedrock < 20" Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.06
Hogeye-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.48 0.76

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
360: Southlake-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.82 0.84
380: Delvar-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Clay 27 to 40%	0.00 0.50 0.76
Pleito-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content	0.00 0.32
407: Centerville-----	90	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source SAR > 13 Clay > 40%	0.00 0.00
410: Stineway-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15%	0.00 0.00 0.00
Kiscove-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Urban land-----	15	Not rated		Not rated		Not rated	
411: Delvar-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Rock fragment content Clay 27 to 40% SAR 4 to 13	0.50 0.76 0.98

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412: Chollawell-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.03 0.10	Poor source Rock fragment content Slope 8 to 12% Hard to reclaim	0.00 0.84 0.88
Urban land-----	15	Not rated		Not rated		Not rated	
417: Southlake-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Thickest layer not a source Bottom layer a possible source	0.00 0.00	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.82 0.84
Southlake, gravelly----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.00 0.84
Goodale-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Rock fragment content Hard to reclaim Sand fractions 75-85% Slope 8 to 12%	0.00 0.08 0.09 0.84
Urban land-----	15	Not rated		Not rated		Not rated	
420: Southlake-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Hard to reclaim Rock fragment content Slope 8 to 12%	0.00 0.00 0.96
Urban land-----	15	Not rated		Not rated		Not rated	
422: Kelval-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.01	Good source Sand fractions < 75%	0.99
Urban land-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
423: Auberry-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15%	0.00
Crouch-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.08 0.08	Poor source Slope > 15% Rock fragment content	0.00 0.82
Rock outcrop-----	15	Not rated		Not rated		Not rated	
424: Inyo-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Sand fractions 75-85% Rock fragment content	0.01 0.88
Urban land-----	15	Not rated		Not rated		Not rated	
430: Friant-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.01
Rock outcrop-----	15	Not rated		Not rated		Not rated	
432: Alberti, gravelly-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Clay > 40% Slope > 15% Rock fragment content	0.00 0.00 0.00 0.02
Urban land-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
441: Inyo-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
Urban land-----	15	Not rated		Not rated		Not rated	
442: Inyo-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Slope 12 to 15% Hard to reclaim	0.01 0.01 0.37 0.95
Urban land-----	15	Not rated		Not rated		Not rated	
445: Chollawell-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.57	Poor source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.00 0.06 0.16
Urban land-----	15	Not rated		Not rated		Not rated	
450: Southlake, stony-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.82 0.84
Goodale-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Rock fragment content Hard to reclaim Sand fractions 75-85% Slope 8 to 12%	0.00 0.08 0.09 0.84
Urban land-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
460: Kernville, bouldery-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Rock fragment content Depth to bedrock < 20" Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.06
Hogeye-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.48 0.76
Southlake-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.82 0.84
Urban land-----	15	Not rated		Not rated		Not rated	
465: Arujo-----	65	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Slope 8 to 12% Rock fragment content	0.84 0.92
Urban land-----	15	Not rated		Not rated		Not rated	
485: Inyo-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim	0.01 0.01 0.95
Kelval-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.04 0.10	Good source	
Urban land-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
488:							
Tweedy-----	35	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer a possible source	0.03	Rock fragment content	0.76
						Depth to bedrock 20 to 40"	0.94
Tollhouse-----	20	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Depth to bedrock < 20"	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer a possible source	0.05	Slope > 15%	0.00
						Rock fragment content	0.00
Locobill-----	15	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Bottom layer not a source	0.00	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer a possible source	0.03	Rock fragment content	0.50
						Depth to bedrock 20 to 40"	0.78
Urban land-----	15	Not rated		Not rated		Not rated	
501:							
Hyte-----	35	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Bottom layer a possible source	0.03	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer a possible source	0.03	Depth to bedrock < 20"	0.00
						Rock fragment content	0.00
Erskine-----	25	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer a possible source	0.04	Depth to bedrock < 20"	0.00
						Rock fragment content	0.76
Sorrell-----	25	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Bottom layer a possible source	0.06	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Thickest layer a possible source	0.06	Rock fragment content	0.68
						Depth to bedrock 20 to 40"	0.82
503:							
Tips-----	40	Poor source		Fair source		Poor source	
		Bottom layer not a source	0.00	Thickest layer not a source	0.00	Slope > 15%	0.00
		Thickest layer not a source due to fines or thin layer	0.00	Bottom layer a possible source	0.05	Depth to bedrock < 20"	0.00
						Rock fragment content	0.24

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
503: Erskine-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.59
Rock outcrop-----	15	Not rated		Not rated		Not rated	
505: Chollawell-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.13	Poor source Rock fragment content Hard to reclaim Slope 12 to 15%	0.00 0.12 0.16
507: Xyno-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Canebrake-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Pilotwell-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.06 0.94
508: Pilotwell-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.06 0.26

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
508: Xyno-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.06 0.08
Rock outcrop-----	15	Not rated		Not rated		Not rated	
509: Xyno-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.06
Faycreek-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	15	Not rated		Not rated		Not rated	
510: Xyno-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.04 0.06
Canebrake-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Pilotwell, bouldery----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible	0.12 0.12	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.06 0.28

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
512: Chollawell, cobbly substratum-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.03 0.10	Poor source Rock fragment content Slope 8 to 12% Hard to reclaim	0.00 0.84 0.88
Chollawell, gravelly----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.13	Poor source Rock fragment content Hard to reclaim	0.00 0.12
514: Chollawell-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.06 0.13	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.12 0.84
Inyo-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.14	Fair source Rock fragment content Sand fractions 75-85% Slope 8 to 12% Hard to reclaim	0.01 0.01 0.84 0.95
515: Scodie-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Canebrake-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
515: Xyno-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.06
516: Xyno-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.06
Rock outcrop-----	20	Not rated		Not rated		Not rated	
Canebrake-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.04 0.08
517: Southlake-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Thickest layer not a source Bottom layer a possible source	0.00 0.00	Fair source Rock fragment content Slope 8 to 12% Hard to reclaim	0.68 0.84 0.95
Southlake, gravelly-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Rock fragment content Hard to reclaim Slope 8 to 12%	0.00 0.00 0.84
Goodale-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.03 0.03	Poor source Rock fragment content Hard to reclaim Sand fractions 75-85% Slope 8 to 12%	0.00 0.08 0.09 0.84

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
518: Backcanyon-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.05	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions < 75%	0.00 0.00 0.00 1.00
Rock outcrop-----	30	Not rated		Not rated		Not rated	
520: Kernville-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Hogeye-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.48 0.76
Rock outcrop-----	15	Not rated		Not rated		Not rated	
523: Kernville, bouldery----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.06
Faycreek-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.06
Rock outcrop-----	15	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
525: Hungrygulch-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.05 0.05	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.32 0.95
Kernville-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.06
Hogeye-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.48 0.76
530: Alberti, cobbly-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Clay > 40% Rock fragment content	0.00 0.00 0.00 0.02
Alberti, gravelly-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Clay > 40% Rock fragment content	0.00 0.00 0.00 0.02
531: Tweedy-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.76 0.84

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
531: Erskine-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.59
Alberti, gravelly-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Clay > 40% Rock fragment content	0.00 0.00 0.00 0.02
532: Alberti, gravelly-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Clay > 40% Slope > 15% Rock fragment content	0.00 0.00 0.00 0.02
540: Canebrake-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Lachim-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.13	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.01 0.04 0.32
541: Canebrake-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
541: Lachim-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.32
Rock outcrop-----	15	Not rated		Not rated		Not rated	
543: Wortley-----	45	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.06	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.50
Indiano-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.42
Rock outcrop-----	15	Not rated		Not rated		Not rated	
544: Xeric Haplargids-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer not a source Thickest layer a possible source	0.00 0.10	Poor source Hard to reclaim Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.14
Lithic Xeric Haplargids	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Rock fragment content Depth to bedrock < 20" Slope > 15%	0.00 0.00 0.00
545: Sacatar-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.72 0.99

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
545: Canebrake-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
549: Tunawee-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.09 0.12
Rock outcrop-----	25	Not rated		Not rated		Not rated	
550: Kenypeak-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.06	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.98
Rubble land-----	20	Not rated		Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated		Not rated	
551: Tunawee-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.09 0.68
552: Kenypeak-----	60	Fair source Thickest layer not a source due to fines or thin layer Bottom layer a possible source	0.00 0.14	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Poor source Slope > 15% Rock fragment content Depth to bedrock < 20" Sand fractions 75-85%	0.00 0.00 0.00 0.98

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
552: Torriorthentic Haploxerolls-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.72
553: Tibbcreek-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.00
554: Deerspring-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Fair source Rock fragment content	0.82
555: Cumulic Endoaquolls, frigid-----	75	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.06	Poor source Saturation < 1' depth	0.00
556: Toll-----	80	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.14 0.54	Poor source Sand fractions > 85% Rock fragment content Hard to reclaim	0.00 0.59 0.97
557: Scodie-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
557: Canebrake-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Deadfoot-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.13 0.13	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.01 0.04 0.48
558: Indiano-----	60	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.42
Wortley-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.06	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.59
560: Sacatar-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.72 0.99
Wortley-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.06	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.82
Calpine-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.12	Fair source Rock fragment content Slope 8 to 12%	0.82 0.84

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
561: Scodie-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.04
Sacatar-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.06	Poor source Slope > 15% Depth to bedrock 20 to 40" Rock fragment content	0.00 0.72 0.99
Canebrake-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.04
562: Deerspring, partially drained-----	85	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.02	Fair source SAR 4 to 13 Rock fragment content	0.78 0.82
570: Deadfoot-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.04 0.13	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.01 0.04 0.16
Scodie-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.04 0.08
Rock outcrop-----	20	Not rated		Not rated		Not rated	

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
590: Xyno-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.06
Canebrake-----	25	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Pilotwell-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.12 0.12	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Depth to bedrock 20 to 40"	0.00 0.00 0.06 0.32
591: Xyno-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.12	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.01 0.06
Canebrake-----	20	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.13	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content Sand fractions 75-85%	0.00 0.00 0.00 0.04
Rock outcrop-----	15	Not rated		Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated		Not rated	
610: Hyte-----	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
610: Erskine-----	35	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.03	Poor source Depth to bedrock < 20" Slope > 15% Rock fragment content	0.00 0.00 0.59
650: Stineway-----	40	Poor source Thickest layer not a source due to fines or thin layer Bottom layer not a source	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Kiscove-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Slope > 15% Depth to bedrock < 20" Rock fragment content	0.00 0.00 0.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
3250: Jawbone-----	50	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer not a source Bottom layer a possible source	0.00 0.10	Poor source Slope > 15% Depth to bedrock < 20" Sand fractions 75-85% Rock fragment content	0.00 0.00 0.08 0.82
Jawbone, moderately deep	40	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.39 0.39	Poor source Slope > 15% Sand fractions > 85% Rock fragment content Depth to bedrock 20 to 40"	0.00 0.00 0.18 0.72
4432: Koehn, occasionally flooded-----	70	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.38 0.38	Poor source Sand fractions > 85%	0.00

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
4432: Koehn, frequently flooded-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.38 0.38	Poor source Sand fractions > 85%	0.00
5201: Wingap-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.10 0.11	Poor source Slope > 15% Rock fragment content Sand fractions 75-85% Hard to reclaim	0.00 0.04 0.56 0.74
Pinyonpeak-----	30	Fair source Thickest layer not a source due to fines or thin layer Bottom layer a possible source	0.00 0.62	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.78
5210: Grandora-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.38 0.47	Poor source Slope > 15% Sand fractions > 85% Rock fragment content	0.00 0.00 0.88
Grandora, warm-----	30	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.08 0.47	Poor source Slope > 15% Sand fractions 75-85% Rock fragment content	0.00 0.22 0.88
Pinyonpeak-----	30	Fair source Thickest layer not a source due to fines or thin layer Bottom layer a possible source	0.00 0.62	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.78

Table 14a.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of gravel		Potential as source of sand		Potential as source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6001: Goldpeak-----	55	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Bottom layer a possible source Thickest layer a possible source	0.06 0.09	Fair source Rock fragment content	0.18
Pinyonpeak-----	15	Fair source Thickest layer not a source due to fines or thin layer Bottom layer a possible source	0.00 0.62	Poor source Bottom layer not a source Thickest layer not a source	0.00 0.00	Poor source Depth to bedrock < 20" Rock fragment content Slope > 15% Sand fractions 75-85%	0.00 0.00 0.00 0.78
Wingap-----	15	Poor source Bottom layer not a source Thickest layer not a source due to fines or thin layer	0.00 0.00	Fair source Thickest layer a possible source Bottom layer a possible source	0.10 0.11	Fair source Rock fragment content Sand fractions 75-85% Hard to reclaim Slope 8 to 12%	0.04 0.56 0.74 0.84
W: Water-----	100	Not rated		Not rated		Not rated	

The interpretation for gravel evaluates the content of coarse fragments more than .2 inch in size in the bottom or thickest layer of the soil.

The interpretation for sand evaluates the amount of sand and fine gravel in the thickest or bottom layer of the soil. Organic soil layers with the Unified engineering class for peat (PT) also are evaluated.

The interpretation for topsoil evaluates the following soil properties at various depths: calcium carbonates, clay content, bulk density, sand content, soil wetness, coarse fragments .2 inch to more than 3 inches in size, content of organic matter (OM), sodium content expressed as the sodium adsorption ratio (SAR), salinity expressed as dS/m of electrical conductivity (EC), depth to bedrock, slope, and pH.

Table 14b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The closer the value is to 0, the greater the limitation. A value of 0.00 indicates an absolute limitation based on the soil property criteria used to develop the interpretation. Values closer to 1.00 indicate lesser limitations. Features with a value of 1.00 have absolutely no limitation and are not shown in the table. Rating classes are determined by the most limiting value. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
115: Chanac-----	85	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25% LEP 3 to 9	0.08 0.88
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	Poor source OM < .5%	0.00	Good source	
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	Poor source OM < .5%	0.00	Good source	
138: Hesperia-----	85	Poor source OM < .5%	0.00	Good source	
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	Poor source Sand fractions > 85% WEG = 1 or 2 OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00 0.79	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
144: Calicreek-----	85	Poor source Sand fractions > 85% OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.44	Good source	
145: Delano-----	85	Poor source WEG = 1 or 2 OM < .5% pH between 4 and 6.5 above 40"	0.00 0.00 0.60	Fair source LEP 3 to 9	0.89
146: Delano-----	80	Poor source OM < .5%	0.00	Good source	
147: Chanac-----	80	Poor source OM < .5%	0.00	Fair source LEP 3 to 9	0.88
148: Delano-----	85	Poor source OM < .5%	0.00	Good source	
149: Delano-----	85	Poor source OM < .5%	0.00	Good source	
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	Good source		Fair source LEP 3 to 9	0.96
153: Chanac-----	85	Poor source OM < .5%	0.00	Fair source LEP 3 to 9	0.88

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
154: Dam-----	100	Not rated		Not rated	
166: Delano-----	60	Poor source OM < .5%	0.00	Good source	
Urban land-----	20	Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Poor source OM < .5% EC > 16 dS/m K factor .10 -.35 AWC 3 - 6" to 60" depth	0.00 0.00 0.68 0.98	Poor source AASHTO GIN > 8 (low soil strength) Slopes > 25% LEP 3 to 9	0.00 0.00 0.35
Calcic Haploxerepts-----	40	Poor source OM < .5% EC 8 to 16 dS/m K factor .10 -.35 SAR < 4	0.00 0.88 0.90 1.00	Poor source Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.75
176: Elkhills, eroded-----	75	Poor source OM < .5% SAR < 4	0.00 1.00	Poor source Slopes > 25%	0.00
177: Chanac-----	55	Fair source OM .5 to 1% SAR < 4	0.18 0.99	Poor source Slopes > 25% LEP 3 to 9	0.00 0.99
Torriorthents, stratified-----	25	Poor source OM < .5% SAR > 13 EC 8 to 16 dS/m AWC 3 - 6" to 60" depth	0.00 0.00 0.50 0.95	Poor source Slopes > 25% LEP 3 to 9	0.00 0.70

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
178:					
Delano-----	40	Poor source OM < .5% K factor .10 -.35	0.00 0.90	Fair source LEP 3 to 9	0.99
Cuyama-----	25	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25%	0.82
Premier-----	15	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25%	0.08
179:					
Torriorrhents, stratified, eroded	50	Poor source OM < .5% SAR > 13 EC 8 to 16 dS/m AWC 3 - 6" to 60" depth	0.00 0.00 0.50 0.95	Poor source Slopes > 25% LEP 3 to 9	0.00 0.70
Elkhills-----	30	Fair source OM .5 to 1%	0.50	Poor source Slopes > 25%	0.00
184:					
Cuyama-----	85	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.99	Good source	
185:					
Brecken-----	40	Poor source OM < .5% 25 to 50% fragments 3-10" 5 to 15% fragments >10"	0.00 0.78 0.94	Poor source Slopes > 25% 25 to 50% fragments >3" LEP 3 to 9	0.00 0.68 0.97
Cuyama-----	20	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25%	0.08
Pleito-----	20	Good source		Poor source Slopes > 25% AASHTO GIN 5 to 8 (soil strength) LEP 3 to 9	0.00 0.22 0.75

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
186: Cuyama-----	85	Poor source OM < .5%	0.00	Good source	
187: Trigo-----	50	Poor source AWC < 3" to 60" depth OM < .5% K factor < .10	0.00 0.00 0.99	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Chanac-----	35	Fair source OM .5 to 1%	0.18	Poor source Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.99
188: Tweedy-----	50	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.94	Poor source Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.50 0.90
Tollhouse-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
Locobill-----	15	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.45 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
189: Tweedy-----	40	Fair source OM .5 to 1%	0.50	Poor source Slopes > 25% Depth to bedrock 40 to 60" LEP 3 to 9	0.00 0.00 0.75
Walong-----	35	Poor source AWC < 3" to 60" depth	0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
192:					
Chanac-----	55	Fair source OM .5 to 1% K factor < .10	0.18 0.99	Fair source Slopes 15 to 25%	0.82
Pleito-----	30	Good source		Fair source LEP 3 to 9 Slopes 15 to 25%	0.81 0.82
193:					
Chanac-----	50	Fair source OM .5 to 1%	0.18	Fair source LEP 3 to 9	0.84
Pleito-----	30	Good source		Fair source LEP 3 to 9	0.75
194:					
Pleito-----	40	Fair source Clay 27 to 40%	0.76	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.75
Delvar-----	40	Poor source Clay > 40% SAR < 4	0.00 1.00	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.47
195:					
Centerville-----	60	Poor source Clay > 40% OM .5 to 1%	0.00 0.32	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9 Slopes 15 to 25%	0.00 0.43 0.50
Delvar-----	20	Poor source Clay > 40% SAR < 4	0.00 1.00	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9 Slopes 15 to 25%	0.00 0.45 0.50
196:					
Exeter-----	75	Poor source OM < .5% K factor .10 -.35 Depth to pan 20 to 40" AWC 3 - 6" to 60" depth SAR < 4	0.00 0.06 0.16 0.21 1.00	Poor source Depth to pan < 40" LEP 3 to 9	0.00 0.75

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
197: Nord-----	85	Poor source OM < .5%	0.00	Good source	
198: Centerville-----	65	Poor source Clay > 40% OM .5 to 1%	0.00 0.32	Fair source LEP 3 to 9	0.59
Delvar-----	20	Fair source Clay 27 to 40%	0.76	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.47
199: Exeter-----	80	Poor source OM < .5% AWC 3 - 6" to 60" depth Depth to pan > 40"	0.00 0.92 0.99	Poor source Depth to pan < 40" LEP 3 to 9	0.00 0.93
200: Urban land-----	60	Not rated		Not rated	
Delano-----	25	Poor source OM < .5%	0.00	Good source	
201: Pleito-----	30	Good source		Fair source LEP 3 to 9 Slopes 15 to 25%	0.81 0.82
Chanac-----	30	Fair source OM .5 to 1%	0.18	Poor source AASHTO GIN > 8 (low soil strength) Slopes 15 to 25% LEP 3 to 9	0.00 0.82 0.82
Raggulch-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% SAR < 4	0.00 0.02 1.00	Poor source Depth to bedrock < 40" LEP 3 to 9 Slopes 15 to 25%	0.00 0.75 0.82

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
205: Pleito-----	40	Good source		Poor source Slopes > 25% LEP 3 to 9	0.00 0.75
Trigo-----	25	Poor source AWC < 3" to 60" depth OM < .5% K factor < .10	0.00 0.00 0.99	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Chanac-----	20	Fair source OM .5 to 1%	0.18	Poor source Slopes > 25% AASHTO GIN 5 to 8 (soil strength) LEP 3 to 9	0.00 0.22 0.99
207: Whitewolf-----	85	Poor source Sand fractions > 85% WEG = 1 or 2 OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00 0.16	Good source	
209: Whitewolf-----	85	Poor source WEG = 1 or 2 AWC 3 - 6" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.25 0.50 0.56	Good source	
210: Kernfork-----	85	Fair source SAR from 4 to 13	0.97	Fair source Saturation from 1 to 3'	0.53
212: Kernfork-----	80	Fair source SAR from 4 to 13	0.97	Good source	
213: Calicreek-----	85	Poor source Sand fractions > 85% WEG = 1 or 2 OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00 0.70	Good source	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
215: Kelval-----	85	Poor source WEG = 1 or 2 OM .5 to 1%	0.00 0.50	Good source	
216: Inyo-----	60	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
Riverwash-----	25	Not rated		Not rated	
217: Whitewolf-----	55	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.21	Good source	
Riverwash-----	25	Not rated		Not rated	
220: Aquents-----	40	Poor source OM < .5% SAR from 4 to 13 Sand fractions 75 to 85% K factor .10 -.35 AWC 3 - 6" to 60" depth	0.00 0.03 0.61 0.68 0.99	Poor source Saturation < 1' depth	0.00
Aquolls-----	35	Poor source OM < .5% SAR from 4 to 13 Sand fractions 75 to 85% K factor .10 -.35	0.00 0.03 0.03 0.68	Poor source Saturation < 1' depth	0.00
Riverwash-----	15	Not rated		Not rated	
222: Kelval-----	85	Fair source OM .5 to 1%	0.50	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
223: Kelval-----	70	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.06 0.50	Good source	
224: Inyo-----	85	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
238: Cinco-----	85	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.00 0.41	Poor source Slopes > 25%	0.00
240: Dune land-----	85	Not rated		Not rated	
241: Inyo-----	75	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
242: Inyo-----	80	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
243: Kernfork, saline-sodic, occasionally flooded-----	85	Poor source SAR > 13 EC 8 to 16 dS/m AWC 3 - 6" to 60" depth	0.00 0.88 0.88	Poor source Saturation < 1' depth	0.00

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Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
245: Chollawell-----	80	Fair source Sand fractions 75 to 85% AWC 3 - 6" to 60" depth OM .5 to 1%	0.15 0.45 0.50	Good source	
246: Chollawell-----	80	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.63	Good source	
247: Inyo-----	45	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
Tips-----	25	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Rock outcrop-----	15	Not rated		Not rated	
249: Hoffman-----	65	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
250: Hoffman-----	40	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Tips-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.02 0.19	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250: Pilotwell-----	15	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
253: Sorrell-----	40	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM .5 to 1% pH between 4 and 6.5 above 40"	0.00 0.00 0.50 0.84	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Martee-----	25	Poor source > 15% fragments >10" AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
254: Martee-----	60	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	25	Not rated		Not rated	
255: Kernfork, occasionally flooded----	45	Fair source AWC 3 - 6" to 60" depth	0.88	Good source	
Kernfork, frequently flooded-----	40	Fair source Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.30 0.75	Poor source Saturation < 1' depth	0.00
257: Hoffman-----	50	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

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Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
257:					
Tips-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.02 0.19	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
259:					
Cowspring-----	80	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
260:					
Cowspring-----	45	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Tips-----	20	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
261:					
Blasingame-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% 5 to 15% fragments >10"	0.00 0.50 0.82	Poor source Depth to bedrock < 40" Slopes > 25% LEP 3 to 9	0.00 0.00 0.95
Arujo-----	25	Good source		Poor source Slopes > 25% LEP 3 to 9 Depth to bedrock 40 to 60"	0.00 0.80 0.99
Cieneba-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1% pH between 4 and 6.5 above 40"	0.00 0.50 0.88	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
264: Arujo-----	35	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25% LEP 3 to 9 Depth to bedrock 40 to 60"	0.50 0.80 0.99
Walong-----	25	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.08
Tunis-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.08
265: Arujo-----	80	Poor source OM < .5%	0.00	Fair source LEP 3 to 9 Depth to bedrock 40 to 60"	0.80 0.99
266: Tunis-----	50	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	30	Not rated		Not rated	
267: Cieneba-----	40	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.82	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Vista-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
268: Tunis-----	35	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
268:					
Tollhouse-----	25	Poor source AWC < 3" to 60" depth 5 to 15% fragments >10"	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Sorrell-----	20	Poor source > 15% fragments >10" AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.01 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
269:					
Tollhouse-----	45	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Sorrell-----	25	Poor source AWC < 3" to 60" depth > 15% fragments >10"	0.00 0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
270:					
Locobill-----	35	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.20	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Backcanyon-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Calcium carbonates 15 to 40%	0.00 0.02 0.92	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Sesame-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.59	Poor source Depth to bedrock < 40" Slopes > 25% LEP 3 to 9	0.00 0.00 0.94
271:					
Walong-----	35	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.68	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
271:					
Tunis-----	30	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
272:					
Tollhouse-----	35	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Edmundston-----	30	Fair source AWC 3 - 6" to 60" depth	0.87	Fair source Slopes 15 to 25% Depth to bedrock 40 to 60"	0.18 0.98
Sorrell-----	20	Poor source > 15% fragments >10" AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.05 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
274:					
Sesame-----	40	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.02	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.93
Tweedy-----	20	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.11 0.50	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Rock outcrop-----	15	Not rated		Not rated	
275:					
Strahle-----	50	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25% LEP 3 to 9	0.00 0.00 0.75

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
275:					
Sesame-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.06	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Tweedy-----	15	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.30 0.50	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
276:					
Tips-----	35	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Hoffman-----	30	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.02	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Cinco-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.00 0.61	Poor source Slopes > 25%	0.00
277:					
Feethill-----	30	Fair source AWC 3 - 6" to 60" depth	0.73	Poor source Depth to bedrock < 40" Slopes > 25% LEP 3 to 9	0.00 0.00 0.75
Vista-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Walong-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
279:					
Strahle-----	50	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25% LEP 3 to 9	0.00 0.00 0.75
Rock outcrop-----	20	Not rated		Not rated	
Sesame-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.65	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.95
280:					
Tollhouse-----	40	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Martee-----	20	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Edmundston-----	15	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.29 0.50	Poor source Slopes > 25% Depth to bedrock 40 to 60"	0.00 0.12
281:					
Havala-----	55	Fair source OM .5 to 1%	0.02	Good source	
Walong-----	15	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.18	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Kernfork-----	15	Fair source OM .5 to 1%	0.50	Fair source Saturation from 1 to 3'	0.53

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
282:					
Tollhouse-----	35	Poor source AWC < 3" to 60" depth 5 to 15% fragments >10"	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Sesame-----	25	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.08 0.50	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.91
Friant-----	20	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM < .5%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
283:					
Tollhouse-----	35	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Martee-----	30	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
284:					
Tollhouse-----	70	Poor source AWC < 3" to 60" depth > 15% fragments >10"	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
285:					
Inyo-----	50	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
285: Kelval-----	40	Poor source WEG = 1 or 2 OM .5 to 1% AWC > 6" to 60" depth	0.00 0.50 1.00	Good source	
286: Tollhouse-----	40	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Tweedy-----	25	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.80	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.78
Locobill-----	20	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.45 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
287: Tweedy-----	40	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.94	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.90
Strahle-----	40	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
288: Sorrell-----	45	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM .5 to 1%	0.00 0.00 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Arujo-----	25	Good source		Poor source Slopes > 25% Depth to bedrock 40 to 60" LEP 3 to 9	0.00 0.39 0.92
Rock outcrop-----	15	Not rated		Not rated	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
289:					
Erskine-----	35	Poor source WEG = 1 or 2 AWC < 3" to 60" depth OM .5 to 1% 5 to 15% fragments >10"	0.00 0.00 0.08 0.98	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Hyte-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.08	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
294:					
Edmundston-----	45	Fair source AWC 3 - 6" to 60" depth	0.70	Poor source Slopes > 25% Depth to bedrock 40 to 60"	0.00 0.58
Tweedy-----	20	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.74	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Walong-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
295:					
Tweedy-----	30	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.17 0.92	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Tunis-----	30	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rankor-----	20	Good source		Poor source Slopes > 25% LEP 3 to 9 Depth to bedrock 40 to 60"	0.00 0.75 0.99

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296:					
Arujo-----	40	Good source		Poor source	
				Slopes > 25%	0.00
				Depth to bedrock 40 to 60"	0.74
				LEP 3 to 9	0.88
Walong-----	30	Fair source		Poor source	
		AWC 3 - 6" to 60" depth	0.03	Slopes > 25%	0.00
		OM .5 to 1%	0.18	Depth to bedrock < 40"	0.00
Tunis-----	15	Poor source		Poor source	
		AWC < 3" to 60" depth	0.00	Depth to bedrock < 40"	0.00
				Slopes > 25%	0.00
297:					
Walong-----	30	Poor source		Poor source	
		AWC 3 - 6" to 60" depth	0.00	Slopes > 25%	0.00
		OM .5 to 1%	0.18	Depth to bedrock < 40"	0.00
Blasingame-----	25	Poor source		Poor source	
		OM < .5%	0.00	Slopes > 25%	0.00
		AWC 3 - 6" to 60" depth	0.74	Depth to bedrock < 40"	0.00
		5 to 15% fragments >10"	0.82	LEP 3 to 9	0.50
Rock outcrop-----	15	Not rated		Not rated	
298:					
Arujo-----	35	Fair source		Poor source	
		OM .5 to 1%	0.02	Slopes > 25%	0.00
				LEP 3 to 9	0.77
				Depth to bedrock 40 to 60"	0.95
Feethill-----	25	Poor source		Poor source	
		OM < .5%	0.00	Depth to bedrock < 40"	0.00
				Slopes > 25%	0.00
				LEP 3 to 9	0.75
Sesame-----	20	Poor source		Poor source	
		OM < .5%	0.00	Depth to bedrock < 40"	0.00
		AWC 3 - 6" to 60" depth	0.43	Slopes > 25%	0.00
				LEP 3 to 9	0.75

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
299:					
Arujo-----	40	Fair source OM .5 to 1%	0.02	Poor source Slopes > 25% LEP 3 to 9 Depth to bedrock 40 to 60"	0.00 0.77 0.95
Feethill-----	25	Poor source OM < .5%	0.00	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Sesame-----	20	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.43	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
300:					
Stineway-----	50	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Kiscove-----	30	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
301:					
Feethill-----	35	Fair source AWC 3 - 6" to 60" depth	0.01	Poor source Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.50 0.75
Vista-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
Rock outcrop-----	15	Not rated		Not rated	
302:					
Feethill-----	30	Fair source AWC 3 - 6" to 60" depth	0.43	Poor source Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.08 0.75

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
302: Cibo-----	25	Fair source Clay 27 to 40% AWC 3 - 6" to 60" depth OM .5 to 1%	0.08 0.11 0.50	Poor source AASHTO GIN > 8 (low soil strength) Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.00 0.08 0.25
Cieneba-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.08
303: Steuber-----	80	Poor source OM < .5%	0.00	Good source	
304: Cibo-----	80	Poor source Clay > 40% AWC 3 - 6" to 60" depth	0.00 0.68	Poor source Slopes > 25% AASHTO GIN > 8 (low soil strength) Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.00 0.25
305: Chanac-----	45	Fair source OM .5 to 1%	0.18	Poor source Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.87
Pleito-----	20	Good source		Poor source Slopes > 25% AASHTO GIN 5 to 8 (soil strength) LEP 3 to 9	0.00 0.22 0.75
Premier-----	15	Poor source OM < .5%	0.00	Poor source Slopes > 25%	0.00
306: Xerofluvents, occasionally flooded	60	Poor source Sand fractions > 85% OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.91	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
306: Riverwash-----	25	Not rated		Not rated	
307: Typic Xeropsamments-----	80	Poor source Sand fractions > 85% WEG = 1 or 2 OM .5 to 1% AWC 3 - 6" to 60" depth	0.00 0.00 0.02 0.38	Good source	
308: Rankor-----	35	Good source		Fair source Depth to bedrock 40 to 60" LEP 3 to 9 Slopes 15 to 25%	0.23 0.75 0.82
Edmundston-----	25	Fair source AWC 3 - 6" to 60" depth	0.58	Fair source Depth to bedrock 40 to 60" Slopes 15 to 25%	0.39 0.50
Tweedy-----	20	Fair source OM .5 to 1%	0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.59 0.75
309: Rankor-----	35	Good source		Poor source Slopes > 25% Depth to bedrock 40 to 60" LEP 3 to 9	0.00 0.23 0.75
Edmundston-----	25	Fair source AWC 3 - 6" to 60" depth	0.58	Poor source Slopes > 25% Depth to bedrock 40 to 60"	0.00 0.39
Tweedy-----	20	Fair source OM .5 to 1%	0.50	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
310: Stineway-----	50	Poor source AWC < 3" to 60" depth 5 to 15% fragments >10"	0.00 0.95	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.88
Kiscove-----	30	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.12
311: Xerorthents-----	50	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.82	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	30	Not rated		Not rated	
312: Havala-----	85	Good source		Good source	
313: Dumps-----	80	Not rated		Not rated	
314: Premier-----	45	Poor source OM < .5%	0.00	Fair source Slopes 15 to 25%	0.59
Haplodurids-----	35	Poor source OM < .5% AWC 3 - 6" to 60" depth K factor .10 -.35 Depth to pan 20 to 40"	0.00 0.00 0.06 0.16	Poor source Depth to pan < 40" Slopes 15 to 25%	0.00 0.59
315: Premier-----	45	Poor source OM < .5%	0.00	Good source	
Haplodurids-----	40	Poor source OM < .5% AWC 3 - 6" to 60" depth K factor .10 -.35 Depth to pan 20 to 40"	0.00 0.00 0.06 0.16	Poor source Depth to pan < 40"	0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
316: Premier-----	85	Poor source OM < .5%	0.00	Good source	
317: Premier-----	85	Poor source OM < .5%	0.00	Good source	
320: Southlake-----	80	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.89	Good source	
325: Walong-----	75	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.12
326: Walong-----	80	Poor source AWC < 3" to 60" depth	0.00	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
330: Kernville-----	35	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Faycreek-----	25	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony-----	55	Poor source OM < .5% > 15% fragments >10"	0.00 0.00	Fair source LEP 3 to 9	0.75

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Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
350: Goodale-----	20	Poor source AWC < 3" to 60" depth OM < .5% > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.00 0.19	Good source	
352: Goodale-----	65	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10" Sand fractions 75 to 85% 25 to 50% fragments 3-10"	0.00 0.00 0.05 0.19 0.74	Fair source 25 to 50% fragments >3"	0.74
Riverwash-----	20	Not rated		Not rated	
360: Kernville, bouldery-----	40	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Hogeye-----	30	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.98	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Southlake-----	15	Poor source OM < .5% > 15% fragments >10"	0.00 0.00	Fair source LEP 3 to 9	0.75
380: Delvar-----	40	Fair source Clay 27 to 40%	0.76	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9 Slopes 15 to 25%	0.00 0.43 0.50
Pleito-----	40	Good source		Fair source AASHTO GIN 5 to 8 (soil strength) Slopes 15 to 25% LEP 3 to 9	0.22 0.50 0.75

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
407: Centerville-----	90	Poor source SAR > 13 Clay > 40% OM .5 to 1%	0.00 0.00 0.50	Poor source AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.25
410: Stineway-----	40	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.88
Kiscove-----	25	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.12
Urban land-----	15	Not rated		Not rated	
411: Delvar-----	85	Fair source Clay 27 to 40% SAR from 4 to 13	0.76 0.78	Fair source LEP 3 to 9	0.44
412: Chollawell-----	70	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.48 0.50	Good source	
Urban land-----	15	Not rated		Not rated	
417: Southlake-----	40	Poor source OM < .5% > 15% fragments >10"	0.00 0.00	Good source LEP < 3	0.99
Southlake, gravelly-----	20	Poor source OM < .5% 5 to 15% fragments >10" AWC 3 - 6" to 60" depth	0.00 0.85 0.90	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
417: Gooddale-----	15	Poor source AWC < 3" to 60" depth OM < .5% > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.00 0.19	Good source	
Urban land-----	15	Not rated		Not rated	
420: Southlake-----	65	Poor source OM < .5% AWC 3 - 6" to 60" depth 5 to 15% fragments >10"	0.00 0.89 0.98	Good source	
Urban land-----	15	Not rated		Not rated	
422: Kelval-----	70	Fair source OM .5 to 1%	0.50	Good source	
Urban land-----	15	Not rated		Not rated	
423: Auberry-----	45	Fair source OM .5 to 1% pH between 4 and 6.5 above 40" K factor < .10	0.50 0.72 0.99	Poor source Slopes > 25% Depth to bedrock 40 to 60"	0.00 0.95
Crouch-----	15	Fair source pH between 4 and 6.5 above 40"	0.84	Poor source Slopes > 25%	0.00
Rock outcrop-----	15	Not rated		Not rated	
424: Inyo-----	70	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
430:					
Friant-----	70	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM < .5%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
432:					
Alberti, gravelly-----	70	Poor source AWC < 3" to 60" depth OM < .5% Clay > 40%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" AASHTO GIN > 8 (low soil strength) LEP 3 to 9 Slopes 15 to 25%	0.00 0.00 0.25 0.82
Urban land-----	15	Not rated		Not rated	
441:					
Inyo-----	65	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
Urban land-----	15	Not rated		Not rated	
442:					
Inyo-----	70	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	
Urban land-----	15	Not rated		Not rated	
445:					
Chollawell-----	70	Fair source Sand fractions 75 to 85% AWC 3 - 6" to 60" depth OM .5 to 1%	0.15 0.45 0.50	Good source	
Urban land-----	15	Not rated		Not rated	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
450:					
Southlake, stony-----	45	Poor source OM < .5% > 15% fragments >10"	0.00 0.00	Fair source LEP 3 to 9	0.75
Goodale-----	15	Poor source > 15% fragments >10" AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.00 0.19	Good source	
Urban land-----	15	Not rated		Not rated	
460:					
Kernville, bouldery-----	30	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Hogeye-----	25	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.98	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Southlake-----	15	Poor source OM < .5% > 15% fragments >10"	0.00 0.00	Fair source LEP 3 to 9	0.75
Urban land-----	15	Not rated		Not rated	
465:					
Arujo-----	65	Poor source OM < .5%	0.00	Fair source LEP 3 to 9 Depth to bedrock 40 to 60"	0.80 0.99
Urban land-----	15	Not rated		Not rated	
485:					
Inyo-----	45	Poor source OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.02 0.09	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
485:					
Kelval-----	30	Poor source WEG = 1 or 2 OM .5 to 1% AWC > 6" to 60" depth	0.00 0.50 1.00	Good source	
Urban land-----	15	Not rated		Not rated	
488:					
Tweedy-----	35	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.94	Poor source Depth to bedrock < 40" Slopes 15 to 25% LEP 3 to 9	0.00 0.50 0.90
Tollhouse-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
Locobill-----	15	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.45 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
Urban land-----	15	Not rated		Not rated	
501:					
Hyte-----	35	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.08	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Erskine-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1% 5 to 15% fragments >10"	0.00 0.08 0.98	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Sorrell-----	25	Poor source > 15% fragments >10" AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.01 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
503: Tips-----	40	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.68	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Erskine-----	30	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM .5 to 1%	0.00 0.00 0.08	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
505: Chollawell-----	85	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.63	Good source	
507: Xyno-----	40	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Canebrake-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Pilotwell-----	15	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
508: Pilotwell-----	45	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00

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Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
508:					
Xyno-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.02 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
509:					
Xyno-----	40	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Faycreek-----	20	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% 5 to 15% fragments >10"	0.00 0.15 0.32	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
510:					
Xyno-----	35	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Canebrake-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Pilotwell, bouldery-----	15	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
512:					
Chollawell, cobbly substratum-----	60	Fair source AWC 3 - 6" to 60" depth OM .5 to 1%	0.48 0.50	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
512: Chollawell, gravelly-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.63	Good source	
514: Chollawell-----	50	Poor source OM < .5% AWC 3 - 6" to 60" depth	0.00 0.63	Good source	
Inyo-----	35	Poor source WEG = 1 or 2 OM < .5% Sand fractions 75 to 85% AWC 3 - 6" to 60" depth	0.00 0.00 0.02 0.10	Good source	
515: Scodie-----	35	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Canebrake-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Xyno-----	20	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
516: Xyno-----	45	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
516: Canebrake-----	20	Poor source AWC < 3" to 60" depth 5 to 15% fragments >10" OM .5 to 1% Sand fractions 75 to 85%	0.00 0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
517: Southlake-----	55	Poor source OM < .5% 5 to 15% fragments >10"	0.00 0.82	Good source LEP < 3	0.99
Southlake, gravelly-----	20	Poor source OM < .5% 5 to 15% fragments >10" AWC 3 - 6" to 60" depth	0.00 0.82 0.90	Good source	
Goodale-----	15	Poor source > 15% fragments >10" AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.00 0.19	Good source	
518: Backcanyon-----	50	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.02	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	30	Not rated		Not rated	
520: Kernville-----	50	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.08
Hogeye-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1% 5 to 15% fragments >10"	0.00 0.50 0.98	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.08
Rock outcrop-----	15	Not rated		Not rated	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
523:					
Kernville, bouldery-----	45	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Faycreek-----	20	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
525:					
Hungrygulch-----	35	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Kernville-----	30	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.15 0.50	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Hogeye-----	20	Poor source AWC < 3" to 60" depth OM < .5% 5 to 15% fragments >10"	0.00 0.00 0.98	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
530:					
Alberti, cobbly-----	45	Poor source AWC < 3" to 60" depth OM < .5% Clay > 40%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.00 0.25
Alberti, gravelly-----	40	Poor source AWC < 3" to 60" depth OM < .5% Clay > 40%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.00 0.25

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
531: Tweedy-----	40	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.50 0.96	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.77
Erskine-----	25	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM .5 to 1%	0.00 0.00 0.08	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Alberti, gravelly-----	20	Poor source AWC < 3" to 60" depth OM < .5% Clay > 40%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25% AASHTO GIN > 8 (low soil strength) LEP 3 to 9	0.00 0.00 0.00 0.25
532: Alberti, gravelly-----	80	Poor source AWC < 3" to 60" depth OM < .5% Clay > 40%	0.00 0.00 0.00	Poor source Depth to bedrock < 40" AASHTO GIN > 8 (low soil strength) LEP 3 to 9 Slopes 15 to 25%	0.00 0.00 0.25 0.82
540: Canebrake-----	60	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.10 0.50	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Lachim-----	20	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.10 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
541: Canebrake-----	45	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.10 0.50	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
541: Lachim-----	20	Poor source WEG = 1 or 2 AWC < 3" to 60" depth Sand fractions 75 to 85% OM .5 to 1%	0.00 0.00 0.01 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
543: Wortley-----	45	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Indiano-----	25	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.02 0.11	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Rock outcrop-----	15	Not rated		Not rated	
544: Xeric Haplargids-----	60	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.05 0.30	Poor source Depth to bedrock 40 to 60" Slopes 15 to 25%	0.00 0.88
Lithic Xeric Haplargids-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1% 25 to 50% fragments 3-10"	0.00 0.08 0.89	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.88
545: Sacatar-----	50	Poor source WEG = 1 or 2 AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.02 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Canebrake-----	30	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
549: Tunawee-----	60	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.19	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	25	Not rated		Not rated	
550: Kenypeak-----	40	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	
551: Tunawee-----	70	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85%	0.00 0.00 0.19	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
552: Kenypeak-----	60	Poor source AWC < 3" to 60" depth 5 to 15% fragments >10"	0.00 0.97	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Torriorthentic Haploxerolls-----	25	Poor source AWC < 3" to 60" depth	0.00	Poor source Slopes > 25" Depth to bedrock < 40"	0.00 0.00
553: Tibbcreek-----	75	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.18	Poor source Depth to bedrock < 40" LEP 3 to 9 Slopes 15 to 25%	0.00 0.75 0.82
554: Deerspring-----	85	Good source SAR < 4	1.00	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
555: Cumulic Endoaquolls, frigid-----	75	Good source		Poor source Saturation < 1' depth	0.00
556: Toll-----	80	Poor source Sand fractions > 85% WEG = 1 or 2 AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.00 0.05 0.50	Good source	
557: Scodie-----	35	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Canebrake-----	25	Poor source WEG = 1 or 2 AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Deadfoot-----	20	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85% OM .5 to 1%	0.00 0.00 0.10 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00
558: Indiano-----	60	Fair source OM .5 to 1% AWC 3 - 6" to 60" depth	0.02 0.11	Poor source Slopes > 25% Depth to bedrock < 40" LEP 3 to 9	0.00 0.00 0.75
Wortley-----	20	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
560:					
Sacatar-----	30	Poor source WEG = 1 or 2 AWC 3 - 6" to 60" depth OM .5 to 1%	0.00 0.10 0.50	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Wortley-----	30	Poor source AWC < 3" to 60" depth	0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Calpine-----	20	Fair source OM .5 to 1%	0.50	Good source	
561:					
Scodie-----	30	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85%	0.00 0.10	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Sacatar-----	25	Poor source WEG = 1 or 2 AWC 3 - 6" to 60" depth	0.00 0.10	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Canebrake-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
562:					
Deerspring, partially drained-----	85	Fair source SAR from 4 to 13	0.78	Good source	
570:					
Deadfoot-----	40	Poor source AWC < 3" to 60" depth > 15% fragments >10" Sand fractions 75 to 85% OM .5 to 1%	0.00 0.00 0.10 0.50	Poor source Slopes > 25% Depth to bedrock < 40"	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
570:					
Scodie-----	20	Poor source AWC < 3" to 60" depth Sand fractions 75 to 85% 5 to 15% fragments >10"	0.00 0.10 0.68	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
590:					
Xyno-----	35	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.02 0.15	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
Canebrake-----	25	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.59
Pilotwell-----	20	Poor source AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.15	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
591:					
Xyno-----	50	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.02 0.15	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Canebrake-----	20	Poor source AWC < 3" to 60" depth OM .5 to 1% Sand fractions 75 to 85%	0.00 0.08 0.10	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
599:					
Rock outcrop-----	80	Not rated		Not rated	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
610:					
Hyte-----	40	Poor source AWC < 3" to 60" depth OM .5 to 1%	0.00 0.08	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
Erskine-----	35	Poor source AWC < 3" to 60" depth > 15% fragments >10" OM .5 to 1%	0.00 0.00 0.08	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.82
650:					
Stineway-----	40	Poor source AWC < 3" to 60" depth OM .5 to 1% 5 to 15% fragments >10" 25 to 50% fragments 3-10"	0.00 0.08 0.82 0.94	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Kiscove-----	30	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Rock outcrop-----	15	Not rated		Not rated	
3250:					
Jawbone-----	50	Poor source WEG = 1 or 2 AWC < 3" to 60" depth OM < .5% Sand fractions 75 to 85%	0.00 0.00 0.00 0.18	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
Jawbone, moderately deep-----	40	Poor source Sand fractions > 85% WEG = 1 or 2 AWC < 3" to 60" depth OM < .5%	0.00 0.00 0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00
4432:					
Koehn, occasionally flooded-----	70	Poor source Sand fractions > 85% WEG = 1 or 2 OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00 0.15	Good source	

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
4432: Koehn, frequently flooded-----	15	Poor source Sand fractions > 85% WEG = 1 or 2 OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00 0.15	Good source	
5201: Wingap-----	55	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.26 0.92	Fair source Slopes 15 to 25% Depth to bedrock 40 to 60"	0.50 0.87
Pinyonpeak-----	30	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40"	0.00
5210: Grandora-----	30	Poor source Sand fractions > 85% OM < .5% AWC 3 - 6" to 60" depth	0.00 0.00 0.00	Poor source Slopes > 25%	0.00
Grandora, warm-----	30	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.00 0.50	Poor source Slopes > 25%	0.00
Pinyonpeak-----	30	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes 15 to 25%	0.00 0.50
6001: Goldpeak-----	55	Poor source OM < .5%	0.00	Good source	
Pinyonpeak-----	15	Poor source AWC < 3" to 60" depth OM < .5%	0.00 0.00	Poor source Depth to bedrock < 40" Slopes > 25%	0.00 0.00

Table 14b.--Construction Materials--Continued

Map symbol and component name	Pct. of map unit	Potential as source of reclamation material		Potential as source of roadfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value
6001: Wingap-----	15	Poor source OM < .5% AWC 3 - 6" to 60" depth Sand fractions 75 to 85%	0.00 0.26 0.92	Fair source Depth to bedrock 40 to 60"	0.87
W: Water-----	100	Not rated		Not rated	

The interpretation for reclamation material evaluates the following soil properties at variable depths in the soil: the amount of sand, clay, and fragments; the content of organic matter (OM); the wind erodibility group (WEG); the available water capacity (AWC); pH; salinity (EC); the amount of sodium (SAR); carbonates; and susceptibility of the soil to water erosion (K factor).

The interpretation for roadfill evaluates the following soil properties at variable depths in the soil: shrink-swell potential expressed as linear extensibility percent (LEP), depth to bedrock or a cemented pan, wetness, slope, soil strength expressed as AASHTO group index number (AASHTO GIN), and content of fragments.

Table 15.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The rating is based on the limitation with the highest value. Only the three highest value limitations are listed. There may be more limitations. Fine-earth fractions and coarse fragments are reported on a weight basis. An explanation of the rating criteria and of the abbreviations used in describing the limitations is given at the end of the table)

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
115: Chanac-----	85	Limitations Shrink-swell (LEP 3-6) Low piping potential	0.50 0.07	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.50
128: Pits-----	35	Not rated		Not rated	
Delano-----	30	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Oil waste land-----	15	Not rated		Not rated	
136: Hesperia-----	75	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.66
138: Hesperia-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
139: Riverwash-----	80	Not rated		Not rated	
143: Calicreek-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
144: Calicreek-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
145: Delano-----	85	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Permeability > 2"/hr (seepage)	1.00
146: Delano-----	80	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
147: Chanac-----	80	Limitations Shrink-swell (LEP 3-6) Low piping potential	0.50 0.07	Limitations Slopes 2 to 7% Permeability .6-2"/hr (some seepage)	0.66 0.50
148: Delano-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
149: Delano-----	85	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.91
150: Pits-----	50	Not rated		Not rated	
Dumps-----	40	Not rated		Not rated	
152: Pleito-----	85	No limitations		Limitations Permeability .6-2"/hr (some seepage) Slopes 2 to 7%	0.53 0.08
153: Chanac-----	85	Limitations High piping potential Shrink-swell (LEP 3-6)	0.54 0.50	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.50
154: Dam-----	100	Not rated		Not rated	

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
166: Delano-----	60	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
Urban land-----	20	Not rated		Not rated	
174: Xeric Torriorthents, silty-----	45	Limitations Shrink-swell (LEP >6) EC > 16 dS/m Very high piping potential	1.00 1.00 1.00	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.50
Calcic Haploxerepts-----	40	Limitations Very high piping potential Shrink-swell (LEP 3-6) EC 8-16 dS/m	1.00 0.50 0.12	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.50
176: Elkhills, eroded-----	75	No limitations Low piping potential	0.02	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
177: Chanac-----	55	Limitations Shrink-swell (LEP 3-6) Low piping potential	0.50 0.10	Limitations Slopes > 7%	1.00
Torriorthents, stratified-----	25	Limitations Very high piping potential EC 8-16 dS/m Shrink-swell (LEP 3-6)	1.00 0.50 0.50	Limitations Slopes > 7%	1.00
178: Delano-----	40	Limitations Shrink-swell (LEP 3-6) High piping potential	0.50 0.35	Limitations Slopes 2 to 7% Permeability .6-2"/hr (some seepage)	0.91 0.53
Cuyama-----	25	Limitations High piping potential	0.60	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
Premier-----	15	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
179: Torriorthents, stratified, eroded	50	Limitations Very high piping potential EC 8-16 dS/m Shrink-swell (LEP 3-6)	1.00 0.50 0.50	Limitations Slopes > 7%	1.00
Elkhills-----	30	No limitations		Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
184: Cuyama-----	85	Limitations High piping potential	0.60	Limitations Permeability .6-2"/hr (some seepage) Slopes 2 to 7%	0.53 0.08
185: Brecken-----	40	Limitations Fragments (>3") > 35%	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Cuyama-----	20	No limitations Low piping potential	0.02	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
Pleito-----	20	Limitations Shrink-swell (LEP 3-6) Low piping potential	0.50 0.02	Limitations Slopes > 7%	1.00
186: Cuyama-----	85	No limitations Low piping potential	0.10	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
187: Trigo-----	50	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Chanac-----	35	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7%	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
188:					
Tweedy-----	50	Limitations		Limitations	
		Thin layer	0.56	Slopes > 7%	1.00
		Shrink-swell (LEP 3-6)	0.50	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.56
Tollhouse-----	20	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock < 20"	1.00
Locobill-----	15	Limitations		Limitations	
		Thin layer	0.70	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.70
189:					
Tweedy-----	40	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Slopes > 7%	1.00
		Thin layer	0.46	Depth to bedrock from 20-60"	0.46
Walong-----	35	Limitations		Limitations	
		Thin layer	0.96	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.96
192:					
Chanac-----	55	Limitations		Limitations	
		High piping potential	0.38	Slopes > 7%	1.00
				Permeability .6-2"/hr (some seepage)	0.53
Pleito-----	30	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Slopes > 7%	1.00
				Permeability .6-2"/hr (some seepage)	0.53
193:					
Chanac-----	50	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Slopes 2 to 7%	0.02
Pleito-----	30	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Permeability .6-2"/hr (some seepage)	0.53
				Slopes 2 to 7%	0.02

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
194: Pleito-----	40	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7%	1.00
Delvar-----	40	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40%	1.00 0.50	Limitations Slopes > 7%	1.00
195: Centerville-----	60	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40% Thin layer	1.00 0.50 0.01	Limitations Slopes > 7%	1.00
Delvar-----	20	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40%	1.00 0.50	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.28
196: Exeter-----	75	Limitations Thin layer Shrink-swell (LEP 3-6)	0.96 0.50	Limitations Permeability > 2"/hr (seepage) Depth to pan 20 to 60" Slopes 2 to 7%	1.00 0.96 0.66
197: Nord-----	85	No limitations		Limitations Permeability .6-2"/hr (some seepage)	0.53
198: Centerville-----	65	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes 2 to 7%	0.66
Delvar-----	20	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40%	1.00 0.50	Limitations Slopes 2 to 7% Permeability .6-2"/hr (some seepage)	0.66 0.28
199: Exeter-----	80	Limitations Thin layer Shrink-swell (LEP 3-6)	0.56 0.50	Limitations Depth to pan 20 to 60" Permeability .6-2"/hr (some seepage)	0.56 0.53

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
200: Urban land-----	60	Not rated		Not rated	
Delano-----	25	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
201: Pleito-----	30	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7%	1.00
Chanac-----	30	Limitations High piping potential Shrink-swell (LEP 3-6)	0.94 0.50	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
Raggulch-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
205: Pleito-----	40	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7%	1.00
Trigo-----	25	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Chanac-----	20	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7%	1.00
207: Whitewolf-----	85	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
209: Whitewolf-----	85	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
210: Kernfork-----	85	Limitations Saturation < 2' depth Low piping potential	0.99 0.02	Limitations Permeability > 2"/hr (seepage)	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
212: Kernfork-----	80	Limitations Ponded (any duration) High piping potential	1.00 0.30	Limitations Permeability > 2"/hr (seepage)	1.00
213: Calicreek-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
215: Kelval-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
216: Inyo-----	60	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Riverwash-----	25	Not rated		Not rated	
217: Whitewolf-----	55	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Riverwash-----	25	Not rated		Not rated	
220: Aquents-----	40	Limitations Ponded (any duration) Saturation < 2' depth High piping potential	1.00 1.00 0.98	Limitations Permeability > 2"/hr (seepage)	1.00
Aquolls-----	35	Limitations Ponded (any duration) Saturation < 2' depth High piping potential	1.00 1.00 0.98	Limitations Permeability > 2"/hr (seepage)	1.00
Riverwash-----	15	Not rated		Not rated	
222: Kelval-----	85	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
223: Kelval-----	70	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
224: Inyo-----	85	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.31
238: Cinco-----	85	Limitations Seepage	0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
240: Dune land-----	85	Not rated		Not rated	
241: Inyo-----	75	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
242: Inyo-----	80	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
243: Kernfork, saline-sodic, occasionally flooded-----	85	Limitations Ponded (any duration) Saturation < 2' depth Very high piping potential	1.00 1.00 1.00	Limitations Permeability .6-2"/hr (some seepage)	0.53
245: Chollawell-----	80	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.08
246: Chollawell-----	80	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
247:					
Inyo-----	45	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Tips-----	25	Limitations Thin layer	1.00	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
249:					
Hoffman-----	65	Limitations Thin layer	0.74	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.74
Rock outcrop-----	20	Not rated		Not rated	
250:					
Hoffman-----	40	Limitations Thin layer	0.74	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.74
Tips-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Pilotwell-----	15	Limitations Seepage Thin layer	1.00 0.56	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.56
253:					
Sorrell-----	40	Limitations Thin layer Fragments (>3") 15-35%	0.99 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.99

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
253:					
Martee-----	25	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
		Fragments (>3") > 35%	1.00		
Rock outcrop-----	20	Not rated		Not rated	
254:					
Martee-----	60	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
		Fragments (>3") 15-35%	0.01		
Rock outcrop-----	25	Not rated		Not rated	
255:					
Kernfork, occasionally flooded----	45	Limitations		Limitations	
		Ponded (any duration)	1.00	Permeability .6-2"/hr (some seepage)	0.53
		Saturation between 2-4'	0.09		
Kernfork, frequently flooded-----	40	Limitations		Limitations	
		Ponded (any duration)	1.00	Permeability .6-2"/hr (some seepage)	0.53
		Saturation < 2' depth	1.00		
257:					
Hoffman-----	50	Limitations		Limitations	
		Thin layer	0.74	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.74
Tips-----	20	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
Rock outcrop-----	15	Not rated		Not rated	
259:					
Cowspring-----	80	Limitations		Limitations	
		Thin layer	0.93	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.93

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
260:					
Cowspring-----	45	Limitations Thin layer	0.93	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.93
Tips-----	20	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
261:					
Blasingame-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	0.99 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 0.99
Arujo-----	25	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.01
Cieneba-----	25	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
264:					
Arujo-----	35	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.01
Walong-----	25	Limitations Thin layer	0.96	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.96
Tunis-----	20	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20" Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
265:					
Arujo-----	80	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Slopes > 7%	1.00
		Thin layer	0.01	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.01
266:					
Tunis-----	50	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
				Depth to bedrock < 20"	1.00
				Permeability > 2"/hr (seepage)	1.00
Rock outcrop-----	30	Not rated		Not rated	
267:					
Cieneba-----	40	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Fragments (>3") 15-35%	0.01	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock < 20"	1.00
Vista-----	25	Limitations		Limitations	
		Thin layer	0.93	Slopes > 7%	1.00
				Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.93
Rock outcrop-----	15	Not rated		Not rated	
268:					
Tunis-----	35	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
				Depth to bedrock < 20"	1.00
				Permeability > 2"/hr (seepage)	1.00
Tollhouse-----	25	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Fragments (>3") 15-35%	0.05	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock < 20"	1.00
Sorrell-----	20	Limitations		Limitations	
		Thin layer	0.66	Slopes > 7%	1.00
		Fragments (>3") 15-35%	0.41	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.66

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
269:					
Tollhouse-----	45	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Sorrell-----	25	Limitations Thin layer Fragments (>3") 15-35%	0.93 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.93
Rock outcrop-----	15	Not rated		Not rated	
270:					
Locobill-----	35	Limitations Thin layer	0.70	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.70
Backcanyon-----	30	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Sesame-----	15	Limitations Thin layer Shrink-swell (LEP 3-6)	0.77 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.77
271:					
Walong-----	35	Limitations Thin layer	0.86	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.86
Tunis-----	30	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
272:					
Tollhouse-----	35	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Edmundston-----	30	No limitations Thin layer	0.01	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.01
Sorrell-----	20	Limitations Thin layer Fragments (>3") 15-35%	0.52 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.52
274:					
Sesame-----	40	Limitations Thin layer Shrink-swell (LEP 3-6)	0.98 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.98
Tweedy-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.98 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.98
Rock outcrop-----	15	Not rated		Not rated	
275:					
Strahle-----	50	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Sesame-----	15	Limitations Thin layer Shrink-swell (LEP 3-6)	0.98 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60" Permeability .6-2"/hr (some seepage)	1.00 0.98 0.53
Tweedy-----	15	Limitations Thin layer Shrink-swell (LEP 3-6)	0.96 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.96

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
276:					
Tips-----	35	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Hoffman-----	30	Limitations Thin layer	0.52	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.52
Cinco-----	15	Limitations Seepage	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
277:					
Feethill-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	0.86 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.86
Vista-----	25	Limitations Thin layer	0.99	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 0.99
Walong-----	20	Limitations Thin layer	0.91	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.91
279:					
Strahle-----	50	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
Sesame-----	15	Limitations Thin layer Shrink-swell (LEP 3-6)	0.74 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.74

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
280:					
Tollhouse-----	40	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Martee-----	20	Limitations Thin layer Seepage Fragments (>3") 15-35%	1.00 1.00 0.01	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Edmundston-----	15	Limitations Thin layer	0.29	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.29
281:					
Havala-----	55	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Walong-----	15	Limitations Thin layer	0.88	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.88
Kernfork-----	15	Limitations Saturation < 2' depth	0.99	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
282:					
Tollhouse-----	35	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.05	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Sesame-----	25	Limitations Thin layer Shrink-swell (LEP 3-6)	0.95 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.95
Friant-----	20	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.59	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
283:					
Tollhouse-----	35	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Martee-----	30	Limitations Thin layer Seepage Fragments (>3") 15-35%	1.00 1.00 0.01	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
284:					
Tollhouse-----	70	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
285:					
Inyo-----	50	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
Kelval-----	40	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
286:					
Tollhouse-----	40	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Tweedy-----	25	Limitations Thin layer Shrink-swell (LEP 3-6)	0.77 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.77
Locobill-----	20	Limitations Thin layer	0.70	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.70

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
287:					
Tweedy-----	40	Limitations Thin layer Shrink-swell (LEP 3-6)	0.56 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.56
Strahle-----	40	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
288:					
Sorrell-----	45	Limitations Thin layer Fragments (>3") 15-35%	0.99 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.99
Arujo-----	25	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.16	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.16
Rock outcrop-----	15	Not rated		Not rated	
289:					
Erskine-----	35	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Hyte-----	30	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
294:					
Edmundston-----	45	Limitations Thin layer	0.11	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.11

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
294:					
Tweedy-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.81 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.81
Walong-----	20	Limitations Thin layer	0.96	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.96
295:					
Tweedy-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	0.95 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.95
Tunis-----	30	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20" Permeability > 2"/hr (seepage)	1.00 1.00 1.00
Rankor-----	20	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.01
296:					
Arujo-----	40	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.06	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.06
Walong-----	30	Limitations Thin layer	0.52	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.52
Tunis-----	15	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20" Permeability > 2"/hr (seepage)	1.00 1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
297:					
Walong-----	30	Limitations Thin layer	0.81	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.81
Blasingame-----	25	Limitations Shrink-swell (LEP >6) Thin layer	1.00 0.77	Limitations Slopes > 7% Depth to bedrock from 20-60" Permeability .6-2"/hr (some seepage)	1.00 0.77 0.53
Rock outcrop-----	15	Not rated		Not rated	
298:					
Arujo-----	35	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage) Depth to bedrock from 20-60"	1.00 0.53 0.01
Feethill-----	25	Limitations Thin layer Shrink-swell (LEP 3-6)	0.56 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.56
Sesame-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.91 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60" Permeability .6-2"/hr (some seepage)	1.00 0.91 0.53
299:					
Arujo-----	40	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage) Depth to bedrock from 20-60"	1.00 0.53 0.01
Feethill-----	25	Limitations Thin layer Shrink-swell (LEP 3-6)	0.56 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.56
Sesame-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.91 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60" Permeability .6-2"/hr (some seepage)	1.00 0.91 0.53

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Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
300:					
Stineway-----	50	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20" Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Kiscove-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
301:					
Feethill-----	35	Limitations Thin layer Shrink-swell (LEP 3-6)	0.99 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 0.99
Vista-----	25	Limitations Thin layer	0.98	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.98
Rock outcrop-----	15	Not rated		Not rated	
302:					
Feethill-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	0.95 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.95
Cibo-----	25	Limitations Shrink-swell (LEP >6) Thin layer	1.00 0.99	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.99
Cieneba-----	20	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
303:					
Steuber-----	80	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
304: Cibo-----	80	Limitations Shrink-swell (LEP >6) Thin layer MH or CH Unified and PI <40%	1.00 0.70 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.70
305: Chanac-----	45	Limitations Shrink-swell (LEP 3-6) High piping potential	0.50 0.45	Limitations Slopes > 7%	1.00
Pleito-----	20	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
Premier-----	15	No limitations		Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
306: Xerofluents, occasionally flooded	60	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Riverwash-----	25	Not rated		Not rated	
307: Typic Xeropsamments-----	80	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
308: Rankor-----	35	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.22	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.22
Edmundston-----	25	Limitations Thin layer	0.16	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.16
Tweedy-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.52 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.52

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
309:					
Rankor-----	35	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.22	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.22
Edmundston-----	25	Limitations Thin layer	0.16	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.16
Tweedy-----	20	Limitations Thin layer Shrink-swell (LEP 3-6)	0.52 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.52
310:					
Stineway-----	50	Limitations Thin layer	1.00	Limitations Depth to bedrock < 20" Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Kiscove-----	30	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
311:					
Xerorthents-----	50	Limitations Thin layer Shrink-swell (LEP 3-6) Fragments (>3") 15-35%	1.00 0.22 0.01	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
312:					
Havala-----	85	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.08
313:					
Dumps-----	80	Not rated		Not rated	

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
314: Premier-----	45	No limitations		Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Haplodurids-----	35	Limitations Thin layer	0.96	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to pan 20 to 60"	1.00 1.00 0.96
315: Premier-----	45	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.66
Haplodurids-----	40	Limitations Thin layer	0.96	Limitations Permeability > 2"/hr (seepage) Depth to pan 20 to 60" Slopes 2 to 7%	1.00 0.96 0.66
316: Premier-----	85	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.91
317: Premier-----	85	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.02
320: Southlake-----	80	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
325: Walong-----	75	Limitations Thin layer	0.93	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.93

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
326: Walong-----	80	Limitations Thin layer	0.93	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.93
330: Kernville-----	35	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Faycreek-----	25	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	20	Not rated		Not rated	
350: Southlake, stony-----	55	Limitations Fragments (>3") 15-35% Shrink-swell (LEP 3-6)	0.53 0.50	Limitations Slopes > 7%	1.00
Goodale-----	20	Limitations Fragments (>3") > 35% Seepage	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
352: Goodale-----	65	Limitations Seepage Fragments (>3") > 35%	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Riverwash-----	20	Not rated		Not rated	
360: Kernville, bouldery-----	40	Limitations Thin layer Seepage	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Depth to bedrock < 20" Slopes > 7%	1.00 1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
360: Hogeye-----	30	Limitations Thin layer	0.88	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.88
Southlake-----	15	Limitations Fragments (>3") 15-35% Shrink-swell (LEP 3-6)	0.53 0.50	Limitations Slopes > 7%	1.00
380: Delvar-----	40	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40%	1.00 0.50	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.28
Pleito-----	40	Limitations Shrink-swell (LEP 3-6) Low piping potential	0.50 0.02	Limitations Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 0.53
407: Centerville-----	90	Limitations Shrink-swell (LEP >6) MH or CH Unified and PI <40% Thin layer	1.00 0.50 0.16	Limitations Slopes 2 to 7%	0.08
410: Stineway-----	40	Limitations Thin layer	1.00	Limitations Depth to bedrock < 20" Slopes > 7% Permeability .6-2"/hr (some seepage)	1.00 1.00 0.53
Kiscove-----	25	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Urban land-----	15	Not rated		Not rated	
411: Delvar-----	85	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Slopes 2 to 7% Permeability .6-2"/hr (some seepage)	0.66 0.28

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Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
412: Chollawell-----	70	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Urban land-----	15	Not rated		Not rated	
417: Southlake-----	40	Limitations Fragments (>3") 15-35% Shrink-swell (LEP 3-6)	0.51 0.50	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Southlake, gravelly-----	20	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Goodale-----	15	Limitations Fragments (>3") > 35% Seepage	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Urban land-----	15	Not rated		Not rated	
420: Southlake-----	65	Limitations Shrink-swell (LEP 3-6)	0.50	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Urban land-----	15	Not rated		Not rated	
422: Kelval-----	70	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
Urban land-----	15	Not rated		Not rated	
423: Auberry-----	45	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.01

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
423: Crouch-----	15	No limitations		Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
424: Inyo-----	70	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.91
Urban land-----	15	Not rated		Not rated	
430: Friant-----	70	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.59	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
432: Alberti, gravelly-----	70	Limitations Thin layer Shrink-swell (LEP >6) Fragments (>3") 15-35%	1.00 1.00 0.04	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
Urban land-----	15	Not rated		Not rated	
441: Inyo-----	65	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
Urban land-----	15	Not rated		Not rated	
442: Inyo-----	70	Limitations Seepage	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Urban land-----	15	Not rated		Not rated	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
445:					
Chollawell-----	70	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.08
Urban land-----	15	Not rated		Not rated	
450:					
Southlake, stony-----	45	Limitations Fragments (>3") 15-35% Shrink-swell (LEP 3-6)	0.53 0.50	Limitations Slopes > 7%	1.00
Goodale-----	15	Limitations Fragments (>3") > 35% Seepage	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Urban land-----	15	Not rated		Not rated	
460:					
Kernville, bouldery-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Permeability > 2"/hr (seepage) Depth to bedrock < 20" Slopes > 7%	1.00 1.00 1.00
Hogeye-----	25	Limitations Thin layer	0.88	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.88
Southlake-----	15	Limitations Fragments (>3") 15-35% Shrink-swell (LEP 3-6)	0.53 0.50	Limitations Slopes > 7%	1.00
Urban land-----	15	Not rated		Not rated	
465:					
Arujo-----	65	Limitations Shrink-swell (LEP 3-6) Thin layer	0.50 0.01	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.01
Urban land-----	15	Not rated		Not rated	

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
485:					
Inyo-----	45	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage)	1.00
Kelval-----	30	No limitations		Limitations Permeability > 2"/hr (seepage)	1.00
Urban land-----	15	Not rated		Not rated	
488:					
Tweedy-----	35	Limitations Thin layer Shrink-swell (LEP 3-6)	0.56 0.50	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.56
Tollhouse-----	20	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Locobill-----	15	Limitations Thin layer	0.70	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.70
Urban land-----	15	Not rated		Not rated	
501:					
Hyte-----	35	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Erskine-----	25	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Sorrell-----	25	Limitations Thin layer Fragments (>3") 15-35%	0.66 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.66

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Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
503:					
Tips-----	40	Limitations Thin layer	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Erskine-----	30	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
505:					
Chollawell-----	85	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
507:					
Xyno-----	40	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Canebrake-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Pilotwell-----	15	Limitations Seepage Thin layer	1.00 0.56	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.56
508:					
Pilotwell-----	45	Limitations Seepage Thin layer	1.00 0.97	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.97
Xyno-----	25	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
509:					
Xyno-----	40	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Faycreek-----	20	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
510:					
Xyno-----	35	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Canebrake-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Pilotwell, bouldery-----	15	Limitations Seepage Thin layer	1.00 0.96	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.96
512:					
Chollawell, cobbly substratum----	60	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Chollawell, gravelly-----	15	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.31
514:					
Chollawell-----	50	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
Inyo-----	35	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
515:					
Scodie-----	35	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
Canebrake-----	30	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock < 20"	1.00
Xyno-----	20	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
516:					
Xyno-----	45	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
Rock outcrop-----	20	Not rated		Not rated	
Canebrake-----	20	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
		Fragments (>3") 15-35%	0.68		
517:					
Southlake-----	55	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Permeability > 2"/hr (seepage)	1.00
		Fragments (>3") 15-35%	0.01	Slopes > 7%	1.00
Southlake, gravelly-----	20	Limitations		Limitations	
		Shrink-swell (LEP 3-6)	0.50	Permeability > 2"/hr (seepage)	1.00
		Fragments (>3") 15-35%	0.01	Slopes > 7%	1.00
Goodale-----	15	Limitations		Limitations	
		Fragments (>3") > 35%	1.00	Permeability > 2"/hr (seepage)	1.00
		Seepage	1.00	Slopes > 7%	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
518:					
Backcanyon-----	50	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	30	Not rated		Not rated	
520:					
Kernville-----	50	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Hogeye-----	20	Limitations Thin layer	0.88	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.88
Rock outcrop-----	15	Not rated		Not rated	
523:					
Kernville, bouldery-----	45	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Faycreek-----	20	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
525:					
Hungrygulch-----	35	Limitations Thin layer	0.95	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.95
Kernville-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
525: Hogeye-----	20	Limitations Thin layer	0.88	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.88
530: Alberti, cobbly-----	45	Limitations Thin layer Shrink-swell (LEP >6) Fragments (>3") 15-35%	1.00 1.00 0.07	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Alberti, gravelly-----	40	Limitations Thin layer Shrink-swell (LEP >6)	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
531: Tweedy-----	40	Limitations Thin layer Shrink-swell (LEP 3-6)	0.65 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.65
Erskine-----	25	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.41	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Alberti, gravelly-----	20	Limitations Thin layer Shrink-swell (LEP >6)	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
532: Alberti, gravelly-----	80	Limitations Thin layer Shrink-swell (LEP >6) Fragments (>3") 15-35%	1.00 1.00 0.04	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
540: Canebrake-----	60	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
540:					
Lachim-----	20	Limitations		Limitations	
		Seepage	1.00	Slopes > 7%	1.00
		Thin layer	0.95	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.95
541:					
Canebrake-----	45	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	1.00	Depth to bedrock < 20"	1.00
Lachim-----	20	Limitations		Limitations	
		Seepage	1.00	Slopes > 7%	1.00
		Thin layer	0.95	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.95
Rock outcrop-----	15	Not rated		Not rated	
543:					
Wortley-----	45	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
				Depth to bedrock < 20"	1.00
Indiano-----	25	Limitations		Limitations	
		Thin layer	0.91	Slopes > 7%	1.00
		Shrink-swell (LEP 3-6)	0.50	Depth to bedrock from 20-60"	0.91
Rock outcrop-----	15	Not rated		Not rated	
544:					
Xeric Haplargids-----	60	Limitations		Limitations	
		Seepage	1.00	Permeability > 2"/hr (seepage)	1.00
		Thin layer	0.46	Slopes > 7%	1.00
		Fragments (>3") 15-35%	0.01	Depth to bedrock from 20-60"	0.46
Lithic Xeric Haplargids-----	20	Limitations		Limitations	
		Thin layer	1.00	Permeability > 2"/hr (seepage)	1.00
		Fragments (>3") 15-35%	0.92	Depth to bedrock < 20"	1.00
				Slopes > 7%	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
545: Sacatar-----	50	Limitations Thin layer	0.74	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.74
Canebrake-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
549: Tunawee-----	60	Limitations Thin layer Seepage Fragments (>3") 15-35%	1.00 1.00 0.18	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	25	Not rated		Not rated	
550: Kenypeak-----	40	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Rubble land-----	20	Not rated		Not rated	
Rock outcrop-----	20	Not rated		Not rated	
551: Tunawee-----	70	Limitations Thin layer Seepage Fragments (>3") 15-35%	1.00 1.00 0.18	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
552: Kenypeak-----	60	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.82	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Torriorthentic Haploxerolls-----	25	Limitations Thin layer	0.74	Limitations Slopes > 7% Depth to bedrock from 20-60" Permeability .6-2"/hr (some seepage)	1.00 0.74 0.53

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
553: Tibbcreek-----	75	Limitations Thin layer Shrink-swell (LEP 3-6)	1.00 0.50	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
554: Deerspring-----	85	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
555: Cumulic Endoaquolls, frigid-----	75	Limitations Saturation < 2' depth	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
556: Toll-----	80	Limitations Seepage	1.00	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.66
557: Scodie-----	35	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Canebrake-----	25	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Deadfoot-----	20	Limitations Fragments (>3") > 35% Seepage Thin layer	1.00 1.00 0.88	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.88
558: Indiano-----	60	Limitations Thin layer Shrink-swell (LEP 3-6)	0.91 0.50	Limitations Slopes > 7% Depth to bedrock from 20-60"	1.00 0.91
Wortley-----	20	Limitations Thin layer	1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
560:					
Sacatar-----	30	Limitations Thin layer	0.74	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.74
Wortley-----	30	Limitations Thin layer	1.00	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
Calpine-----	20	No limitations		Limitations Permeability > 2"/hr (seepage) Slopes > 7%	1.00 1.00
561:					
Scodie-----	30	Limitations Thin layer Seepage	1.00 1.00	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
Sacatar-----	25	Limitations Thin layer	0.74	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.74
Canebrake-----	20	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
562:					
Deerspring, partially drained----	85	Limitations High piping potential	0.22	Limitations Permeability > 2"/hr (seepage) Slopes 2 to 7%	1.00 0.01
570:					
Deadfoot-----	40	Limitations Fragments (>3") > 35% Seepage Thin layer	1.00 1.00 0.99	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock from 20-60"	1.00 1.00 0.99
Scodie-----	20	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
570: Rock outcrop-----	20	Not rated		Not rated	
590: Xyno-----	35	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Canebrake-----	25	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Pilotwell-----	20	Limitations Seepage Thin layer	1.00 0.95	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.95
591: Xyno-----	50	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Depth to bedrock < 20"	1.00 1.00
Canebrake-----	20	Limitations Thin layer Seepage	1.00 1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage) Depth to bedrock < 20"	1.00 1.00 1.00
Rock outcrop-----	15	Not rated		Not rated	
599: Rock outcrop-----	80	Not rated		Not rated	
610: Hyte-----	40	Limitations Thin layer	1.00	Limitations Permeability > 2"/hr (seepage) Depth to bedrock < 20" Slopes > 7%	1.00 1.00 1.00
Erskine-----	35	Limitations Thin layer Fragments (>3") 15-35%	1.00 0.41	Limitations Permeability > 2"/hr (seepage) Depth to bedrock < 20" Slopes > 7%	1.00 1.00 1.00

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
650:					
Stineway-----	40	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Fragments (>3") > 35%	1.00	Depth to bedrock < 20"	1.00
				Permeability .6-2"/hr (some seepage)	0.53
Kiscove-----	30	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Shrink-swell (LEP 3-6)	0.50	Depth to bedrock < 20"	1.00
Rock outcrop-----	15	Not rated		Not rated	
3250:					
Jawbone-----	50	Limitations		Limitations	
		Thin layer	1.00	Slopes > 7%	1.00
		Seepage	0.50	Depth to bedrock < 20"	1.00
Jawbone, moderately deep-----	40	Limitations		Limitations	
		Seepage	1.00	Slopes > 7%	1.00
		Thin layer	0.74	Permeability > 2"/hr (seepage)	1.00
				Depth to bedrock from 20-60"	0.74
4432:					
Koehn, occasionally flooded-----	70	Limitations		Limitations	
		Seepage	1.00	Permeability > 2"/hr (seepage)	1.00
				Slopes 2 to 7%	0.01
Koehn, frequently flooded-----	15	Limitations		Limitations	
		Seepage	1.00	Permeability > 2"/hr (seepage)	1.00
				Slopes 2 to 7%	0.01
5201:					
Wingap-----	55	No limitations		Limitations	
		Thin layer	0.03	Permeability > 2"/hr (seepage)	1.00
				Slopes > 7%	1.00
				Depth to bedrock from 20-60"	0.03
Pinyonpeak-----	30	Limitations		Limitations	
		Thin layer	1.00	Depth to bedrock < 20"	1.00
		Seepage	0.50	Slopes > 7%	1.00

Table 15.--Water Management--Continued

Map symbol and component name	Pct. of map unit	Embankments, dikes, and levees		Pond reservoir areas	
		Limitations	Value	Limitations	Value
5210:					
Grandora-----	30	Limitations Seepage	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Grandora, warm-----	30	Limitations Seepage	1.00	Limitations Slopes > 7% Permeability > 2"/hr (seepage)	1.00 1.00
Pinyonpeak-----	30	Limitations Thin layer Seepage	1.00 0.50	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
6001:					
Goldpeak-----	55	No limitations		Limitations Permeability .6-2"/hr (some seepage) Slopes 2 to 7%	0.68 0.08
Pinyonpeak-----	15	Limitations Thin layer Seepage	1.00 0.50	Limitations Depth to bedrock < 20" Slopes > 7%	1.00 1.00
Wingap-----	15	No limitations Thin layer	0.03	Limitations Permeability > 2"/hr (seepage) Slopes > 7% Depth to bedrock from 20-60"	1.00 1.00 0.03
W:					
Water-----	100	Not rated		Not rated	

The interpretation for embankments, dikes, and levees evaluates the following soil properties at variable depths in the soil: ponding; wetness; depth to a restrictive layer; fragments more than 3 inches in size; salinity (EC); Unified classes for a high content of organic matter (PT, OL, and OH); Unified classes that are hard to pack (MH and CH); permeability that is too rapid, allowing seepage; piping as determined by Atterberg limits of liquid limit (LL) and plasticity index (PI); sodium content (SAR); and gypsum content.

The interpretation for pond reservoir areas evaluates the following soil properties at variable depths in the soil: slope, depth to hard or soft bedrock, depth to a cemented pan, marly textures, gypsum content, and permeability that is too rapid, allowing seepage.

Table 16.--Engineering Index Properties

(See Glossary for definitions of abbreviations in the USDA texture column. Absence of an entry indicates that data were not estimated)

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
115: Chanac-----	0-18	GR-CL, CL	CL	A-7-6, A-6	0	0	90-100	76-100	66-95	50-75	38-47	19-25
	18-46	GR-L, GR-CL, SCL, CL, L, GR-SCL	CL, SC	A-7-6, A-2-6, A-6	0	0	90-100	75-100	59-94	33-59	31-45	13-25
	46-60	GR-COSL, GR-SL, GR-L, COSL, SL, L	SC, CL	A-4, A-6	0	0	90-100	76-100	65-91	47-66	24-30	9-13
128: Pits.												
Delano-----	0-18	SL	SC-SM, SC	A-2-4, A-4, A-6	0	0	100	95-100	69-82	33-45	21-33	6-13
	18-37	SCL, CL, L	SC, CL	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	SL, L	SC-SM, SC	A-2-4, A-6	0	0	100	95-100	65-85	29-47	20-36	5-17
Oil waste land												
136: Hesperia-----	0-20	SL	SC, SC-SM	A-2-4, A-6	0	0	95-100	86-100	61-82	29-44	18-30	4-12
	20-60	COSL, GR-COSL, SL, GR-SL	SC, SC-SM	A-2-4, A-6, A-1-b	0	0	85-100	65-100	46-82	22-44	18-29	4-12
138: Hesperia-----	0-18	SL	SC, SC-SM	A-2-4, A-6	0	0	95-100	86-100	61-82	29-44	18-30	4-12
	18-34	FSL, GR-FSL	SC-SM, SC	A-2-4, A-6	0	0	84-100	64-100	56-98	22-44	18-29	4-12
	34-70	GR-SL, COSL, GR-COSL, SL	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	84-100	64-100	46-82	21-44	18-29	4-12
139. Riverwash												
143: Calicreek-----	0-7	SL, LCOS, LS	SC-SM, SM	A-2-4, A-1-b	0	0-3	92-100	81-100	42-58	14-23	15-24	1-6
	7-30	SR- COS FSL, SR- COS GR-FSL	SP-SM, SC-SM	A-1-b, A-2-4	0	0-5	86-100	64-100	30-53	7-16	15-22	1-5
	30-60	SR- GR-COS FSL	SP-SM, SW-SM, SM	A-1-b	0	0-4	87-100	66-100	30-49	8-15	0-18	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
144: Calicreek-----	0-5	LS, SL	SC-SM, SC	A-2-4	0	0-3	92-100	81-100	59-79	28-41	20-28	5-10
	5-60	SR- COS GR-FSL, SR- COS FSL	SP-SM, SP-SC, SC-SM	A-1-b, A-2-4	0	0-4	87-100	66-100	30-55	6-18	0-24	NP-7
145: Delano-----	0-7	LS	SM, SC-SM	A-2-4	0	0	95-100	85-100	64-84	23-35	0-24	NP-6
	7-20	SL	SC-SM, SC	A-2-4, A-6	0	0	95-100	86-100	61-82	29-44	18-30	4-12
	20-55	L, SCL, CL	CL, SC	A-6, A-7-6	0	0	95-100	85-100	67-94	37-59	31-46	13-25
	55-60	LS, SL	SM, SC-SM, SC	A-2-4	0	0	95-100	85-100	65-86	18-31	16-27	2-10
146: Delano-----	0-18	SL	SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	69-82	33-45	21-33	6-13
	18-37	SCL, CL, L	CL, SC	A-7-6, A-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	L, SL	SC, SC-SM	A-2-4, A-6	0	0	100	95-100	65-85	29-47	20-36	5-17
147: Chanac-----	0-18	GR-CL, CL	CL	A-7-6, A-6	0	0	90-100	76-100	66-95	50-75	38-47	19-25
	18-46	GR-L, GR-CL, GR-SCL, SCL, CL, L	CL, SC	A-7-6, A-2-6, A-6	0	0	90-100	75-100	59-94	33-59	31-45	13-25
	46-60	GR-L, GR-SL, GR-COSL, COSL, SL, L	SC, CL	A-4, A-6	0	0	90-100	76-100	65-91	47-66	24-30	9-13
148: Delano-----	0-18	SL, SCL	SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	70-88	29-46	21-33	6-13
	18-37	L, CL, SCL	SC, CL	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	SL, L	SC, SC-SM	A-2-4, A-6	0	0	100	95-100	65-86	29-48	20-36	5-17
149: Delano-----	0-18	SL	SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	69-82	33-45	21-33	6-13
	18-37	CL, SCL, L	CL, SC	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	SL, L	SC, SC-SM	A-2-4, A-6	0	0	100	95-100	65-85	29-47	20-36	5-17
150: Pits. Dumps.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
152: Pleito-----	0-27	GR-SCL, GR-SL, SL, SCL	CL, SC	A-7-6, A-2-4, A-6	0	0-8	85-100	61-100	48-99	25-60	28-48	10-22
	27-38	GR-CL, GR-L, GR-SCL, CL, L, SCL	ML, SC	A-7-6, A-2-6, A-6	0	0-8	84-100	61-100	48-94	27-59	31-45	11-18
	38-60	GR-SL, GR-SCL, SCL, SL	SC	A-6, A-2-4, A-4	0	0-8	85-100	62-100	47-86	24-49	24-33	8-11
153: Chanac-----	0-18	GR-CL, CL	CL	A-7-6, A-6	0	0	90-100	76-100	66-95	50-75	38-47	19-25
	18-46	GR-L, GR-CL, SCL, CL, L, GR-SCL	CL, SC, SC-SM	A-4, A-7-6, A-6	0	0	90-100	75-100	64-100	45-81	26-45	10-25
	46-60	GR-COSL, GR-SL, GR-L, COSL, SL, L	SC, CL	A-4, A-6	0	0	90-100	76-100	65-91	47-66	24-30	9-13
154. Dam												
166: Delano-----	0-18	SL	SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	69-82	33-45	21-33	6-13
	18-37	CL, SCL, L	CL, SC	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	L, SL	SC, SC-SM	A-2-4, A-6	0	0	100	95-100	65-85	29-47	20-36	5-17
Urban land.												
174: Xeric Torriorthents, silty----	0-15	SIL	CL	A-6, A-7-6, A-4	0	0	95-100	90-100	87-100	80-100	26-43	10-21
	15-20	SIL	CL	A-6, A-7-6, A-4	0	0	95-100	90-100	88-100	81-100	26-42	10-21
	20-50	SIL, SICL	CH, CL	A-6, A-7-6	0	0-5	95-100	89-100	85-100	78-100	37-56	18-33
	50-60	SIC	CL, CH	A-6, A-7-6	0	0-5	95-100	89-100	74-100	67-96	37-56	18-33
Calcic Haploxerepts-----	0-2	SICL	CL	A-6, A-7-6	0	0	90-100	90-100	85-100	76-93	38-49	19-25
	2-12	SIL	CL	A-6	0	0	90-100	90-100	88-100	78-93	31-40	13-19
	12-23	SIL	CL	A-4, A-6	0	0	90-100	90-100	87-100	77-96	26-38	10-18
	23-60	L	CL	A-6, A-4	0	0	90-100	90-100	85-100	69-87	26-37	10-18

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
176: Elkhills, eroded-----	0-8	COSL, GR-L, GR-COSL, GR-SL, SL, L	SC-SM, SC	A-6, A-2-4, A-2-6	0	0-1	71-100	71-100	57-83	26-45	20-36	6-17
	8-17	GR-SL, L, COSL, SL, GR-L, GR-COSL	SC, SC-SM	A-1-b, A-6, A-2-6	0	0-1	71-100	71-100	48-84	21-46	20-36	6-17
	17-34	GRV-COSL, GR-COSL, COSL	SC, SC-SM	A-1-b, A-6, A-2-4	0	0-1	49-100	48-100	27-67	15-42	20-32	6-13
	34-42	SL, GR-SL, GRV-SL	SC, SC-SM	A-1-b, A-2-4, A-6	0	0-1	45-100	44-100	31-79	15-43	20-29	6-12
	42-60	SL, GRV-SL, GR-SL	SC, SC-SM	A-1-b, A-2-4, A-4	0	0-1	44-100	43-100	32-83	17-46	20-27	6-10
177: Chanac-----	0-7	GR-L, L, SCL, GR-SCL	CL, SC	A-2-6, A-7-6, A-6	0	0	90-100	76-100	60-94	33-59	32-47	13-25
	7-36	GR-SCL, SCL, GR-CL, CL, GR-L, L	CL, SC	A-7-6, A-2-6, A-6	0	0	90-100	75-100	59-94	33-59	31-47	13-25
	36-60	SL, SCL, CL, GR-CL, GR-SCL, GR-SL	CL, SC-SM, SC	A-6, A-2-4	0	0	91-100	77-100	56-89	28-52	22-38	7-19
Torriorhents, stratified-----	0-4	SR- GR-S SICL	SC-SM, SC	A-6, A-2-4	0	0	92-100	84-100	60-83	28-45	20-33	4-13
	4-54	SR- GR-S SICL	SM, CL	A-7-6, A-4, A-6	0	0	92-100	84-100	57-97	39-76	18-46	2-25
	54-60	SR- GR-SL C	CH, CL	A-7-6, A-6	0	0-5	84-100	68-100	49-100	42-100	31-69	12-44
178: Delano-----	0-8	SCL	CL, SC	A-6	0	0	100	95-100	79-91	43-52	30-39	13-19
	8-36	L, SCL, CL	CL, SC	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-47	13-25
	36-60	L, SL	CL, CL-ML	A-4, A-6	0	0	100	95-100	76-97	53-73	20-37	6-19
Cuyama-----	0-10	GR-SL, SL	SC, SC-SM, SM	A-6, A-2-4, A-1-b	0	0-5	86-100	65-100	47-85	22-47	16-30	2-12
	10-21	SCL, L, GR-L, GR-SCL	CL, SC	A-6	0	0-10	85-100	63-100	54-92	39-69	27-36	12-17
	21-39	L, GR-SCL, GRV-L, GR-L, GRV-SCL, SCL, GRV-CL, CL, GR-CL	CL, SC	A-7-6, A-6, A-2-6	0-5	5-15	69-87	49-87	39-83	21-51	31-46	13-25
	39-60	GRV-L, CL, GRV-CL, SCL, GR-L, GRV-SCL, GR-SCL, L, GR-CL	CL, SC-SM, SC	A-6, A-2-4	0-5	10-26	77-96	54-96	42-95	29-72	20-40	6-21

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
178: Premier-----	0-12	COSL	SM, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	54-70	30-44	17-31	2-12
	12-60	L, SL, COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	54-70	30-44	16-29	2-12
179: Torriorthents, stratified, eroded-----	0-4	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0	92-100	84-100	60-83	28-45	20-33	4-13
	4-54	SR- S SICL	SM, CL	A-7-6, A-4, A-6	0	0	92-100	84-100	59-100	40-78	18-46	2-25
	54-60	SR- CL C	CL, CH	A-7-6, A-6	0	0-5	84-100	68-100	49-100	42-100	31-69	12-44
Elkhills-----	0-29	GR-SL	SM, SC, SC-SM	A-1-b, A-2-4, A-6	0	0-5	84-100	63-100	45-85	22-47	17-31	2-12
	29-49	COSL, GR-SL, L	SC, SM, SC-SM	A-1-b, A-6, A-2-4	0	0-5	84-100	63-100	45-85	22-47	16-29	2-12
	49-65	SR- S GRV-SIL, SR- S GR-SIL	SC, SM, SC-SM	A-2-4, A-1-a, A-6	0	0-9	69-87	42-87	30-74	14-41	16-29	2-12
184: Cuyama-----	0-10	GR-SL, SL	SC-SM, SC	A-6, A-1-b, A-2-4	0	0-5	86-100	65-100	47-81	22-44	19-30	4-12
	10-21	GR-SCL, GR-L, L, SCL	CL, SC	A-6, A-2-6	0	0-10	86-100	64-100	52-93	26-54	27-40	12-21
	21-32	SL, GR-SL	SC-SM, SC	A-6, A-1-b, A-2-6	0-5	5-9	82-97	65-97	44-76	20-39	20-32	6-13
	32-44	SL, GR-SL	SC, SC-SM	A-1-b, A-2-4, A-6	0-5	5-9	82-97	65-97	46-79	22-43	20-31	6-13
	44-54	SL, GR-SL	SC, SC-SM	A-1-b, A-2-4, A-6	0-5	5-9	82-97	65-97	49-84	24-48	18-31	4-13
	54-60	GR-SL, SL	SC, SC-SM	A-1-b, A-2-4, A-6	0-5	5-9	82-97	65-97	49-84	24-48	18-31	4-13

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
185: Brecken-----	0-3	GR-SL, SL, GRV-SL	GC-GM, SC	A-2-6, A-2-4, A-1-b	0-8	0-9	55-78	53-77	39-63	19-35	22-37	6-13
	3-12	CBV-SL, CBV-SCL, CB-SL	SC, GC	A-2-6, A-6	0-8	8-23	58-84	56-83	44-71	25-42	29-39	12-17
	12-19	CBV-SCL, GR-SCL, CBX-SCL	GC, SC	A-2-6, A-7-6	0-8	24-54	52-83	50-82	40-77	22-48	32-47	13-25
	19-39	CBX-SL, CBV-SCL, CBX-SCL, CBV-SL	GC, SC	A-2-6, A-2-7	3-15	25-45	33-71	31-69	23-61	14-39	29-42	12-21
	39-60	CBV-COSL, CBX-SCL, CBV-SCL, CBX-COSL	GC, GP-GC	A-1-a, A-2-4, A-2-6	3-16	17-36	29-65	27-63	15-44	9-28	20-33	6-15
Cuyama-----	0-4	GR-SL, SL	SC, SC-SM, SM	A-6, A-1-b, A-2-4	0	0-5	86-100	63-100	45-85	22-47	16-30	2-12
	4-22	SCL, L, GR-L, GR-SCL	CL, SC	A-6	0	0-10	85-100	63-100	54-92	39-69	27-36	12-17
	22-60	GR-L, L, SCL, GR-SCL	CL, SC-SM, SC	A-1-b, A-6	0-4	4-9	83-97	65-97	49-92	24-54	20-40	6-21
Pleito-----	0-12	GR-CL, CL	CL, SC	A-6, A-7-6	0	0-10	83-100	61-100	51-98	39-79	33-49	13-25
	12-24	SCL, L, CL, GR-CL, GR-L, GR-SCL	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	26-59	33-49	13-25
	24-60	GR-L, L, GR-SCL, GR-CL, SCL, CL	CL, SC	A-7-6, A-6	0	0-10	83-100	61-100	51-98	39-79	31-48	13-25
186: Cuyama-----	0-4	L, GR-L	SC-SM, CL	A-6, A-4	0	0-5	86-100	65-100	53-93	37-68	20-32	6-13
	4-28	SCL, GR-CL, CL, GR-SCL, GR-L, L	CL, SC	A-7-6, A-2-6	0-5	5-15	70-87	50-87	39-83	22-51	31-46	13-25
	28-36	GR-L, L, SCL, GR-SCL	CL, SC	A-6	0-5	0-10	85-100	62-100	53-92	38-69	27-36	12-17
	36-60	CB-CL, CBX-L, CBX-SCL, SCL, CB-SCL, CB-L, CL, CBX-CL, L	CL, SC-SM, SC	A-1-b, A-2-6, A-6	0-5	10-26	77-96	55-96	41-92	20-54	20-40	6-21

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
187:												
Trigo-----	0-2	FSL	SC, SC-SM	A-4	0	0	100	95-100	83-95	37-46	20-28	4-10
	2-10	FSL, SL, L	SC-SM, SC	A-6, A-4, A-2-4	0	0	100	95-100	83-98	33-44	18-30	4-12
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Chanac-----	0-8	GR-SCL, GR-L, L, SCL	CL, SC	A-2-6, A-6	0	0	90-100	75-100	62-91	33-53	30-40	12-19
	8-36	CL, L, GR-SCL, SCL, GR-L, GR-CL	CL, SC	A-4, A-7-6, A-6	0	0	90-100	75-100	65-100	49-86	27-47	10-25
	36-60	L, GR-COSL, SL, GR-L, COSL, GR-SL	SC	A-6, A-2-6, A-2-4	0	0	90-100	76-100	56-79	27-41	25-32	9-13
188:												
Tweedy-----	0-11	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	11-31	CL, GR-CL, GR-SCL, SCL	CL, SC	A-6, A-7-6, A-2-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	31-38	GR-SL, SL	SC, SC-SM	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	23-33	7-13
	38-48	WB	---	---	---	---	---	---	---	---	---	---
Tollhouse-----	0-5	GR-SL, SL	SC-SM, SC	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	5-14	GRV-SL, GRV-COSL, GR-COSL, GR-SL, COSL, SL	SC-SM, SM, SC	A-1-a, A-2-4, A-6	0-5	0-5	76-92	44-92	25-64	14-41	18-33	2-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Locobill-----	0-3	GR-SL, SL	SC-SM, SM, SC	A-2-4, A-4	0-5	0-5	76-92	75-91	56-74	28-40	19-28	3-9
	3-28	GR-SL, SL	SC-SM, SC	A-2-4, A-6, A-1-b	0	0-5	83-100	66-100	48-81	23-43	21-31	6-12
	28-35	SCL, GR-SCL, GRV-SCL	SC, CL	A-2-6, A-6	0	0-14	76-100	43-100	36-89	19-51	31-38	13-18
	35-45	WB	---	---	---	---	---	---	---	---	---	---
189:												
Tweedy-----	0-7	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	7-40	GR-SCL, GR-CL, CL, SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	40-50	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
189: Walong-----	0-13	GR-SL, SL	SC, SM	A-2-4, A-1-b, A-6	0	0-14	76-92	62-92	44-75	20-40	20-33	3-12
	13-25	GR-SL, COSL, SL, GR-COSL	SM, SC	A-2-4, A-2-6, A-1-b	0	0-14	76-92	62-92	35-62	19-38	18-31	3-12
	25-35	WB	---	---	---	---	---	---	---	---	---	---
192: Chanac-----	0-8	L, SCL, GR-SCL, GR-L	CL, SC	A-7-6, A-6	0	0	90-100	76-100	64-94	37-59	30-41	12-19
	8-22	GR-SCL, GR-L, L, CL, SCL, GR-CL	CL	A-6	0	0	90-100	76-100	66-97	50-76	28-39	12-18
	22-31	GR-L, GR-CL, GR-SCL, CL, SCL, L	SC, CL	A-6	0	0	90-100	76-100	65-95	47-72	28-39	12-18
	31-42	GR-SCL, GR-CL, GR-L, CL, L, SCL	CL	A-6	0	0	90-100	76-100	65-95	47-72	27-39	12-19
	42-52	L, CL, SCL, GR- L, GR-CL, GR- SCL	CL	A-6	0	0	90-100	76-100	63-93	46-71	27-38	12-19
	52-60	GR-CL, GR-L, GR-SCL, SCL, CL, L	CL	A-6, A-7-6	0	0	90-100	76-100	59-93	44-73	31-45	13-25
Pleito-----	0-21	GR-SCL, SCL	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	27-59	33-49	13-25
	21-53	SCL, CL, GR-CL, GR-L, GR-SCL, L	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	26-59	33-49	13-25
	53-60	GR-L, L, SL, COSL, GR-COSL, GR-SL	SC	A-2-6, A-6, A-2-4	0	0	82-100	56-100	41-79	20-41	25-32	9-13
193: Chanac-----	0-9	SCL, GR-SCL	CL, SC	A-7-6, A-2-6, A-6	0	0	90-100	76-100	60-94	33-59	32-47	13-25
	9-50	L, GR-L, CL, GR-CL, SCL, GR-SCL	CL, SC	A-7-6, A-2-6, A-6	0	0	90-100	75-100	59-94	33-59	31-47	13-25
	50-63	GR-L, GR-SL, COSL, SL, GR- COSL, L	SC-SM, SC	A-6, A-2-4	0	0	91-100	77-100	55-82	27-46	20-32	6-13

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
193:												
Pleito-----	0-25	GR-SCL, SCL	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	27-59	33-49	13-25
	25-48	GR-SCL, GR-L, CL, SCL, GR-CL, L	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	26-59	33-49	13-25
	48-60	GR-SL, GR-CL, GR-SCL	GC, SC	A-2-6, A-7-6	0	0-8	71-100	60-100	45-93	23-55	29-47	12-25
194:												
Pleito-----	0-30	GR-CL, CL	CL, SC	A-7-6, A-6	0	0-10	82-100	60-100	51-93	39-73	39-49	19-25
	30-48	SCL, L, CL, GR-CL, GR-L, GR-SCL	CL, SC	A-7-6, A-6	0	0-10	83-100	61-100	51-98	39-79	33-48	13-25
	48-60	CL, L, SCL, GR-CL, GR-SCL, GR-L	SC, CL	A-7-6, A-2-6, A-6	0	0-10	83-100	61-100	48-94	26-59	31-47	13-25
Delvar-----	0-17	SCL	CL, SC	A-7-6, A-2-6	0	0	86-100	65-100	53-91	30-55	35-49	17-24
	17-35	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	35-55	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	55-60	SCL	CL, SC	A-7-6, A-2-6, A-6	0	0	86-100	65-100	53-91	30-55	34-45	17-25
195:												
Centerville-----	0-10	C	CH	A-7-6	0	0	100	100	82-100	71-91	51-72	29-44
	10-39	SC, C	CH, CL	A-7-6	0	0	100	100	80-100	67-92	46-70	25-44
	39-56	CL, SCL, GR-SCL, GR-CL	CL, SC	A-6, A-2-6, A-7-6	0	0	86-100	65-100	52-96	31-63	31-46	13-25
	56-60	SCL, GR-SL, GR-SCL, SL	SC	A-6, A-2-4	0	0	86-100	65-100	48-79	28-48	26-33	10-14
Delvar-----	0-18	CL	SC, CH, CL	A-6, A-7-6	0	0	86-100	65-100	55-98	42-78	39-55	19-28
	18-48	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	48-60	CL, SCL, SL	CL, SC, SC-SM	A-7-6, A-2-4, A-6	0	0	87-100	66-100	50-97	26-60	26-46	10-25
196:												
Exeter-----	0-4	SL	SC-SM, SC	A-6, A-2-4	0	0	79-97	78-97	55-78	27-43	20-33	6-13
	4-8	SL	SC, SC-SM	A-2-4, A-6	0	0	85-97	84-97	57-75	26-39	20-33	6-13
	8-12	SCL	SC, CL	A-7-6, A-6	0	0	84-97	84-97	71-92	39-54	31-42	13-21
	12-18	SCL	SC, CL	A-7-6, A-6	0	0	84-97	84-97	70-90	38-53	31-42	13-21
	18-25	SCL, CL, L	CL, SC	A-7-6, A-6	0	0	92-100	91-100	72-91	38-54	29-42	12-21
	25-39	DUR	---	---	---	---	---	---	---	---	---	---
	39-60	SL	SC, SC-SM, SM	A-2-4, A-6	0	0	79-92	78-92	57-79	27-44	16-29	2-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
197: Nord-----	0-9	FSL	SC-SM, SC	A-6, A-2-4, A-4	0	0	79-100	78-100	69-97	28-44	22-33	6-12
	9-65	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0	78-92	77-92	56-74	27-40	20-30	6-12
198: Centerville-----	0-6	C	CH	A-7-6	0	0	100	100	82-100	71-91	51-72	29-44
	6-26	C, SC	CH, CL	A-7-6	0	0	100	100	80-100	67-92	46-70	25-44
	26-48	GR-SCL, GR-L, GR-CL, CL, L, SCL	CL, SC	A-6, A-7-6, A-2-6	0	0-10	83-100	61-100	48-94	26-59	31-47	13-25
	48-60	GR-CL, GR-L, L, SCL, GR-SCL, CL	CL, SC	A-6, A-7-6, A-2-6	0	0-10	83-100	61-100	48-94	26-59	31-46	13-25
Delvar-----	0-21	CL	SC, CH, CL	A-6, A-7-6	0	0	86-100	65-100	55-98	42-78	39-55	19-28
	21-48	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	48-60	SL, SCL, CL	CL, SC, SC-SM	A-7-6, A-2-4, A-6	0	0	87-100	66-100	50-97	26-60	26-46	10-25
199: Exeter-----	0-20	SL	SC-SM, SC	A-2-4, A-6	0	0	95-100	81-100	59-82	28-45	20-33	6-13
	20-38	CL, L, SCL	CL, SC	A-6, A-7-6, A-2-6	0	0	95-100	80-100	65-93	35-55	29-42	12-21
	38-42	DUR	---	---	---	---	---	---	---	---	---	---
200: Urban land.												
Delano-----	0-18	SL	SC, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	69-82	33-45	21-33	6-13
	18-37	L, SCL, CL	CL, SC	A-6, A-7-6	0	0	100	95-100	75-94	41-59	31-46	13-24
	37-60	L, SL	SC, SC-SM	A-2-4, A-6	0	0	100	95-100	65-85	29-47	20-36	5-17
201: Pleito-----	0-7	GR-SCL, SCL	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	27-59	33-49	13-25
	7-53	GR-L, GR-CL, CL, L, SCL, GR-SCL	CL, SC	A-7-6, A-2-6, A-6	0	0-10	83-100	61-100	48-94	26-59	33-48	13-25
	53-66	SL, GR-L, GR-SL, COSL, GR-COSL, L	SC	A-6, A-2-6, A-2-4	0	0	90-100	76-100	56-79	27-41	25-32	9-13

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
201: Chanac-----	0-17	GR-L, GR-SCL, L, SCL	CL, SC	A-4, A-7-6, A-6	0	0	90-100	76-100	65-100	46-81	27-47	10-25
	17-52	CL, SCL, GR-CL, GR-L, L, GR-SCL	CL, SC	A-4, A-7-6, A-6	0	0	90-100	75-100	65-100	49-86	27-47	10-25
	52-62	GR-SL, L, GR-COSL, GR-L, SL, COSL	SC-SM, CL	A-6, A-4	0	0	91-100	77-100	64-94	47-71	20-32	6-13
Raggulch-----	0-4	SL, GR-SL	SC	A-2-6, A-6, A-2-4	0-5	0-5	86-100	71-100	53-80	27-43	26-34	9-13
	4-16	SCL, GR-SCL	CL, SC	A-2-6, A-7-6, A-6	0-5	0-5	85-100	71-100	56-94	31-59	31-47	13-25
	16-18	WB	---	---	---	---	---	---	---	---	---	---
	18-28	BR	---	---	---	---	---	---	---	---	---	---
205: Pleito-----	0-13	CL, GR-CL	CL, SC	A-6, A-7-6	0	0-10	83-100	61-100	54-96	42-77	39-49	19-25
	13-42	SL, GR-SCL	CL, SC	A-7-6, A-2-4, A-6	0	0-10	83-100	61-100	48-99	25-60	28-48	10-25
	42-60	SCL, GR-SCL	GC, SC	A-7-6, A-2-6	0-5	0-10	65-80	51-80	41-76	22-47	31-47	13-25
Trigo-----	0-2	FSL	SC, SC-SM	A-4	0	0	100	95-100	83-95	37-46	20-28	4-10
	2-9	FSL, L, SL	SC, SC-SM	A-6, A-2-4, A-4	0	0	100	95-100	83-98	33-44	18-30	4-12
	9-19	WB	---	---	---	---	---	---	---	---	---	---
Chanac-----	0-8	GR-L, SCL, L, GR-SCL	CL, SC	A-6	0	0	90-100	75-100	63-93	44-67	30-40	12-19
	8-36	GR-L, GR-CL, SCL, CL, L, GR-SCL	CL, SC	A-4, A-7-6, A-6	0	0	90-100	75-100	64-100	45-81	27-47	10-25
	36-60	GR-SL, GR-L, GR-COSL, L, SL, COSL	SC	A-2-4, A-2-6, A-6	0	0	90-100	76-100	56-79	27-41	25-32	9-13
207: Whitewolf-----	0-10	LS	SM, SC-SM	A-2-4	0	0	80-100	79-100	59-82	20-33	0-22	NP-4
	10-60	S, LCOS	SP, SP-SM	A-3, A-2-4	0	0	73-100	71-100	53-79	4-11	0-19	NP-2
209: Whitewolf-----	0-15	LS	SC-SM, SM	A-2-4	0	0	85-100	84-100	63-82	22-33	0-22	NP-4
	15-25	LS, LCOS	SM, SC-SM	A-2-4	0	0	85-100	84-100	63-82	22-33	0-21	NP-4
	25-60	GR-S, GR-LCOS, LCOS, S	SP, SP-SM	A-2-4, A-3	0	0-1	73-100	72-100	53-79	4-11	0-18	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
210: Kernfork-----	0-6	FSL, GR-FSL	SC-SM, SM	A-2-4, A-7-6	0	0	91-100	77-100	67-98	26-44	21-42	4-12
	6-27	GR-L, GR-SL, GR-FSL, L, FSL, SL	SC-SM, SC	A-2-4, A-6	0	0	91-100	77-100	67-98	26-44	21-35	4-12
	27-30	LS, GR-LS	SC-SM, SM	A-2-4	0	0	91-100	78-100	60-84	15-26	0-26	NP-6
	30-60	SR- LS SL	SC-SM, SC	A-2-4, A-6	0	0	91-100	77-100	55-82	26-44	20-32	4-12
212: Kernfork-----	0-10	FSL, GR-FSL	SM, SC-SM, SC	A-6, A-2-4	0	0	91-100	77-100	67-98	26-44	21-37	4-12
	10-31	SL, FSL, L, GR- L, GR-SL, GR- FSL	SC, SC-SM	A-2-4, A-6	0	0	91-100	77-100	55-82	26-44	21-35	4-12
	31-60	SR- LS SIL	SC, SC-SM	A-2-4, A-6	0	0	91-100	77-100	55-82	26-44	20-32	4-12
213: Calicreek-----	0-7	LS, LCOS	SC-SM, SM	A-2-4	0	0-3	92-100	81-100	62-83	17-27	16-24	1-6
	7-26	SR- GR-COS FSL	SP-SM, SC-SM	A-1-b, A-2-4	0	0-8	86-100	63-100	30-53	7-16	15-23	1-6
	26-60	SR- GR-COS FSL	SM, SW-SM	A-1-b	0	0-8	86-100	65-100	29-49	7-15	0-19	NP-2
215: Kelval-----	0-7	GR-LS, LS	SM, SC-SM	A-2-4	0	0	100	100	77-83	20-26	17-26	1-6
	7-43	GR-FSL, SL	SM, SC-SM	A-4	0	0	100	100	88-94	38-44	16-24	1-6
	43-60	SR- GR-S FSL	SC, SM	A-4	0	0	100	100	76-88	40-52	0-28	NP-10
216: Inyo-----	0-14	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	14-60	GR-LCOS, LCOS	SM, SC-SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Riverwash.												
217: Whitewolf-----	0-14	GR-LCOS, LCOS	SW-SM, SC-SM, SM	A-1-b	0	0-8	78-87	63-87	32-50	11-20	0-20	NP-4
	14-60	GR-LCOS, LCOS	SM, SP-SM, SC-SM	A-2-4, A-1-b	0	0-4	75-92	56-92	29-53	10-21	0-20	NP-4
Riverwash.												
220: Aguents-----	0-7	LFS, COS, SL	SM, SC-SM	A-4, A-2-4	0	0	100	100	92-100	34-43	0-25	NP-7
	7-18	LS, SIL, FSL	SC-SM, SC	A-4, A-6	0	0	100	100	89-97	36-44	20-31	6-12
	18-60	S, LFS	SM, SC-SM	A-2-4	0	0	100	100	92-100	32-43	0-24	NP-7

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
220:												
Aquolls-----	0-3	SIL, SL, CL	ML, CL, CL-ML	A-7-6, A-4	0	0	100	100	85-100	66-91	18-45	2-21
	3-12	VFSL, SL, SIL	CL-ML, SM, CL	A-4, A-6	0	0	100	100	92-100	49-62	18-35	2-12
	12-60	FSL, LFS	SC-SM, SC, SM	A-2-4	0	0	100	100	89-100	22-35	16-30	2-12
Riverwash.												
222:												
Kelval-----	0-13	FSL, GR-FSL	SC, SC-SM	A-4	0	0	100	100	89-94	40-45	22-30	5-9
	13-60	SR- GR-S FSL	SC-SM	A-2-4	0	0	100	100	88-92	38-42	16-24	1-6
223:												
Kelval-----	0-13	ST-LS, ST-SL, SL, LS	SM, SC-SM	A-2-4	0	0	100	100	72-77	29-34	20-28	3-7
	13-60	ST-LS, ST-SL, SL, LS	SM, SC-SM	A-2-4	0	0	100	100	73-80	34-41	16-25	1-7
224:												
Inyo-----	0-12	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	12-60	GR-LCOS, LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
238:												
Cinco-----	0-3	LS, GR-LS	SM	A-2-4, A-1-b	0	0	88-95	55-94	42-75	15-29	0-19	NP-1
	3-60	LS, GR-LS, LCOS	SM	A-1-b, A-2-4	0	0	88-95	55-94	42-75	15-29	0-18	NP-2
240:												
Dune land-----	0-6	S	SP-SM	A-3	0	0	100	100	76-77	6-7	0-14	NP
	6-60	S, FS	SP-SM	A-3	0	0	100	100	76-77	6-7	0-14	NP
241:												
Inyo-----	0-8	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	8-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
242:												
Inyo-----	0-6	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	6-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
243:												
Kernfork, saline-sodic, occasionally flooded-----	0-10	L, GR-L	CL-ML, CL, ML	A-4, A-7-6	0	0	100	95-100	77-94	53-68	21-43	4-13
	10-60	SR- LS SIL	SM, SC-SM	A-2-4, A-4, A-7-6	0	0	100	95-100	68-82	32-44	21-42	4-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
245: Chollawell-----	0-21	LCOS, GR-LCOS, GRV-LCOS	SC-SM, SW-SM, SP-SC	A-1-b, A-1-a	0	0-1	66-80	49-80	26-46	9-20	16-24	1-6
	21-46	GRX-COSL, COSL, GR-COSL	SP-SC, SC	A-6, A-1-a, A-2-4	0	0-10	62-94	24-94	14-63	8-38	20-30	6-12
	46-60	GRV-LCOS, GRV-COS, COS, GR-COS, GR-LCOS, LCOS	SW-SM, SC-SM, SW	A-1-b, A-1-a	0	0-10	60-85	29-85	13-46	2-14	0-23	NP-6
246: Chollawell-----	0-19	LCOS, GR-LCOS, GRV-LCOS	SC-SM, SW-SM, SP-SM	A-1-a, A-1-b	0	0-11	58-80	31-80	16-46	6-20	16-24	1-6
	19-54	GR-COSL, COSL, GRX-COSL	SP-SC, SC	A-1-a, A-6, A-2-4	0	0-10	62-94	24-94	14-63	8-38	20-30	6-12
	54-60	LCOS, GR-LCOS, GR-COS, GRX-COS, COS, GRX-LCOS	SC-SM, SP-SM	A-1-b, A-1-a	0	0-26	60-85	29-85	15-50	5-21	0-23	NP-6
247: Inyo-----	0-8	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	8-60	GR-LCOS, LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Tips-----	0-5	GR-LCOS, GRV-LCOS, LCOS	SW-SM, SC-SM	A-1-a, A-1-b	0-5	0-5	63-83	39-83	21-48	8-21	16-24	2-6
	5-12	GR-SL, GR-COSL, GRV-COSL, COSL, GRV-SL, SL	SC-SM, SC	A-2-6, A-2-4	0-5	0-5	64-84	40-84	24-55	14-34	22-30	7-12
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
249: Hoffman-----	0-11	GRV-LCOS, GR-LCOS, LCOS	SC-SM, SW-SM	A-1-a, A-1-b, A-2-4	0	0-4	74-92	44-92	23-54	8-23	16-24	1-6
	11-22	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SW-SC	A-1-b, A-1-a	0	0-4	73-87	46-87	26-50	10-21	19-23	4-6
	22-34	GR-COSL, GR-SL, GRV-SL, SL, GRV-COSL, COSL	SC-SM, SC	A-6, A-2-4	0	0-5	73-91	41-91	25-60	14-37	22-30	7-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
250: Hoffman-----	0-11	GR-LCOS, LCOS, GRV-LCOS	SC-SM, SW-SM	A-1-a, A-1-b, A-2-4	0	0-4	74-92	44-92	23-54	8-23	16-24	1-6
	11-22	GR-LCOS, GRV- LCOS, LCOS	SC-SM, SW-SC	A-1-b, A-1-a	0	0-4	73-87	46-87	26-50	10-21	19-23	4-6
	22-34	COSL, GRV-COSL, GR-COSL, GR- SL, GRV-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	73-91	41-91	25-60	14-37	22-30	7-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Tips-----	0-5	GR-LCOS, LCOS, GRV-LCOS	SC-SM, SW-SM	A-1-b, A-1-a	0-8	0-8	69-83	46-83	25-48	9-21	16-24	2-6
	5-10	COSL, GRV-COSL, GR-COSL, GR- SL, SL, GRV-SL	SC-SM, SC	A-2-4, A-2-6	0-5	0-5	64-84	40-84	24-55	14-34	22-30	7-12
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Pilotwell-----	0-3	LCOS, GR-LCOS	SC-SM, SW-SM	A-2-4, A-1-b	0-3	0-3	77-92	57-92	30-53	11-23	17-24	2-6
	3-38	GR-LCOS, LCOS	SW-SM, SC-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-54	11-23	15-23	1-6
	38-48	WB	---	---	---	---	---	---	---	---	---	---
253: Sorrell-----	0-9	BYV-LCOS, BY- LCOS, LCOS	SM, SC-SM	A-1-b, A-2-4	6-31	3-15	70-94	69-94	37-54	14-23	18-29	2-6
	9-23	COSL, BYV-SL, SL, BY-COSL, BY-SL, BYV- COSL	SC-SM, SC	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	21-31	6-12
	23-33	WB	---	---	---	---	---	---	---	---	---	---
Martee-----	0-5	BYV-LCOS, BY- LCOS, BYX-LCOS	SM, GP-GM	A-1-a, A-1-b	22-50	7-22	41-82	38-81	20-47	7-20	20-31	1-6
	5-11	BY-LCOS, BYV- LCOS, BYX-LCOS	GP-GM, SC-SM, SM	A-1-a, A-1-b	20-51	6-15	44-78	42-77	22-45	8-19	17-31	1-6
	11-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
254: Martee-----	0-4	GR-LCOS, GRV-LCOS	SM, GP-GM	A-1-b	7-30	0	53-71	51-70	27-41	10-17	20-31	1-6
	4-12	GR-LCOS, GRV-LCOS	SM, GP-GM, SP-SC	A-1-b, A-1-a	8-31	0	52-71	50-69	26-40	9-17	17-31	1-6
	12-15	WB	---	---	---	---	---	---	---	---	---	---
	15-25	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
255: Kernfork, occasionally flooded	0-10	GR-L, L	ML, CL, CL-ML	A-7-6, A-4	0	0	100	95-100	77-94	53-68	21-43	4-13
	10-60	SR- LS SIL	SM, SC-SM	A-2-4, A-7-6, A-4	0	0	100	95-100	68-82	32-44	21-42	4-12
Kernfork, frequently flooded---	0-8	SL	SC, SC-SM, SM	A-2-4, A-7-5, A-4	0	0	100	95-100	67-82	31-44	21-43	4-12
	8-60	LS	SM, SC-SM	A-2-7, A-2-4	0	0	100	95-100	75-89	22-34	21-42	4-12
257: Hoffman-----	0-11	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SW-SM	A-1-a, A-1-b, A-2-4	0	0-4	74-92	44-92	23-54	8-23	16-24	1-6
	11-22	GR-LCOS, GRV-LCOS, LCOS	SC-SM, SW-SC	A-1-b, A-1-a	0	0-4	73-87	46-87	26-50	10-21	19-23	4-6
	22-34	GRV-COSL, COSL, SL, GRV-SL, GR-SL, GR-COSL	SC-SM, SC	A-6, A-2-4	0	0-5	73-91	41-91	25-60	14-37	22-30	7-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Tips-----	0-5	GR-LCOS, GRV-LCOS, LCOS	SC-SM, SW-SM	A-1-b, A-1-a	0-5	0-5	63-83	39-83	21-48	8-21	16-24	2-6
	5-10	GR-SL, GR-COSL, GRV-COSL, COSL, GRV-SL, SL	SC-SM, SC	A-2-4, A-2-6	0-5	0-5	64-84	40-84	24-55	14-34	22-30	7-12
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
259: Cowspring-----	0-3	LCOS, GR-LCOS, GRV-LCOS	SC-SM, SW-SM, SM	A-1-a, A-2-4, A-1-b	0	0-4	74-92	45-92	23-54	8-23	0-23	NP-6
	3-27	GR-COSL, GRV-COSL, COSL	SC-SM, SC	A-6, A-2-4	0	0-5	73-92	42-92	25-61	15-37	22-30	7-12
	27-37	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
260: Cowspring-----	0-3	SL, GR-LCOS, GRV-LCOS	SC-SM, SW-SM, SM	A-1-a, A-2-4, A-1-b	0	0-4	74-92	44-92	23-54	8-23	0-23	NP-6
	3-27	GR-SL, GRV-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	73-92	42-92	31-73	15-39	22-30	7-12
	27-37	WB	---	---	---	---	---	---	---	---	---	---
Tips-----	0-5	GR-LCOS, GRV-LCOS, LCOS	SC-SM, SW-SM	A-1-b, A-1-a	0-5	0-5	63-83	39-83	21-48	8-21	16-24	2-6
	5-12	GRV-COSL, GRV-SL, GR-SL, GR-COSL, COSL, SL	SC-SM, SC	A-2-4, A-2-6	0-5	0-5	64-84	40-84	24-55	14-34	22-30	7-12
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
261: Blasingame-----	0-14	SL	SC, SC-SM	A-2-4, A-4, A-6	0-9	0	96-100	86-100	63-81	32-45	23-33	7-13
	14-21	SCL, CL, L	CL, SC	A-6, A-7-6	0-10	0	96-100	85-100	69-92	38-55	31-43	13-21
	21-31	WB	---	---	---	---	---	---	---	---	---	---
Arujo-----	0-14	SL	SC, SC-SM	A-2-4, A-6	0-2	0	92-100	80-100	58-82	28-45	22-35	6-13
	14-45	L, SCL	SC, SC-SM	A-7-6, A-6, A-2-4	0-2	0	92-100	79-100	61-90	30-50	26-41	7-17
	45-58	SL, SCL, L	CL, SC	A-2-4, A-6	0-2	0	92-100	80-100	64-91	33-51	26-38	10-18
	58-68	WB	---	---	---	---	---	---	---	---	---	---
Cieneba-----	0-16	GR-SL, SL	SM, SC	A-2-4, A-1-b, A-6	0	0	91-100	70-100	50-82	23-44	19-31	3-12
	16-26	WB	---	---	---	---	---	---	---	---	---	---
264: Arujo-----	0-14	SL	SC, SC-SM	A-2-4, A-6	0	0	92-100	78-100	56-82	27-45	22-35	6-13
	14-20	SCL, L	CL, SC, SC-SM	A-2-4, A-6, A-7-6	0	0	92-100	77-100	60-90	29-50	26-41	7-17
	20-58	CL, SCL	CL, SC	A-7-6, A-2-6	0	0	92-100	77-100	62-91	35-55	35-47	17-25
	58-68	WB	---	---	---	---	---	---	---	---	---	---
Walong-----	0-13	SL, GR-SL	SM, SC	A-2-4, A-6, A-1-b	0	0-14	76-92	61-92	43-75	20-40	20-33	3-12
	13-25	SL, COSL, GR-COSL, GR-SL	SM, SC	A-2-4, A-6	0	0-14	84-100	61-100	34-67	18-41	18-31	3-12
	25-35	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
264: Tunis-----	0-3	SL, GR-SL	SC-SM, SC	A-2-4, A-1-b, A-6	0	0	84-100	64-100	46-82	21-44	21-33	4-12
	3-16	SL, GR-SL, GR-L, L	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	84-100	63-100	45-82	21-44	20-31	4-12
	16-26	WB	---	---	---	---	---	---	---	---	---	---
265: Arujo-----	0-14	SL	SC, SC-SM	A-2-4, A-6	0	0	91-100	78-100	56-82	27-45	22-35	6-13
	14-20	L, SCL	CL, SC, SC-SM	A-7-6, A-6, A-2-4	0	0	91-100	77-100	60-90	29-50	26-41	7-17
	20-58	CL, SCL	CL, SC	A-7-6, A-2-6	0	0	91-100	77-100	62-91	35-55	35-47	17-25
	58-68	WB	---	---	---	---	---	---	---	---	---	---
266: Tunis-----	0-3	SL, GR-SL	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	84-100	64-100	46-82	21-44	21-33	4-12
	3-16	L, SL	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	84-100	63-100	45-82	21-44	20-31	4-12
	16-26	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
267: Cieneba-----	0-6	SL, ST-SL	SM, SC	A-2-4, A-6	0-15	0-15	74-100	73-100	52-82	24-44	19-31	3-12
	6-16	ST-SL, SL	SM, SC	A-6, A-2-4	0-15	0-15	74-100	73-100	52-82	24-44	18-30	3-12
	16-26	WB	---	---	---	---	---	---	---	---	---	---
Vista-----	0-4	SL, GR-SL	SM, SC, SC-SM	A-4, A-2-4	0	0	85-100	70-100	52-82	26-45	19-28	3-10
	4-12	SL, GR-COSL, GR-SL, COSL	SC-SM, SC, SM	A-4, A-2-4	0	0	85-100	70-100	52-82	26-45	18-28	3-10
	12-27	COSL, SL, GR-SL, GR-COSL	SC, SC-SM, SM	A-2-4, A-4	0	0	85-100	70-100	52-82	26-45	18-28	3-10
	27-37	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
268: Tunis-----	0-5	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0	0	92-100	77-100	55-82	26-44	21-33	4-12
	5-16	GR-SL, SL, L, GR-L	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	85-100	70-100	50-82	23-44	20-31	4-12
	16-26	WB	---	---	---	---	---	---	---	---	---	---

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Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
268: Tollhouse-----	0-13	STV-COSL, COSL, ST-COSL	SM, SC, SC-SM	A-1-b, A-2-4, A-6	4-30	0-15	70-96	69-96	39-67	21-42	18-33	2-12
	13-23	WB	---	---	---	---	---	---	---	---	---	---
Sorrell-----	0-11	COSL, BYV-COSL, BY-COSL	SC-SM, SC	A-2-4, A-4, A-1-b	7-31	3-15	70-94	69-94	41-62	24-38	21-32	4-9
	11-36	BYV-COSL, BY- SL, BY-COSL, COSL, BYV-SL, SL	SC-SM, SC	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	21-31	6-12
	36-46	WB	---	---	---	---	---	---	---	---	---	---
269: Tollhouse-----	0-11	SL, GRV-SL, GR- SL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	0-5	0-5	76-92	44-92	32-78	15-44	18-33	2-12
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Sorrell-----	0-2	BY-LCOS, BYV- LCOS, LCOS	SC-SM, SC	A-2-4, A-1-b	7-31	3-15	70-94	69-94	32-50	11-21	21-32	4-9
	2-27	BY-SL, BY-COSL, SL, BYV-SL, COSL, BYV-COSL	SC-SM, SC	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	22-32	6-12
	27-37	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
270: Locobill-----	0-3	SL, GR-SL	SC, SC-SM, SM	A-2-4, A-4	0	0	77-92	76-91	57-74	28-40	19-28	3-9
	3-13	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0	77-92	76-91	56-74	27-40	21-31	6-12
	13-28	GRV-SL, GR-SL	GC-GM, GC, SC	A-2-4, A-2-6	0	0-8	51-71	49-69	37-56	18-30	22-30	7-12
	28-35	GRV-SCL, GR-SCL	SC, GC	A-2-6	0	8-23	48-70	46-69	38-61	21-35	31-38	13-18
	35-45	WB	---	---	---	---	---	---	---	---	---	---
Backcanyon-----	0-3	GR-SL, GRV-SL, SL, FSL, GRV- FSL, GR-FSL	SC-SM, SC	A-1-a, A-2-4, A-6	0-5	0-9	72-92	40-92	28-75	13-40	20-35	4-12
	3-15	GR-FSL, GR- COSL, GRV- COSL, COSL, GRV-SL, SL, GRV-FSL, FSL, GR-SL	CL, SC-SM, SC	A-1-b, A-2-4, A-7-6	0-5	0-9	72-92	40-92	35-92	14-52	19-41	4-21
	15-23	WB	---	---	---	---	---	---	---	---	---	---
	23-33	BR	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
270: Sesame-----	0-9	SL	SC, SC-SM	A-4, A-6, A-2-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	9-24	SCL, L	CL, SC	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	24-33	SL	SC, SC-SM	A-2-4, A-4, A-6	0	0	97-100	90-100	69-82	33-45	20-31	6-13
	33-43	WB	---	---	---	---	---	---	---	---	---	---
271: Walong-----	0-9	GR-SL, SL	SM, SC, SC-SM	A-2-4, A-4	0	0-6	92-100	83-100	62-83	30-45	20-31	3-10
	9-30	GR-SL, SL	SC-SM, SC	A-2-4, A-6	0	0-6	92-100	83-100	60-82	28-44	19-31	4-12
	30-40	WB	---	---	---	---	---	---	---	---	---	---
Tunis-----	0-18	SL, GR-SL	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	84-100	64-100	46-82	21-44	21-33	4-12
	18-28	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
272: Tollhouse-----	0-14	GR-COSL, COSL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	0-5	0-5	83-100	62-100	35-70	19-44	18-33	2-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Edmundston-----	0-25	GR-COSL, COSL	SC-SM, SC	A-1-b, A-6, A-2-4	0	0-9	86-100	69-100	39-67	21-41	21-35	4-12
	25-57	COSL, GRV-COSL, GRV-SL, SL, GR-SL, GR-COSL	SC-SM, SC	A-6, A-1-a, A-2-4	0	0-10	80-100	43-100	25-67	13-41	20-31	4-12
	57-67	WB	---	---	---	---	---	---	---	---	---	---
Sorrell-----	0-10	BY-LCOS, LCOS, BYV-LCOS	SC-SM, SC	A-2-4, A-1-b	7-31	3-15	70-94	69-94	32-50	11-21	21-32	4-9
	10-39	COSL, BYV-SL, SL, BY-COSL, BYV-COSL, BY-SL	SC-SM, SC	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	21-31	6-12
	39-49	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
274: Sesame-----	0-9	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	9-19	SCL, L	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	19-24	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	20-31	6-13
	24-34	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-7	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	7-24	CL, SCL, GR-CL, GR-SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	24-34	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
275: Strahle-----	0-4	GR-SL, GRV-SL, SL	SC, SC-SM	A-6, A-2-4	0	2-15	77-93	54-87	40-71	20-39	24-35	7-13
	4-12	GR-SCL, GR-CL, GRV-CL, SCL, CL, GRV-SCL	CL, SC	A-2-6, A-7-6	0	5-24	65-91	64-91	52-82	29-50	35-47	17-25
	12-14	WB	---	---	---	---	---	---	---	---	---	---
	14-24	BR	---	---	---	---	---	---	---	---	---	---
Sesame-----	0-9	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	9-24	SCL, L	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	24-34	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-3	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	3-25	GR-SCL, GR-CL, CL, SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	25-35	WB	---	---	---	---	---	---	---	---	---	---
276: Tips-----	0-4	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-1-a	0-5	0-5	63-83	39-83	21-48	8-21	16-24	2-6
	4-7	LCOS, GRV-LCOS, GR-LCOS	SW-SM, SC-SM	A-1-b, A-1-a	0-5	0-5	63-83	39-83	21-48	8-20	18-24	3-6
	7-11	GR-SL, GR-COSL, GRV-COSL, COSL, GRV-SL, SL	SC-SM, SC	A-2-4, A-2-6	0-5	0-5	64-84	40-84	24-55	14-34	22-30	7-12
	11-21	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
276: Hoffman-----	0-4	GR-LCOS, LCOS, GRV-LCOS	SC-SM, SW-SM	A-2-4, A-1-b, A-1-a	0	0-4	74-92	44-92	23-54	8-23	16-24	1-6
	4-10	GRV-LCOS, GR-LCOS, LCOS	SC-SM, SW-SC	A-1-a, A-1-b	0	0-4	73-87	46-87	26-50	10-21	19-23	4-6
	10-39	SL, GR-COSL, GR-SL, GRV-SL, COSL, GRV-COSL	SC-SM, SC	A-6, A-2-4	0	0-5	73-91	41-91	25-60	14-37	22-30	7-12
	39-49	WB	---	---	---	---	---	---	---	---	---	---
Cinco-----	0-9	LCOS, GR-LCOS	SM, SC-SM	A-1-b, A-2-4	0	0	88-95	55-94	31-58	13-26	0-20	NP-2
	9-60	LCOS, GR-LS, GRV-LS, LS, GR-LCOS	SC-SM, SM	A-1-b, A-2-4	0	0	88-95	55-94	31-58	13-26	0-19	NP-2
277: Feethill-----	0-4	SL	SC-SM, SC	A-2-4, A-4, A-6	0	0	92-100	84-100	60-82	28-44	21-35	4-12
	4-18	SCL, SL	SC, CL	A-7-6, A-6	0	0	92-100	83-100	61-88	30-50	28-45	10-21
	18-24	SCL, SL	CL, SC	A-7-6, A-6	0	0	92-100	83-100	63-91	33-54	27-42	10-21
	24-30	SL, SCL	CL, SC	A-7-6, A-6	0	0	92-100	83-100	64-92	33-55	27-42	10-21
	30-40	WB	---	---	---	---	---	---	---	---	---	---
Vista-----	0-4	GR-SL, SL	SC-SM, SC, SM	A-4, A-2-4	0	0	92-100	77-100	57-82	28-45	19-28	3-10
	4-21	GR-COSL, GR-SL, COSL, SL	SC-SM, SC, SM	A-4, A-2-4	0	0	92-100	77-100	57-82	28-45	18-28	3-10
	21-31	WB	---	---	---	---	---	---	---	---	---	---
Walong-----	0-18	SL, GR-SL	SM, SC	A-2-4, A-6	0-10	0-6	91-100	82-100	58-82	27-44	20-33	3-12
	18-28	GR-SL, SL, GR-COSL, COSL	SM, SC	A-1-b, A-2-4, A-6	0-10	0-6	91-100	82-100	47-68	25-42	18-31	3-12
	28-38	WB	---	---	---	---	---	---	---	---	---	---
279: Strahle-----	0-6	GR-SL, GRV-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-4	72-84	52-84	39-69	19-38	24-35	7-13
	6-16	GRV-CL, CL, GRV-SCL, SCL, GR-CL, GR-SCL	SC	A-2-6, A-7-6, A-2-7	0	0-5	71-86	47-86	38-78	21-48	35-47	17-25
	16-18	WB	---	---	---	---	---	---	---	---	---	---
	18-28	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
279: Sesame-----	0-9	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	9-24	L, SCL	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	24-34	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	20-31	6-13
	34-44	WB	---	---	---	---	---	---	---	---	---	---
280: Tollhouse-----	0-12	GR-SL, SL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	0-5	0-5	83-100	62-100	44-85	21-47	18-33	2-12
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Martee-----	0-5	GRV-LCOS, GR-LCOS	SM, GP-GM	A-1-b	7-30	0	53-71	51-70	27-41	10-17	20-31	1-6
	5-11	GR-LCOS, GRV-LCOS	SM, GP-GM, SP-SC	A-1-b, A-1-a	8-31	0	52-71	50-69	26-40	9-17	17-31	1-6
	11-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Edmundston-----	0-12	SL, GR-SL	SC-SM, SC	A-6, A-1-b, A-2-4	0	0-10	85-100	68-100	49-82	23-44	21-35	4-12
	12-44	SL, GRV-SL, GR-SL, GR-COSL, COSL, GRV-COSL	SC-SM, SC	A-6, A-1-a, A-2-4	0	0-10	80-100	43-100	25-68	14-42	20-31	4-12
	44-54	WB	---	---	---	---	---	---	---	---	---	---
281: Havala-----	0-13	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0-5	0-5	83-100	62-100	46-80	23-43	24-33	7-12
	13-29	GR-SCL, GR-CL, SCL, CL	CL, SC	A-6, A-2-6, A-7-6	0-5	0-5	83-100	61-100	48-94	26-59	31-47	13-25
	29-60	GR-SL, SL, FSL, GR-FSL	SC, SC-SM	A-2-4, A-6	0-5	0-5	83-100	62-100	45-81	23-45	22-32	7-13
Walong-----	0-14	SL, GR-SL	SM, SC	A-2-4, A-6, A-1-b	0-8	0-5	80-100	60-100	43-82	20-44	20-33	3-12
	14-29	COSL, SL, GR-COSL, GR-SL	SM, SC	A-1-b, A-2-4, A-6	0-8	0-5	80-100	60-100	43-82	20-44	18-31	3-12
	29-39	WB	---	---	---	---	---	---	---	---	---	---
Kernfork-----	0-10	SL, GR-SL	SC, SM, SC-SM	A-2-4, A-6	0	0	91-100	77-100	55-82	26-44	21-40	4-12
	10-26	L, GR-L, GR-FSL, GR-SL, SL, FSL	SC, SC-SM	A-2-4, A-6	0	0	91-100	77-100	67-98	26-44	19-31	4-12
	26-60	SR- LS SIL	SC, SC-SM	A-2-4, A-6	0	0	91-100	77-100	62-90	25-42	18-29	4-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
282: Tollhouse-----	0-10	SL, STV-SL, ST-SL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	4-30	0-15	70-96	69-96	49-81	24-45	18-33	2-12
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Sesame-----	0-15	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	15-26	SCL, L	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	26-36	WB	---	---	---	---	---	---	---	---	---	---
Friant-----	0-5	ST-SL, STV-SL, SL	SC-SM, SC	A-2-4, A-6	9-25	3-17	78-96	77-96	56-78	27-41	22-33	6-12
	5-15	STV-L, STV-FSL, ST-SL, STV-SL, ST-FSL, ST-L	SC-SM, SC	A-2-4, A-2-6, A-1-b	9-25	3-17	61-82	59-81	43-66	21-35	20-31	6-12
	15-25	BR	---	---	---	---	---	---	---	---	---	---
283: Tollhouse-----	0-12	SL, GRV-SL, GR-SL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	0-5	0-5	76-92	44-92	32-78	15-44	18-33	2-12
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Martee-----	0-5	GRV-LCOS, GR-LCOS	SM, GP-GM	A-1-b	7-30	0	53-71	51-70	27-41	10-17	20-31	1-6
	5-11	GRV-LCOS, GR-LCOS	SM, GP-GM, SP-SC	A-1-b, A-1-a	8-31	0	52-71	50-69	26-40	9-17	17-31	1-6
	11-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
284: Tollhouse-----	0-14	SL, BYV-SL, BY-SL	SC-SM, SC, SM	A-6, A-4, A-2-4	4-31	2-15	100	78-98	56-83	27-47	18-33	2-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
285: Inyo-----	0-12	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	12-60	GR-LCOS, LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Kelval-----	0-7	GR-LS, LS	SM, SC-SM	A-2-4	0	0	100	100	77-83	20-26	17-26	1-6
	7-60	SR- GR-S SL	SC-SM	A-2-4	0	0	100	100	88-94	37-43	16-24	1-6

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
286: Tollhouse-----	0-12	GR-SL, SL	SC-SM, SC, SM	A-6, A-1-b, A-2-4	0-5	0-5	83-100	62-100	44-85	21-47	18-33	2-12
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-11	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	11-33	CL, SCL, GR-SCL, GR-CL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	33-43	WB	---	---	---	---	---	---	---	---	---	---
Locobill-----	0-3	SL, GR-SL	SC, SC-SM, SM	A-4, A-2-4	0-5	0-5	76-92	75-91	56-74	28-40	19-28	3-9
	3-28	GR-SL, SL	SC-SM, SC	A-1-b, A-6, A-2-4	0	0-5	83-100	66-100	48-81	23-43	21-31	6-12
	28-35	GR-SCL, GRV-SCL, SCL	CL, SC	A-2-6, A-6	0	0-14	76-100	43-100	36-89	19-51	31-38	13-18
	35-45	WB	---	---	---	---	---	---	---	---	---	---
287: Tweedy-----	0-11	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	11-31	GR-CL, CL, SCL, GR-SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	31-38	SL	SC-SM, SC	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	23-33	7-13
	38-48	WB	---	---	---	---	---	---	---	---	---	---
Strahle-----	0-5	SL, GR-SL, GRV-SL	SC-SM, SC	A-6, A-2-4	0	0-4	72-84	52-84	39-69	19-38	24-35	7-13
	5-10	GR-CL, GRV-CL, CL, GRV-SCL, GR-SCL, SCL	SC	A-2-6, A-7-6, A-2-7	0	0-5	71-86	47-86	38-78	21-48	35-47	17-25
	10-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
288: Sorrell-----	0-9	LCOS, BY-LCOS, BYV-LCOS	SM, SC-SM	A-1-b, A-2-4	6-31	3-15	70-94	69-94	37-54	14-23	18-29	2-6
	9-23	BYV-SL, COSL, SL, BYV-COSL, BY-SL, BY-COSL	SC, SC-SM	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	21-31	6-12
	23-33	WB	---	---	---	---	---	---	---	---	---	---
Arujo-----	0-23	SL	SC, SC-SM	A-2-4, A-6	0	0	91-100	78-100	56-82	27-45	22-35	6-13
	23-41	SCL, CL	CL, SC	A-7-6, A-2-6	0	0	91-100	77-100	62-91	35-55	35-47	17-25
	41-48	L, SCL, SL	SC	A-6, A-2-4	0	0	91-100	78-100	62-90	30-48	26-38	10-18
	48-58	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
289:												
Erskine-----	0-8	LCOS, GR-LCOS	SC-SM, SM	A-1-b, A-2-4	0-15	0-7	75-100	74-100	38-59	13-25	0-24	NP-6
	8-18	GR-SL, SL	SC-SM, SC	A-2-4, A-6	0-16	0-8	74-100	73-100	52-82	25-44	19-31	4-12
	18-28	WB	---	---	---	---	---	---	---	---	---	---
Hyte-----	0-5	GR-SL, SL, GRV-SL	SC-SM, SM, SC	A-4, A-1-b, A-2-4	0-5	0-5	72-87	47-87	35-71	17-39	20-31	3-10
	5-14	COSL, GRV-COSL, GRV-SL, GR-SL, SL, GR-COSL	SC-SM, SC	A-2-4, A-6, A-1-b	0-4	0-4	76-92	52-92	38-74	18-40	21-31	6-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
294:												
Edmundston-----	0-26	SL, GR-SL	SC-SM, SC	A-6, A-1-b, A-2-4	0	0-10	85-100	68-100	49-82	23-44	21-35	4-12
	26-50	SL, GR-SL, GR-COSL, COSL, GRV-SL, GRV-COSL	SC-SM, SC	A-6, A-1-a, A-2-4	0	0-10	80-100	43-100	25-68	14-42	20-31	4-12
	50-60	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-10	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	10-32	SCL, CL, GR-CL, GR-SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	32-42	WB	---	---	---	---	---	---	---	---	---	---
Walong-----	0-13	GR-SL, SL	SM, SC	A-2-4, A-6, A-1-b	0-8	0-5	80-100	60-100	43-82	20-44	20-33	3-12
	13-25	GR-COSL, SL, COSL, GR-SL	SM, SC	A-6, A-1-b, A-2-4	0-8	0-5	80-100	60-100	43-82	19-43	18-31	3-12
	25-35	WB	---	---	---	---	---	---	---	---	---	---
295:												
Tweedy-----	0-10	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	10-26	GR-SCL, SCL, CL, GR-CL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-48	13-25
	26-36	WB	---	---	---	---	---	---	---	---	---	---
Tunis-----	0-5	SL, GR-SL	SC, SC-SM	A-2-4, A-1-b, A-6	0	0	84-100	64-100	46-82	21-44	21-33	4-12
	5-14	GR-SL, L, SL, GR-L	SC, SC-SM, CL	A-6, A-4	0	0	84-100	63-100	52-92	36-67	20-31	4-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---

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Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
295: Rankor-----	0-5	GR-SL, SL	SC, SC-SM	A-2-4, A-6	0	0-5	91-100	73-100	53-82	26-45	22-37	6-13
	5-21	SCL, GR-SCL	SC, CL	A-2-6, A-6, A-7-6	0	0-5	90-100	73-100	59-92	32-55	33-47	13-21
	21-33	GR-SCL, SCL	SC, CL	A-2-6, A-6, A-7-6	0	0-5	90-100	73-100	58-94	32-59	32-49	13-25
	33-58	GR-SCL, SCL, SL, GR-SL	SC, SC-SM, CL	A-2-4, A-7-6, A-6	0	0-5	91-100	73-100	54-94	25-54	22-43	6-21
	58-68	WB	---	---	---	---	---	---	---	---	---	---
296: Arujo-----	0-21	SL	SC-SM, SC	A-2-4, A-6	0-7	0	93-100	84-100	60-82	29-45	22-35	6-13
	21-52	CL, SCL	SC, CL	A-7-6, A-6	0-8	0	93-100	83-100	67-91	38-55	35-47	17-25
	52-62	WB	---	---	---	---	---	---	---	---	---	---
Walong-----	0-17	GR-SL	SM, SC	A-1-b, A-2-4	0	0-14	74-85	60-77	43-63	20-34	20-33	3-12
	17-39	GR-COSL, COSL, SL	SM, SC	A-6, A-2-4	0	0-10	81-100	59-100	33-67	18-41	18-31	3-12
	39-49	WB	---	---	---	---	---	---	---	---	---	---
Tunis-----	0-7	SL	SC-SM, SC	A-1-b, A-2-4, A-6	0	0	84-100	64-100	46-82	21-44	21-33	4-12
	7-14	L, SL	SC-SM, SC	A-6, A-4	0	0	84-100	63-100	45-82	21-44	20-31	4-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
297: Walong-----	0-11	SL, GR-SL	SC	A-2-4, A-6, A-1-b	0-8	0-5	80-100	60-100	---	---	---	---
	11-27	SL, COSL, GR- COSL, GR-SL	SM, SC	A-1-b, A-2-4, A-6	0-8	0-5	80-100	60-100	43-82	20-44	18-31	3-12
	27-32	COSL, SL, GR- COSL, GR-SL	SM, SC	A-6, A-1-b, A-2-4	0-8	0-5	80-100	60-100	34-67	18-41	18-31	3-12
	32-42	WB	---	---	---	---	---	---	---	---	---	---
Blasingame-----	0-3	ST-SL, SL	SC-SM, SC	A-2-4, A-6	0-15	0	95-100	79-100	57-84	27-46	20-33	4-13
	3-10	SL, ST-SL	SC-SM, SC	A-6, A-2-4	0-15	0	95-100	79-100	54-79	26-42	20-32	4-12
	10-17	SCL, ST-SCL	SC, CL	A-2-6, A-7-6, A-6	0-16	0	95-100	79-100	65-95	34-56	30-43	12-21
	17-27	ST-SCL, SCL	SC, CL	A-2-6, A-6, A-7-6	0-16	0	95-100	79-100	61-90	33-54	30-42	12-21
	27-33	ST-SCL, SCL	SC, CL	A-2-6, A-6, A-7-6	0-16	0	95-100	79-100	64-93	34-55	30-42	12-21
	33-43	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
298:												
Arujo-----	0-12	SL	SC, SC-SM	A-6, A-2-4	0	0	91-100	78-100	56-82	27-45	22-35	6-13
	12-24	L, SL	SC, SC-SM	A-2-4, A-6, A-7-6	0	0	91-100	77-100	55-85	28-49	26-41	7-17
	24-56	SCL, CL	CL, SC	A-7-6, A-2-6	0	0	91-100	77-100	62-91	35-55	35-47	17-25
	56-66	WB	---	---	---	---	---	---	---	---	---	---
Feethill-----	0-4	SL, GR-SL	SC-SM, SC	A-2-4, A-6, A-1-b	0	0	91-100	70-100	50-82	24-44	21-35	4-12
	4-14	SCL, GR-SCL	SC, CL	A-2-6, A-6, A-7-6	0	0	91-100	69-100	56-92	31-55	33-45	13-21
	14-38	SCL, GR-SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	32-42	13-21
	38-48	WB	---	---	---	---	---	---	---	---	---	---
Sesame-----	0-4	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	4-28	SCL, L	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	28-38	WB	---	---	---	---	---	---	---	---	---	---
299:												
Arujo-----	0-12	SL	SC, SC-SM	A-6, A-2-4	0	0	91-100	78-100	56-82	27-45	22-35	6-13
	12-24	SL, L	SC-SM, SC	A-2-4, A-6, A-7-6	0	0	91-100	77-100	55-85	28-49	26-41	7-17
	24-56	SCL, CL	CL, SC	A-7-6, A-2-6	0	0	91-100	77-100	62-91	35-55	35-47	17-25
	56-66	WB	---	---	---	---	---	---	---	---	---	---
Feethill-----	0-4	GR-SL, SL	SC-SM, SC	A-2-4, A-1-b, A-6	0	0	91-100	70-100	50-82	24-44	21-35	4-12
	4-14	GR-SCL, SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	33-45	13-21
	14-38	GR-SCL, SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	32-42	13-21
	38-48	WB	---	---	---	---	---	---	---	---	---	---
Sesame-----	0-4	SL	SC-SM, SC	A-2-4, A-6, A-4	0	0	97-100	90-100	69-82	33-45	21-33	6-13
	4-28	SCL, L	SC, CL	A-6	0	0	97-100	90-100	78-91	41-53	29-40	12-19
	28-38	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
300: Stineway-----	0-4	GRV-SL, GRX-SL, SL	SP-SC, SC	A-2-4, A-1-a, A-6	0-5	0-9	65-84	30-84	22-70	10-38	21-35	4-13
	4-10	GRV-SL, GRV-L, GRX-L, L, GRX-SL, SL	GC, SC	A-2-4, A-6, A-2-6	0-5	0-9	58-85	31-70	27-63	19-46	26-35	9-13
	10-13	GRV-L, GR-L, GRX-L	CL, GC	A-2-4, A-6	0-8	10-23	60-79	36-79	30-74	22-55	25-37	9-17
	13-23	BR	---	---	---	---	---	---	---	---	---	---
Kiscove-----	0-3	GR-L, GRV-L, L	CL, SC	A-2-4, A-6, A-7-6	0	0-5	65-82	42-82	35-77	25-57	26-41	10-17
	3-9	GR-CL, GR-L, GRV-L, L, GRV-CL, CL	SC, CL	A-2-6, A-6, A-7-6	0	0-5	68-86	40-86	33-85	25-68	31-47	13-25
	9-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
301: Feethill-----	0-8	SL, GR-SL	SC-SM, SC	A-2-4, A-1-b, A-6	0	0	91-100	70-100	50-82	24-44	21-35	4-12
	8-14	SCL, GR-SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	33-45	13-21
	14-22	GR-SCL, SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	32-42	13-21
	22-32	WB	---	---	---	---	---	---	---	---	---	---
Vista-----	0-3	SL, GR-SL	SC-SM, SC, SM	A-4, A-2-4, A-1-b	0	0	78-100	64-100	47-82	23-45	19-28	3-10
	3-24	GR-COSL, COSL, SL, GR-SL	SC-SM, SC, SM	A-4, A-2-4	0	0	92-100	77-100	57-82	28-45	18-28	3-10
	24-34	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
302: Feethill-----	0-3	L, GR-L	SC-SM, CL	A-4, A-6	0	0	91-100	69-100	57-93	40-68	22-37	6-13
	3-19	GR-SCL, SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	33-45	13-21
	19-26	SCL, GR-SCL	SC, CL	A-2-6, A-7-6, A-6	0	0	91-100	69-100	56-92	31-55	32-42	13-21
	26-36	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
302: Cibo-----	0-5	CL	CH, CL	A-7-6	0	0	83-100	82-100	74-95	58-76	47-55	25-29
	5-9	CL, C	CL, CH	A-7-6	0	0	82-100	82-100	74-100	60-89	46-62	25-36
	9-23	C, CL	CH, CL	A-7-6	0	0	82-100	82-100	73-100	58-86	46-62	25-36
	23-33	BR	---	---	---	---	---	---	---	---	---	---
Cieneba-----	0-15	SL, GR-SL	SM, SC	A-2-4, A-6	0	0	78-100	77-100	55-82	25-44	19-31	3-12
	15-25	WB	---	---	---	---	---	---	---	---	---	---
303: Steuber-----	0-12	GR-SL, SL	SC-SM, SC	A-6, A-2-4, A-1-b	0	0-5	84-100	63-100	45-82	21-44	20-31	4-12
	12-60	LCOS, GR-LS, GR-LCOS, LS, GR-SL, LFS, GR-LFS, SCL, SL, GR-SCL	SC, SM, SC-SM	A-6, A-2-4, A-1-b	0	0-5	83-100	62-100	45-87	21-49	16-32	2-13
304: Cibo-----	0-19	C	CH	A-7-6	0	0	83-100	83-100	74-100	61-83	51-64	29-36
	19-35	C, CL	CH, CL	A-7-6	0	0	83-100	83-100	71-100	57-84	47-64	25-36
	35-45	BR	---	---	---	---	---	---	---	---	---	---
305: Chanac-----	0-2	L, GR-L	CL, SC	A-6	0	0	90-100	75-100	64-94	47-71	30-40	12-19
	2-47	L, GR-L, GR-CL, SCL, CL, GR-SCL	CL, SC	A-7-6, A-6	0	0	90-100	75-100	63-100	47-78	31-47	13-25
	47-60	GR-COSL, GR-L, GR-SL, COSL, SL, L	SC-SM, CL	A-6, A-4	0	0	91-100	77-100	63-93	44-68	20-32	6-13
Pleito-----	0-24	GR-SCL, SCL	CL, SC	A-2-6, A-7-6	0	0-10	83-100	61-100	48-94	27-59	33-49	13-25
	24-60	SCL, L, CL, GR-CL, GR-SCL, GR-L	CL, SC	A-6, A-7-6	0	0-10	83-100	61-100	51-98	39-79	31-48	13-25
Premier-----	0-7	SL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	17-31	2-12
	7-16	COSL, SL, L	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	54-70	30-44	16-30	2-12
	16-51	L, SL, COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	54-70	30-44	16-29	2-12
	51-60	COSL, SL, L	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	54-70	30-44	16-29	2-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
306: Xerofluvents, occasionally flooded-----	0-6	LS, L, CL, SL, SCL, C	CL, SM, CH	A-4, A-6, A-7-6	0	0	84-100	84-100	60-100	41-84	19-55	2-28
	6-12	GR-C, GR-LS, GR-L, SL, GR-SL, CL, GR-CL, L, GR-SCL, LS, SCL, C	CL, CH, SM	A-2-4, A-6, A-7-6	0	0	71-100	69-100	48-100	32-84	0-51	NP-29
	12-19	GR-C, GR-L, L, LS, C, CL, SCL, SL, GR-LS, GR-CL, GR-SCL, GR-SL	CL, CH, SM	A-2-4, A-6, A-7-6	0	0	70-92	69-91	45-91	31-76	0-50	NP-29
	19-25	GR-C, GR-CL, SL, SCL, GR-L, L, LS, C, CL, GR-SCL, GR-SL, GR-LS	SC-SM, SP-SM, CL	A-2-4, A-7-6	0	0	72-92	71-92	52-92	12-51	0-49	NP-28
	25-28	L, GR-L, LS, C, GR-CL, GR-SL, CL, SCL, SL, GR-LS, GR-C, GR-SCL	SC, CL, SM	A-1-b, A-6, A-7-6	0	0	71-92	69-91	44-91	18-59	0-50	NP-29
	28-50	CL, COS, S, GR-S, GR-L, GR-COS, GR-SL, GR-SCL, GR-CL, GR-C, SL, SCL, C, L	SC, SP-SM	A-3, A-2-4, A-7-6	0	0	73-93	71-92	54-92	5-42	0-47	NP-28
	50-60	GR-L, L, COS, C, CL, SCL, SL, GR-COS, GR-C, GR-CL, GR-SCL, GR-SL, GR-S, S	SC, SP-SM	A-1-b, A-7-6	0	0	74-93	73-93	33-78	6-43	0-47	NP-28
Riverwash.												
307: Typic Xeropsamments-----	0-6	LS	SM, SC-SM	A-2-4	0	0	92-100	84-100	64-81	22-31	0-20	NP-2
	6-20	S, LS, FS	SM, SC-SM	A-2-4	0	0	92-100	85-100	64-81	22-31	0-20	NP-2
	20-60	S, LS, FS	SP-SM	A-2-4, A-3	0	0	92-100	85-100	63-79	5-11	0-20	NP-2

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
308: Rankor-----	0-4	GR-SL, SL	SC-SM, SC	A-2-4, A-6	0	0-5	91-100	73-100	53-82	26-45	22-37	6-13
	4-23	GR-SCL, SCL	CL, SC	A-7-6, A-2-6, A-6	0	0-5	90-100	73-100	59-92	32-55	33-47	13-21
	23-31	GR-SCL, SCL	CL, SC	A-2-6, A-7-6, A-6	0	0-5	90-100	73-100	58-94	32-59	32-49	13-25
	31-46	GR-SCL, GR-SL, SCL, SL	CL, SC, SC-SM	A-7-6, A-2-4, A-6	0	0-5	91-100	73-100	55-96	27-56	22-43	6-21
	46-56	WB	---	---	---	---	---	---	---	---	---	---
Edmundston-----	0-23	SL, GR-SL	SC-SM, SC	A-6, A-1-b, A-2-4	0	0-10	85-100	68-100	49-82	23-44	21-35	4-12
	23-48	COSL, SL, GR-SL, GR-COSL, GRV-COSL, GRV-SL	SC-SM, SC	A-6, A-1-a, A-2-4	0	0-10	80-100	43-100	25-68	14-42	20-31	4-12
	48-58	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-4	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	4-39	GR-SCL, SCL, CL, GR-CL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	39-49	WB	---	---	---	---	---	---	---	---	---	---
309: Rankor-----	0-4	SL, GR-SL	SC-SM, SC	A-2-4, A-6	0	0-5	91-100	73-100	53-82	26-45	22-37	6-13
	4-23	SCL, GR-SCL	CL, SC	A-7-6, A-2-6, A-6	0	0-5	90-100	73-100	59-92	32-55	33-47	13-21
	23-31	SCL, GR-SCL	CL, SC	A-2-6, A-7-6, A-6	0	0-5	90-100	73-100	58-94	32-59	32-49	13-25
	31-46	SL, SCL, GR-SL, GR-SCL	CL, SC, SC-SM	A-7-6, A-2-4, A-6	0	0-5	91-100	73-100	55-96	27-56	22-43	6-21
	46-56	WB	---	---	---	---	---	---	---	---	---	---
Edmundston-----	0-23	SL, GR-SL	SC-SM, SC	A-6, A-1-b, A-2-4	0	0-10	85-100	68-100	49-82	23-44	21-35	4-12
	23-48	SL, GR-SL, GR-COSL, GRV-COSL, COSL, GRV-SL	SC-SM, SC	A-2-4, A-6, A-1-a	0	0-10	80-100	43-100	25-68	14-42	20-31	4-12
	48-58	WB	---	---	---	---	---	---	---	---	---	---
Tweedy-----	0-4	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	4-39	SCL, CL, GR-SCL, GR-CL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	39-49	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
310: Stineway-----	0-4	GR-SL, GRV-SL, SL	SC-SM, SC	A-2-6, A-2-4, A-1-a	0-5	0-5	64-89	41-84	29-70	14-38	21-35	4-13
	4-14	GRV-SL, GRV-L, GRX-L, L, SL, GRX-SL	GC, SC, CL	A-2-4, A-6, A-2-6	0-16	0-16	54-84	31-84	27-76	19-56	26-35	9-13
	14-24	BR	---	---	---	---	---	---	---	---	---	---
Kiscove-----	0-2	GR-SL, GRV-SL, SL	SC, SC-SM	A-1-b, A-2-4, A-6	0	0	66-83	44-83	31-67	15-36	18-31	4-12
	2-9	L, GRV-L, GR-L, GR-CL, GRV-CL, CL	CL, SC	A-2-6, A-7-6, A-6	0	0-5	68-86	40-86	33-85	25-68	31-47	13-25
	9-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
311: Xerorthents-----	0-5	LS, GRX-SL, GRX-LS, GR-LS, GR-SCL, GRX-SCL, SCL, SL, GR-SL, GRX-S, GR-S, S	SC, GP-GM	A-6, A-2-6, A-1-a	1-21	1-21	31-95	28-95	19-84	9-48	17-38	2-17
	5-15	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
312: Havala-----	0-24	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0	0-5	84-100	63-100	47-80	23-43	24-33	7-12
	24-48	SL, GR-SL, GR-L, GR-SCL, SCL, L	CL, SC	A-2-4, A-2-6, A-7-6	0	0-5	83-100	62-100	47-90	26-55	27-42	10-21
	48-65	GR-SL, SL, FSL, GR-FSL	SC, SC-SM	A-2-4, A-6	0	0-5	84-100	63-100	46-81	23-45	22-30	7-13
313. Dumps												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
314: Premier-----	0-14	SL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	17-31	2-12
	14-30	COSL, L, SL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-30	2-12
	30-47	L, SL, COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-29	2-12
	47-60	SL, COSL, L	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-29	2-12
Haplodurids-----	0-14	FSL	SC-SM, SC	A-4, A-6	0	0	100	100	89-97	36-44	21-31	6-12
	14-25	FSL	SC-SM, SC	A-4, A-6	0	0	100	100	89-97	36-44	21-30	6-12
	25-38	CEM-MAT			---	---	---	---	---	---	---	---
	38-50	L, SL, COSL	SC-SM, SM, SC	A-2-4, A-4, A-6	0	0	100	95-100	68-85	33-47	16-29	2-12
	50-60	COSL, L, SL	SC, SM, SC-SM	A-2-4, A-4, A-6	0	0	100	95-100	68-85	33-47	16-29	2-12
315: Premier-----	0-14	SL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	17-31	2-12
	14-30	L, SL, COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-30	2-12
	30-47	L, SL, COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-29	2-12
	47-60	SL, L, COSL	SC, SM, SC-SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-29	2-12
Haplodurids-----	0-14	FSL	SC, SC-SM	A-4, A-6	0	0	100	100	89-97	36-44	21-31	6-12
	14-25	FSL	SC-SM, SC	A-4, A-6	0	0	100	100	89-97	36-44	21-30	6-12
	25-38	CEM-MAT			---	---	---	---	---	---	---	---
	38-50	L, SL, COSL	SC-SM, SM, SC	A-2-4, A-4, A-6	0	0	100	95-100	68-85	33-47	16-29	2-12
	50-60	COSL, SL, L	SC, SC-SM, SM	A-2-4, A-4, A-6	0	0	100	95-100	68-85	33-47	16-29	2-12
316: Premier-----	0-12	COSL	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	54-70	30-44	17-31	2-12
	12-60	COSL, SL, L	SC-SM, SC, SM	A-6, A-2-4, A-4	0	0	100	95-100	68-85	33-47	16-29	2-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
317: Premier-----	0-12	COSL	SC-SM, SC, SM	A-2-4, A-4, A-6	0	0	100	95-100	54-70	30-44	17-31	2-12
	12-60	COSL, SL, L	SC-SM, SC, SM	A-2-4, A-4, A-6	0	0	100	95-100	68-85	33-47	16-29	2-12
320: Southlake-----	0-4	GR-SL, GRV-SL, SL	SC-SM, SM, SC	A-1-b, A-4	1-8	1-8	67-88	42-87	31-72	15-39	16-28	2-10
	4-19	GRV-SL, GRX-SL, SL	SC, SP-SC	A-1-a, A-2-4, A-2-6	0-15	0-8	60-81	31-81	23-66	11-35	20-31	6-12
	19-42	GRV-SL, SL, SCL, GRV-SCL	SC, GC	A-2-6, A-7-6	0-5	0-5	62-79	35-79	27-75	13-44	29-46	12-25
	42-60	SL, COSL, GRV-COSL, GRV-SL	SC, SC-SM	A-1-a, A-2-4, A-2-6	0-5	0-5	62-79	36-79	26-64	13-34	20-30	6-12
325: Walong-----	0-14	GR-SL, SL	SM, SC	A-2-4, A-6, A-1-b	0-8	0-5	80-100	60-100	43-82	20-44	20-33	3-12
	14-27	GR-SL, COSL, SL, GR-COSL	SM, SC	A-1-b, A-2-4, A-6	0-8	0-5	80-100	60-100	43-82	20-44	19-31	3-12
	27-37	WB	---	---	---	---	---	---	---	---	---	---
326: Walong-----	0-14	SL, GR-SL	SM, SC	A-2-4, A-6, A-1-b	0-8	0-5	80-100	60-100	43-82	20-44	20-33	3-12
	14-27	COSL, SL, GR-COSL, GR-SL	SM, SC	A-1-b, A-2-4, A-6	0-8	0-5	80-100	60-100	34-68	18-42	19-31	3-12
	27-37	WB	---	---	---	---	---	---	---	---	---	---
330: Kernville-----	0-5	GR-LCOS	SC-SM, SP-SC	A-1-b	0-6	0-6	63-78	61-77	32-45	11-19	16-24	1-6
	5-16	GR-LCOS	SC-SM, SP-SC	A-1-b	0-6	0-6	63-78	61-77	32-45	11-19	16-24	1-6
	16-19	WB	---	---	---	---	---	---	---	---	---	---
	19-29	BR	---	---	---	---	---	---	---	---	---	---
Faycreek-----	0-5	GR-LCOS, GRV-LCOS, LCOS	SM, SC-SM	A-1-b, A-2-4	0-8	4-8	85-97	55-97	29-56	10-24	17-29	1-6
	5-12	LCOS, GRV-LCOS, GR-LCOS	SM, SC-SM	A-2-4, A-1-b	0-8	4-8	85-97	55-97	29-56	10-24	17-26	1-6
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
350:												
Southlake, stony-----	0-6	ST-SL, STV-SL, SL	SC-SM, SC, SM	A-2-4, A-4, A-1-b	5-17	1-9	81-93	66-90	48-74	23-40	17-28	2-10
	6-60	ST-SL, SCL, SL, ST-SCL	SC, CL	A-2-6, A-7-6	9-16	5-11	82-94	69-94	54-90	29-56	29-46	12-25
Goodale-----	0-3	CBV-LCOS, CB-LCOS, CBX-LCOS	SC-SM	A-1-b, A-1-a	0-15	15-28	73-92	45-83	24-48	9-21	17-24	2-6
	3-60	CBX-LCOS, CB-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	14-40	14-28	63-90	39-90	21-53	8-22	16-23	2-6
352:												
Goodale-----	0-3	CB-LCOS, CBX-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	3-7	22-40	71-91	42-82	22-48	8-20	17-24	2-6
	3-60	CBX-LCOS, CBV-LCOS	SW-SM	A-1-a, A-1-b	7-20	28-38	61-81	33-72	17-42	6-18	16-23	2-6
Riverwash.												
360:												
Kernville, bouldery-----	0-16	GR-LCOS	SP-SC, SC-SM	A-1-b	0-6	0-6	63-68	61-67	32-39	11-17	16-24	1-6
	16-20	WB	---	---	---	---	---	---	---	---	---	---
	20-30	BR	---	---	---	---	---	---	---	---	---	---
Hogeye-----	0-2	COSL, GR-COSL	SC-SM, SC	A-2-4, A-1-b, A-6	0-16	0-8	76-100	75-100	44-67	25-41	21-31	6-12
	2-29	GR-SL, COSL, SL, GR-COSL	SC-SM, SC	A-2-4, A-6, A-1-b	0-16	0-8	76-100	75-100	44-67	25-41	20-30	6-12
	29-40	WB	---	---	---	---	---	---	---	---	---	---
	40-50	BR	---	---	---	---	---	---	---	---	---	---
Southlake-----	0-6	SL, ST-SL, STV-SL	SC-SM, SC, SM	A-2-4, A-1-b, A-4	5-17	3-9	81-93	66-91	48-75	23-41	17-28	2-10
	6-60	SL, STV-SL, SCL, STV-SCL, ST-SCL	CL, SC	A-2-6, A-7-6	9-16	5-11	82-94	69-94	53-89	27-52	29-46	12-25
380:												
Delvar-----	0-20	CL	CH, SC, CL	A-6, A-7-6	0	0	86-100	65-100	55-98	42-78	39-55	19-28
	20-51	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	51-60	SL, SCL, CL	CL, SC, SC-SM	A-7-6, A-2-4, A-6	0	0	87-100	66-100	50-97	26-60	26-46	10-25

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
380: Pleito-----	0-30	CL, GR-CL	CL, SC	A-6, A-7-6	0	0-10	83-100	61-100	51-98	39-79	33-49	13-25
	30-60	CL, L, GR-CL, SCL, GR-L, GR-SCL	CL, SC	A-7-6, A-6	0	0-10	83-100	61-100	51-98	39-79	31-48	13-25
407: Centerville-----	0-7	C	CH	A-7-6	0	0	100	100	82-100	71-91	51-72	29-44
	7-48	CL, SC, C	CH, SC	A-7-6	0	0	100	100	71-96	42-67	46-70	25-44
	48-60	GR-SCL, GR-C	SC, CH	A-2-6, A-7-6, A-2-7	0	0	69-85	42-76	35-76	22-56	37-59	19-36
410: Stineway-----	0-4	SL, GRV-SL, GR-SL	SC-SM, SC	A-2-4, A-1-a, A-6	0-5	0-5	64-84	41-84	29-70	14-38	21-35	4-13
	4-14	GRV-SL, GRV-L, GRX-L, SL, L, GRX-SL	GC, SC, CL	A-2-4, A-2-6, A-6	0-5	0-9	58-78	31-78	27-71	19-52	26-35	9-13
	14-24	BR	---	---	---	---	---	---	---	---	---	---
Kiscove-----	0-2	SL, GRV-SL, GR-SL	SC, SC-SM	A-1-b, A-6, A-2-4	0	0	66-83	44-83	31-67	15-36	18-31	4-12
	2-9	GRV-CL, CL, L, GRV-L, GR-L, GR-CL	CL, SC	A-2-6, A-7-6, A-6	0	0-5	68-86	40-86	33-85	25-68	31-47	13-25
	9-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Urban land.												
411: Delvar-----	0-12	CL	CH, SC, CL	A-7-6, A-6	0	0	86-100	65-100	55-98	42-78	39-55	19-28
	12-19	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	19-28	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	51-68	29-40
	28-42	C	SC, CH	A-7-6	0	0	86-100	65-100	55-100	47-87	50-66	29-40
	42-60	CL, SCL	SC, CL	A-2-4, A-7-6, A-6	0	0	87-100	66-100	50-96	24-56	26-46	10-25

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
412: Chollawell-----	0-22	GRV-SL, SL, GR-SL	SC-SM, SM	A-2-4, A-1-b	0	0-6	71-84	56-84	42-67	21-35	19-26	3-7
	22-40	GRV-COSL, COSL, CB-COSL	SC-SM, SC	A-1-b, A-6, A-2-4	0	0-8	74-90	55-90	32-60	18-37	20-30	6-12
	40-60	COSL, CBX-LCOS, LCOS, CBV-COSL, CB-LCOS, CBX-COSL	SC-SM, SM	A-1-b, A-1-a, A-2-4	0	0-42	64-92	38-92	23-56	10-26	0-19	NP-2
Urban land.												
417: Southlake-----	0-6	SL, STV-SL, ST-SL	SC-SM, SM, SC	A-2-4, A-4, A-1-b	5-17	1-9	81-93	66-90	48-74	23-40	17-28	2-10
	6-15	SL, ST-SL, STV-SL	SC-SM, SC, SM	A-1-b, A-2-4, A-4	9-15	5-11	82-94	69-94	50-78	24-42	17-28	2-10
	15-40	ST-SCL, STV-SCL, SL, SCL, ST-SL, STV-SL	SC, CL	A-2-6, A-7-6	9-16	5-11	82-94	69-94	53-89	27-52	29-46	12-25
	40-60	ST-SL, STV-SCL, SL, SCL, ST-SCL, STV-SL	SC	A-2-4, A-2-6, A-6	9-16	5-11	82-94	69-94	55-85	26-45	25-36	9-17
Southlake, gravelly-----	0-6	GR-SL	SC, SC-SM, SM	A-1-b, A-2-4	0-6	0-6	77-85	59-77	43-63	21-34	16-28	2-10
	6-19	GRV-SL	SC	A-1-a, A-2-4, A-2-6	5-13	5-13	68-78	36-56	26-45	13-24	20-31	6-12
	19-42	GRV-SCL, GRV-SL	SC	A-2-6	5-13	5-13	68-77	36-55	28-52	14-31	29-46	12-25
	42-60	GRV-SL, GRV-COSL	SC, SC-SM	A-2-6, A-2-4, A-1-a	5-13	5-13	68-78	36-55	26-45	13-24	20-30	6-12
Goodale-----	0-8	CBX-LCOS, CB-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	0-15	15-28	73-97	45-88	24-51	9-22	17-24	2-6
	8-60	ST-LCOS, STV-LCOS, STX-LCOS	SC-SM	A-1-a, A-1-b	14-40	14-28	63-90	39-90	21-53	8-22	16-23	2-6
Urban land.												

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
420: Southlake-----	0-4	GRV-SL, GR-SL, SL	SC-SM, SM, SC	A-1-b, A-4	1-7	1-7	73-92	60-90	44-74	21-40	16-28	2-10
	4-19	GR-SL, GRV-SL, SL	SC, SP-SC	A-1-a, A-2-6, A-2-4	1-9	1-5	62-98	34-90	25-73	12-39	20-31	6-12
	19-42	GRV-SL, GRV-SCL, SL, SCL	SC, GC	A-2-6, A-7-6	1-8	1-8	66-98	32-90	25-85	12-50	29-46	12-25
	42-60	GRV-SCL, GRV-SL, SL, SCL	GC, SC, SC-SM	A-1-a, A-2-4, A-6	1-13	1-13	68-98	36-90	26-80	13-46	20-37	6-18
Urban land.												
422: Kelval-----	0-13	FSL, GR-FSL	SC, SC-SM	A-4	0	0	100	100	89-94	40-45	22-30	5-9
	13-60	SR- GR-S FSL	SC-SM	A-2-4	0	0	100	100	88-94	37-43	16-24	1-6
Urban land.												
423: Auberry-----	0-16	SL	SC, SC-SM	A-2-4, A-4	0	0	95-100	81-100	61-82	30-44	20-31	4-10
	16-22	L, SL	SC-SM, CL	A-6, A-4	0	0	95-100	85-100	70-93	49-68	21-33	6-13
	22-43	CL, L, SCL	CL, SC	A-7-6, A-6	0	0	95-100	85-100	69-92	38-55	32-43	13-21
	43-56	SL, COSL	SC-SM, SC	A-2-4, A-6	0	0	95-100	81-100	58-80	28-43	20-30	6-12
	56-66	WB	---	---	---	---	---	---	---	---	---	---
Crouch-----	0-22	GR-COSL, COSL	SM, SC-SM	A-4, A-1-b, A-2-4	0	0	91-100	70-100	42-65	24-39	20-30	3-7
	22-43	COSL, SL, GR-COSL, GR-SL, GR-L, L	SM, SC, SC-SM	A-1-b, A-2-4, A-4	0	0	91-100	70-100	42-67	24-42	19-28	3-10
	43-70	LS, GR-LS, COSL, GR-COSL	SC-SM, SM	A-2-4	0	0	91-100	71-100	54-82	19-33	0-22	NP-4
	70-80	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
424: Inyo-----	0-12	LCOS	SC-SM, SM	A-1-b	0	0	85-100	70-100	35-57	14-23	0-21	NP-4
	12-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-100	59-100	30-57	10-23	0-21	NP-4
Urban land.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
430: Friant-----	0-5	STV-SL, ST-SL, SL	SC, SC-SM	A-2-4, A-6	9-25	3-17	79-96	78-96	57-78	27-41	22-33	6-12
	5-15	STV-SL, ST-SL, ST-FSL, ST-L, STV-L, STV-FSL	SC, SC-SM	A-2-4, A-2-6, A-1-b	9-25	3-17	61-82	60-82	43-66	21-35	20-31	6-12
	15-25	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
432: Alberti, gravelly-----	0-1	GR-L, GR-CL	CL, SC	A-2-6, A-6	0	0-3	72-82	54-82	47-76	35-58	33-40	15-19
	1-17	GR-C, CB-CL, CB-C	CL, SC	A-7-6	0-4	12-16	80-95	60-95	48-95	41-88	45-69	25-44
	17-22	WB	---	---	---	---	---	---	---	---	---	---
	22-32	BR	---	---	---	---	---	---	---	---	---	---
Urban land.												
441: Inyo-----	0-8	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	8-60	GR-LCOS, LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Urban land.												
442: Inyo-----	0-6	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	6-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Urban land.												
445: Chollawell-----	0-21	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SW-SM, SP-SC	A-1-a, A-1-b	0	0-1	66-80	49-80	26-46	9-20	16-24	1-6
	21-46	GRX-COSL, COSL, GR-COSL	SC	A-6, A-2-4	0	0-5	76-94	52-94	30-63	17-38	20-30	6-12
	46-60	GRX-COS, LCOS, GR-LCOS, GR-COS, COS, GRX-LCOS	SC-SM, SW, SP-SM	A-1-b, A-1-a	0	0-34	58-85	26-85	12-46	2-14	0-23	NP-6
Urban land.												

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
450:												
Southlake, stony-----	0-6	ST-SL, SL	SC-SM, SC, SM	A-2-4, A-4	5-15	1-8	82-93	73-90	53-74	25-40	17-28	2-10
	6-60	ST-SCL, ST-SL, SL, STV-SCL, STV-SL, SCL	SC, CL	A-2-6, A-7-6	9-21	5-17	70-94	45-94	35-90	19-56	29-46	12-25
Goodale-----	0-3	CBX-LCOS, CB-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	0-15	15-28	73-97	45-88	24-51	9-22	17-24	2-6
	3-60	LCOS, CBX-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	28-40	14-28	63-90	39-79	21-46	8-20	16-23	2-6
Urban land.												
460:												
Kernville, bouldery-----	0-16	GR-LCOS	SP-SC, SC-SM	A-1-b	4-6	0-6	63-71	61-70	32-41	11-17	16-24	1-6
	16-20	WB	---	---	---	---	---	---	---	---	---	---
	20-30	BR	---	---	---	---	---	---	---	---	---	---
Hogeye-----	0-2	GR-COSL, COSL	SC-SM, SC	A-2-4, A-1-b, A-6	0-16	0-8	76-100	75-100	44-67	25-41	21-31	6-12
	2-29	SL, GR-SL, GR-COSL, COSL	SC-SM, SC	A-2-4, A-6, A-1-b	0-16	0-8	76-100	75-100	44-67	25-41	20-30	6-12
	29-40	WB	---	---	---	---	---	---	---	---	---	---
	40-50	BR	---	---	---	---	---	---	---	---	---	---
Southlake-----	0-6	SL, STV-SL, ST-SL	SC-SM, SC, SM	A-2-4, A-1-b, A-4	5-17	1-9	81-93	66-90	48-74	23-40	17-28	2-10
	6-60	STV-SCL, STV-SL, ST-SL, SCL, ST-SCL, SL	SC, CL	A-2-6, A-7-6	9-21	5-17	70-94	45-94	35-89	17-52	29-46	12-25
Urban land.												
465:												
Arujo-----	0-14	SL	SC, SC-SM	A-2-4, A-6	0	0	91-100	78-100	56-82	27-45	22-35	6-13
	14-20	SCL, L	CL, SC, SC-SM	A-2-4, A-6, A-7-6	0	0	91-100	77-100	60-90	29-50	26-41	7-17
	20-58	SCL, CL	CL, SC	A-7-6, A-2-6	0	0	91-100	77-100	62-91	35-55	35-47	17-25
	58-68	WB	---	---	---	---	---	---	---	---	---	---
Urban land.												

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
485:												
Inyo-----	0-12	LCOS	SC-SM, SM	A-1-b	0	0	90-100	79-100	41-57	14-23	0-21	NP-4
	12-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
Kelval-----	0-7	LS, GR-LS	SM, SC-SM	A-2-4	0	0	100	100	77-83	20-26	17-26	1-6
	7-60	SR- GR-S SL	SC-SM	A-2-4	0	0	100	100	73-79	35-41	16-24	1-6
Urban land.												
488:												
Tweedy-----	0-11	GR-SL, SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	11-31	SCL, CL, GR-CL, GR-SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	31-38	SL, GR-SL	SC-SM, SC	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	23-33	7-13
	38-48	WB	---	---	---	---	---	---	---	---	---	---
Tollhouse-----	0-5	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	5-14	GR-COSL, GR-SL, GRV-SL, SL, GRV-COSL, COSL	SC-SM, SC, SM	A-1-a, A-2-4, A-6	0-5	0-5	76-92	44-92	25-64	14-41	18-33	2-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Locobill-----	0-3	GR-SL, SL	SC, SC-SM, SM	A-4, A-2-4	0-5	0-5	76-92	75-91	56-74	28-40	19-28	3-9
	3-28	GR-SL, SL	SC-SM, SC	A-1-b, A-6, A-2-4	0	0-5	83-100	66-100	48-81	23-43	21-31	6-12
	28-35	SCL, GR-SCL, GRV-SCL	CL, SC	A-2-6, A-6	0	0-14	76-100	43-100	36-89	19-51	31-38	13-18
	35-45	WB	---	---	---	---	---	---	---	---	---	---
Urban land.												
501:												
Hyte-----	0-4	GR-COSL, GRV-COSL, COSL	SC-SM, SM, SC	A-1-b, A-4	0-4	0-4	72-87	48-87	28-59	16-36	20-31	3-10
	4-17	GRV-COSL, SL, GRV-SL, GR-SL, GR-COSL, COSL	SC-SM, SC	A-2-4, A-1-b, A-6	0-5	0-5	73-92	47-92	34-74	16-40	21-31	6-12
	17-27	WB	---	---	---	---	---	---	---	---	---	---
Erskine-----	0-4	GR-SL, SL	SC-SM, SC	A-2-4, A-4	0-16	0-8	74-100	73-100	55-82	27-44	20-28	4-10
	4-13	SL, GR-SL	SC, SC-SM	A-2-4, A-6	0-16	0-8	74-100	73-100	52-82	25-44	19-31	4-12
	13-23	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
501: Sorrell-----	0-11	BYV-LCOS, BY-LCOS, LCOS	SC-SM, SC	A-2-4, A-1-b	7-31	3-15	70-94	69-94	32-50	11-21	21-32	4-9
	11-36	BYV-COSL, BY-SL, BY-COSL, SL, BYV-SL, COSL	SC-SM, SC	A-1-b, A-2-4, A-6	6-31	3-15	70-94	69-94	40-63	23-38	21-31	6-12
	36-46	WB	---	---	---	---	---	---	---	---	---	---
503: Tips-----	0-5	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SP-SM	A-1-b, A-2-4	4-15	0-4	82-92	65-92	34-54	12-23	15-24	1-6
	5-14	GR-SL, GR-COSL, GRV-COSL, COSL, GRV-SL, SL	SC-SM, SC	A-2-4, A-6	4-15	0-4	82-92	64-92	38-61	22-37	22-30	7-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---
Erskine-----	0-8	COSL, GRV-COSL, GR-COSL	SC-SM, SC	A-4, A-1-b, A-2-4	0-31	0-22	68-100	67-100	40-66	23-41	20-28	4-9
	8-18	GR-SL, SL, GRV-SL	SC, SC-SM	A-2-4, A-6	0-31	0-23	67-100	66-100	49-80	24-43	21-31	6-12
	18-28	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
505: Chollawell-----	0-19	GRV-LCOS, LCOS, GR-LCOS	SC-SM, SW-SM, SP-SM	A-1-a, A-1-b	0	0-11	58-80	31-80	16-46	6-20	16-24	1-6
	19-54	GR-COSL, COSL, GRX-COSL	SP-SC, SC	A-1-a, A-6, A-2-4	0	0-18	63-94	27-94	16-63	9-38	20-30	6-12
	54-60	GR-COS, GRX-LCOS, GRX-COS, COS, GR-LCOS, LCOS	SC-SM, SP-SM	A-1-b, A-1-a	0	0-34	58-85	26-85	13-50	4-21	0-23	NP-6
507: Xyno-----	0-2	GR-LCOS	SC-SM, SP-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	2-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-23	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-7	LCOS, GR-LCOS	SM, SW-SM, SC-SM	A-1-b, A-2-4	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	7-17	COS, GR-LCOS, LCOS, GR-COS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	17-27	WB	---	---	---	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
507:												
Pilotwell-----	0-3	LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-53	11-23	17-24	2-6
	3-38	LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-54	11-23	15-23	1-6
	38-48	WB	---	---	---	---	---	---	---	---	---	---
508:												
Pilotwell-----	0-5	LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-53	11-23	17-24	2-6
	5-25	GR-LCOS, LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-54	11-23	15-23	1-6
	25-35	WB	---	---	---	---	---	---	---	---	---	---
Xyno-----	0-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
509:												
Xyno-----	0-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-23	1-6
	11-15	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	15-25	WB	---	---	---	---	---	---	---	---	---	---
Faycreek-----	0-2	GRV-LCOS, GR-LCOS, LCOS	SM, SW-SM, SC-SM	A-1-a, A-2-4, A-1-b	4-22	0-8	75-97	50-97	26-56	9-24	17-29	1-6
	2-10	LCOS, GRV-LCOS, GR-LCOS	SW-SM, SC-SM	A-1-a, A-2-4, A-1-b	4-22	0-8	76-97	44-97	23-56	8-24	17-26	1-6
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
510:												
Xyno-----	0-2	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	2-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-23	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-7	LCOS, GR-LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	7-17	GR-COS, LCOS, GR-LCOS, COS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	17-27	WB	---	---	---	---	---	---	---	---	---	---
Pilotwell, bouldery-----	0-5	LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-53	11-23	17-24	2-6
	5-25	LCOS, GR-LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-54	11-23	15-23	1-6
	25-35	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
512: Chollawell, cobbly substratum--	0-22	GRV-SL, SL, GR-SL	SC-SM, SM	A-2-4, A-1-b	0	0-8	64-84	44-84	33-67	16-35	19-26	3-7
	22-40	COSL, CBV-COSL, CB-COSL	SC-SM, SC	A-1-b, A-6, A-2-4	0	3-8	74-90	55-90	32-60	18-37	20-30	6-12
	40-60	CBX-LCOS, CBX-COSL, COSL, CBV-LCOS, CBV-COSL, CB-LCOS	SC-SM, SM	A-1-b, A-2-4	0	3-36	58-90	35-90	21-55	9-25	0-19	NP-2
Chollawell, gravelly-----	0-19	LCOS, GRV-LCOS, GR-LCOS	SC-SM, SW-SM, SP-SC	A-1-a, A-1-b	0	0-6	62-80	38-80	20-46	7-20	16-24	1-6
	19-54	GRX-COSL, COSL, GR-COSL	SP-SC, SC	A-1-a, A-6, A-2-4	0	0-18	63-94	27-94	16-63	9-38	20-30	6-12
	54-60	GRX-LCOS, GRX-COS, COS, GR-COS, GR-LCOS, LCOS	SC-SM, SP-SM	A-1-b, A-1-a, A-2-4	0-18	0-18	58-87	26-87	13-51	4-22	0-23	NP-6
514: Chollawell-----	0-19	GRV-LCOS, LCOS, GR-LCOS	SC-SM, SW-SM, SP-SC	A-1-a, A-1-b	0	0-10	61-80	36-80	19-46	7-20	16-24	1-6
	19-54	GRX-COSL, COSL, GR-COSL	SP-SC, SC	A-1-a, A-6, A-2-4	0	0-18	63-94	27-94	16-63	9-38	20-30	6-12
	54-60	GR-LCOS, LCOS, GR-COS, GRX-COS, COS, GRX-LCOS	SC-SM, SP-SM, SW-SM	A-1-b, A-1-a, A-2-4	0	0-20	59-87	27-87	14-51	4-22	0-23	NP-6
Inyo-----	0-1	LCOS	SC-SM, SM	A-1-b	0	0	89-100	79-100	40-57	14-23	0-21	NP-4
	1-60	LCOS, GR-LCOS	SC-SM, SM	A-1-b	0	0	80-92	59-85	30-49	10-20	0-21	NP-4
515: Scodie-----	0-8	GR-LCOS, GRV-LCOS, LCOS	SW-SM, SM	A-2-4, A-1-b, A-1-a	0-4	0-4	69-87	42-87	21-51	7-22	0-29	NP-6
	8-18	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-3	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	3-13	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	13-23	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
515: Xyno-----	0-2	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	2-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-23	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
516: Xyno-----	0-2	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	2-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-23	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
Canebrake-----	0-4	ST-LS, ST-LCOS, LCOS	SM	A-2-4, A-1-b	9-15	9-12	87-100	73-100	37-59	13-25	0-24	NP-6
	4-12	LCOS, ST-LCOS, ST-LS	SM	A-2-4, A-1-b	9-15	9-12	87-100	73-100	37-59	13-25	0-24	NP-6
	12-22	WB	---	---	---	---	---	---	---	---	---	---
517: Southlake-----	0-6	ST-SL, STV-SL, SL	SC-SM, SC, SM	A-2-4, A-4	3-15	3-15	73-92	72-91	52-75	25-41	17-28	2-10
	6-15	STV-SL, SL, ST-SL	SC-SM, SC, SM	A-2-4, A-4	3-15	3-15	73-92	72-91	52-75	25-41	17-28	2-10
	15-40	SCL, ST-SCL, ST-SL, STV-SL, SL, STV-SCL	SC, CL	A-2-6, A-7-6	3-16	3-16	73-92	71-91	55-86	27-51	29-46	12-25
	40-60	ST-SCL, SCL, ST-SL, SL, STV-SCL, STV-SL	SC	A-2-4, A-2-6, A-6	3-16	3-16	73-92	71-91	57-82	27-44	25-36	9-17
Southlake, gravelly-----	0-6	GR-SL	SM, SC-SM, SC	A-2-4	0-8	0-8	75-85	50-70	40-58	21-31	16-28	2-10
	6-19	GRV-SL	SC	A-1-a, A-2-4, A-2-6	5-13	5-13	68-78	36-56	26-45	13-24	20-31	6-12
	19-42	GRV-SCL, GRV-SL	SC	A-2-6	5-13	5-13	68-77	36-55	27-52	14-30	29-46	12-25
	42-60	GRV-SL, GRV-COSL	SC, SC-SM	A-1-a, A-2-4, A-2-6	5-13	5-13	68-78	36-55	26-45	13-24	20-30	6-12
Goodale-----	0-8	CB-LCOS, CBX-LCOS, CBV-LCOS	SC-SM	A-1-a, A-1-b	0-15	15-28	73-92	45-83	24-48	9-21	17-24	2-6
	8-60	CBX-LCOS, CBV-LCOS	SP-SC	A-1-a, A-1-b	28-38	14-26	68-90	36-79	19-46	7-20	16-23	2-6

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
518: Backcanyon-----	0-2	GRV-COSL, COSL, GR-COSL	SP-SC, SC	A-1-a, A-2-4, A-6	0-5	0-9	72-92	40-92	23-62	12-38	20-34	4-12
	2-11	SL, GRV-FSL, FSL, GRV-SL, GR-SL, GR-FSL	SW-SC, SC	A-1-a, A-2-4, A-6	0-5	0-9	72-92	40-92	28-74	12-37	19-31	4-12
	11-15	WB	---	---	---	---	---	---	---	---	---	---
	15-25	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
520: Kernville-----	0-5	GR-LCOS	SC-SM, SP-SC	A-1-b	0-6	0-6	63-78	61-77	32-45	11-19	16-24	1-6
	5-16	GR-LCOS	SC-SM, SP-SC	A-1-b	0-6	0-6	63-78	61-77	32-45	11-19	16-24	1-6
	16-19	WB	---	---	---	---	---	---	---	---	---	---
	19-29	BR	---	---	---	---	---	---	---	---	---	---
Hogeye-----	0-20	GR-COSL, COSL	SC-SM, SC	A-2-4, A-6, A-1-b	0-16	0-8	76-100	75-100	44-67	25-41	21-31	6-12
	20-29	GR-COSL, SL, COSL, GR-SL	SC-SM, SC	A-2-4, A-6, A-1-b	0-16	0-8	76-100	75-100	44-67	25-41	20-30	6-12
	29-40	WB	---	---	---	---	---	---	---	---	---	---
	40-50	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
523: Kernville, bouldery-----	0-16	GR-LCOS	SC-SM, SP-SC	A-1-b	4-6	0-6	63-71	61-70	32-41	11-17	16-24	1-6
	16-20	WB	---	---	---	---	---	---	---	---	---	---
	20-30	BR	---	---	---	---	---	---	---	---	---	---
Faycreek-----	0-6	LCOS, GRV-LCOS, GR-LCOS	SM, SC-SM	A-2-4, A-1-b	0-8	0-8	85-95	55-92	29-54	10-23	17-29	1-6
	6-12	LCOS, GRV-LCOS, GR-LCOS	SC-SM	A-2-4, A-1-b	0-8	0-8	85-95	55-95	29-56	10-24	17-26	1-6
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
525: Hungrygulch-----	0-19	COSL, GR-COSL	SC-SM, SC	A-2-4, A-4	0-4	0-4	91-100	78-100	47-67	27-41	20-28	4-10
	19-26	GR-COSL, GRV- COSL, COSL	SC-SM, SC	A-4, A-2-4, A-1-b	0-4	0-4	88-95	51-94	31-63	18-39	19-28	4-10
	26-36	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
525:												
Kernville-----	0-5	GR-LCOS	SC-SM, SP-SC	A-1-b	4	0-3	55-71	55-70	30-41	11-17	16-24	1-6
	5-16	GR-LCOS	SC-SM, SP-SC	A-1-b	4-6	0-6	63-71	61-70	32-41	11-17	16-24	1-6
	16-20	WB	---	---	---	---	---	---	---	---	---	---
	20-30	BR	---	---	---	---	---	---	---	---	---	---
Hogeye-----	0-2	GR-COSL, COSL	SC-SM, SC	A-2-4, A-1-b, A-6	0-16	0-8	76-100	75-100	44-67	25-41	21-31	6-12
	2-29	SL, GR-SL, GR-COSL, COSL	SC-SM, SC	A-2-4, A-6, A-1-b	0-16	0-8	76-100	75-100	44-67	25-41	20-30	6-12
	29-40	WB	---	---	---	---	---	---	---	---	---	---
	40-50	BR	---	---	---	---	---	---	---	---	---	---
530:												
Alberti, cobbly-----	0-4	CB-CL, GRV-CL, CL	SC, CL	A-6, A-7-6	0-4	10-15	81-96	62-96	54-91	42-71	39-47	19-25
	4-16	CB-C, CB-CL, GRV-C, GRV-CL	CL, SC	A-7-6	0-4	12-16	80-95	60-95	48-95	41-88	45-69	25-44
	16-22	WB	---	---	---	---	---	---	---	---	---	---
	22-32	BR	---	---	---	---	---	---	---	---	---	---
Alberti, gravelly-----	0-5	GR-CL	CL, SC	A-6, A-7-6	0	0-3	72-82	53-82	47-77	36-61	39-47	19-25
	5-15	CB-C, CB-CL, GR-C	CL, SC	A-7-6	0-4	12-16	80-95	60-95	48-95	41-88	45-69	25-44
	15-23	WB	---	---	---	---	---	---	---	---	---	---
	23-33	BR	---	---	---	---	---	---	---	---	---	---
531:												
Tweedy-----	0-11	SL, GR-SL	SC-SM, SC	A-6, A-2-4	0	0-5	91-100	69-100	51-81	25-45	24-35	7-13
	11-36	SCL, CL, GR-CL, GR-SCL	CL, SC	A-2-6, A-6, A-7-6	0	0-5	90-100	68-100	54-94	30-59	32-47	13-25
	36-46	WB	---	---	---	---	---	---	---	---	---	---
Erskine-----	0-7	GRV-SL, SL, GR-SL	SC-SM, SC	A-4, A-2-4	0-31	0-23	67-100	66-100	50-81	25-44	20-28	4-9
	7-19	GRV-SL, SL, GR-SL	SC, SC-SM	A-2-4, A-6	0-31	0-23	67-100	66-100	49-80	24-43	21-31	6-12
	19-29	WB	---	---	---	---	---	---	---	---	---	---
Alberti, gravelly-----	0-5	GR-CL	CL, SC	A-6, A-7-6	0	0-3	72-82	53-82	47-77	36-61	39-47	19-25
	5-17	CB-C, CB-CL, GR-C	CL, SC	A-7-6	0-4	12-16	80-95	60-95	48-95	41-88	45-69	25-44
	17-20	WB	---	---	---	---	---	---	---	---	---	---
	20-30	BR	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
532: Alberti, gravelly-----	0-1	GR-L, GR-CL	CL, SC	A-6	0	0-3	72-82	54-82	48-75	36-57	35-40	16-19
	1-17	CB-C, CB-CL, GR-C	CL, SC	A-7-6	0-4	12-16	80-95	60-95	48-95	41-88	45-69	25-44
	17-22	WB	---	---	---	---	---	---	---	---	---	---
	22-32	BR	---	---	---	---	---	---	---	---	---	---
540: Canebrake-----	0-10	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	10-16	GR-LS, GR-LCOS, LCOS, LS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	16-26	WB	---	---	---	---	---	---	---	---	---	---
Lachim-----	0-3	GR-LCOS, LCOS	SW-SM, SM, SC-SM	A-2-4, A-1-b	0	0-4	64-97	63-97	32-57	11-24	0-24	NP-6
	3-13	GR-LCOS, LCOS	SC-SM, SM, SW-SM	A-2-4, A-1-b	0	0-4	64-97	63-97	32-57	11-24	0-24	NP-6
	13-26	LCOS, GR-LCOS	SC-SM, SM, SW-SM	A-2-4, A-1-b	0	0-4	64-97	63-97	32-57	11-24	0-24	NP-6
	26-36	WB	---	---	---	---	---	---	---	---	---	---
541: Canebrake-----	0-9	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	9-12	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-23	NP-6
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Lachim-----	0-6	LS	SM, SC-SM	A-2-4	0	0-4	85-100	84-100	64-84	16-26	0-24	NP-6
	6-16	LS	SC-SM, SM	A-2-4	0	0-4	85-100	84-100	64-84	16-26	0-24	NP-6
	16-26	LCOS	SC-SM, SM	A-1-b, A-2-4	0	0-4	85-100	84-100	43-59	15-25	0-24	NP-6
	26-36	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
543: Wortley-----	0-5	CB-COSL, COSL	SM, SC-SM	A-1-b, A-2-4	0	4-17	87-96	70-96	42-63	24-37	20-28	3-7
	5-10	CB-COSL, COSL	SC-SM, SM	A-1-b, A-2-4, A-4	0	6-17	92-98	70-98	42-64	24-38	20-28	3-7
	10-20	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
543: Indiano-----	0-6	SL, CBX-SL, CB-SL	SC, SC-SM	A-2-4, A-1-a, A-6	0	9-29	68-96	37-96	27-79	13-43	22-37	6-13
	6-12	SCL, GRV-SCL, GR-SCL	SC	A-2-6, A-2-7, A-7-6	0	0-10	64-84	40-84	32-79	18-49	33-51	13-25
	12-28	GRV-CL, GR-CL, GR-SCL, SCL, GRV-SCL, CL	SC	A-2-6, A-7-6	0	0-10	64-84	40-84	32-79	18-49	31-47	13-25
	28-38	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
544: Xeric Haplargids-----	0-24	CBV-SL, CB-LS, CBV-LS, CB-SL, GR-SL	SC, SC-SM, GM	A-1-b, A-2-4	0-8	6-22	58-83	57-82	43-70	12-25	16-27	2-10
	24-38	CBV-SL, GR-SL, CB-SL	SC, GC-GM	A-2-6, A-1-b, A-2-4	0-8	6-23	58-82	56-82	41-67	20-37	20-32	6-13
	38-40	CB-SCL, STV-SCL, STV-SL, CB-SL	SC	A-6, A-2-6	2-15	14-36	67-92	66-92	54-82	29-46	29-37	12-18
	40-50	BR	---	---	---	---	---	---	---	---	---	---
Lithic Xeric Haplargids-----	0-9	GR-SL, CBV-SL, GRV-SL	GC-GM, SC-SM, GM	A-1-b, A-2-4	0	8-23	54-70	52-69	38-54	18-28	16-24	2-6
	9-18	CBX-SL, CBV-SL	GC-GM, SC-SM	A-1-b, A-2-4	0	42-53	47-69	45-68	34-54	17-28	19-26	4-7
	18-28	BR	---	---	---	---	---	---	---	---	---	---
545: Sacatar-----	0-10	LCOS, GR-LCOS	SM, SC-SM	A-1-b, A-2-4	0	0-4	95-100	82-100	43-58	16-25	18-26	2-6
	10-34	COSL, GR-COSL	SC, SC-SM	A-2-4, A-6	0	0-4	95-100	81-100	47-67	27-41	21-31	6-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-4	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	4-14	LCOS, GR-LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	14-24	WB	---	---	---	---	---	---	---	---	---	---
549: Tunawee-----	0-10	BYV-LCOS, GR-LCOS	SC-SM, SP-SM	A-1-b	8-31	2-15	62-87	60-86	32-50	12-21	18-24	2-5
	10-12	BYV-LCOS, GR-LCOS	SC-SM, SM	A-2-4, A-1-b	11-30	1-8	72-89	71-89	38-51	14-22	17-23	2-5
	12-22	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
549: Rock outcrop.												
550: Kenypeak-----	0-8	GRV-FSL, GRV-L, GRV-SL, L, FSL	SC, SP-SM, SC-SM	A-2-4, A-1-a	0-5	0-5	66-84	31-84	21-65	9-32	18-33	2-10
	8-18	BR	---	---	---	---	---	---	---	---	---	---
Rubble land.												
Rock outcrop.												
551: Tunawee-----	0-11	BY-LCOS, BYV- LCOS, LCOS	SC-SM, SM	A-2-4, A-1-b	4-34	0-9	68-97	67-97	35-56	13-24	18-26	2-6
	11-18	LCOS, BYV-LCOS, BY-LCOS	SM, SC-SM	A-2-4, A-1-b	4-30	0-8	72-97	71-97	38-56	14-24	17-24	2-6
	18-28	WB	---	---	---	---	---	---	---	---	---	---
552: Kenypeak-----	0-3	GR-SL, GR-L, SL, L, FSL, GR-FSL	SC, SC-SM, GP-GM	A-1-a, A-2-4	0-5	0-5	53-69	33-69	28-66	11-29	18-33	2-10
	3-12	CBV-FSL, CBV-L, CBX-L, CBX-FSL	GC-GM, GC	A-1-a, A-2-4	0-14	23-33	39-59	24-51	21-49	8-21	18-32	2-10
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Torriorthentic Haploxerolls----	0-10	GRV-SL, GRV-L	SC, SP-SM, SC-SM	A-2-4, A-1-a	5-13	5-13	68-77	36-55	25-43	11-22	18-31	2-10
	10-34	GRV-L, GRV-SL	SC, SC-SM	A-2-4, A-1-a	0-5	0-5	63-71	33-57	27-51	18-37	18-31	2-10
	34-44	WB	---	---	---	---	---	---	---	---	---	---
553: Tibbcreek-----	0-8	GR-L, L, GRV-L	CL, SC-SM, SC	A-6, A-4	0	0-5	52-92	50-91	41-86	29-63	22-36	6-15
	8-18	GR-CL, GR-L, CL, GRV-CL, GRV-L, L	CL, SC	A-2-6, A-7-6	0	0-5	50-92	48-91	38-89	29-71	29-48	12-26
	18-35	WB	---	---	---	---	---	---	---	---	---	---
	35-45	BR	---	---	---	---	---	---	---	---	---	---
554: Deerspring-----	0-11	FSL	SC-SM, SM	A-2-4, A-4	0	0	79-100	78-100	69-95	31-46	21-35	4-10
	11-24	FSL	SC-SM, SC, SM	A-4, A-2-4	0	0	80-100	79-100	68-96	31-48	19-33	3-10
	24-80	FSL, L	SM, CL-ML, CL	A-6, A-4	0	0	79-100	78-100	63-94	43-68	17-35	2-12

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
555: Cumulic Endoaquolls, frigid----	0-28	SL	SM, SC	A-6, A-2-4, A-4	0	0	100	89-100	63-82	29-44	22-37	3-12
	28-52	FSL, SL	SM, SC	A-6, A-2-4, A-4	0	0	100	89-100	78-98	30-44	20-35	3-12
	52-65	LS, SIL, SL, COSL, S	SM, SC	A-2-4, A-6	0	0	100	89-100	50-67	27-41	19-33	3-12
556: Toll-----	0-6	GR-LCOS, LCOS	SM, SP-SM, SC-SM	A-1-b, A-2-4	0	0	84-100	64-100	33-57	11-23	0-22	NP-4
	6-24	COS, GR-COS	SW-SM, SP-SM, SM	A-1-b	0	0	85-100	65-100	29-49	6-15	0-20	NP-2
	24-60	LCOS, GR-LCOS	SC-SM, SP-SM, SM	A-1-b	0	0	80-94	67-92	34-53	12-21	0-22	NP-4
557: Scodie-----	0-3	LCOS, GRV-LCOS, GR-LCOS	SP-SM, SC-SM, SM	A-1-a, A-2-4, A-1-b	0-7	0-7	69-87	43-87	22-51	8-22	0-29	NP-6
	3-10	GR-LCOS, LCOS	SM, SP-SM, SC-SM	A-2-4, A-1-b	0-7	0-7	69-87	43-87	22-51	8-22	0-26	NP-6
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-3	GR-COS, COS	SP-SM, SC-SM	A-1-b	0-5	0-5	77-93	62-93	29-48	6-13	0-22	NP-4
	3-12	LCOS, GR-LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	12-22	WB	---	---	---	---	---	---	---	---	---	---
Deadfoot-----	0-10	BYV-LCOS, BYX-LCOS, LCOS	SC-SM, SM	A-2-4, A-1-b	7-37	3-22	57-96	55-96	29-56	10-24	0-26	NP-6
	10-29	STV-LCOS, STX-LCOS, LCOS	SC-SM, SM	A-2-4, A-1-b	7-37	3-22	55-96	55-96	29-56	10-24	0-24	NP-6
	29-39	WB	---	---	---	---	---	---	---	---	---	---
558: Indiano-----	0-6	CB-SL, CBX-SL, SL	SC-SM, SC	A-2-4, A-1-a, A-6	0	7-29	68-94	37-87	27-72	13-39	22-37	6-13
	6-12	GRV-SCL, SCL, GR-SCL	SC	A-2-6, A-2-7, A-7-6	0	0-16	77-84	53-84	42-79	23-49	33-51	13-25
	12-28	GR-CL, GRV-CL, CL, GRV-SCL, SCL, GR-SCL	SC	A-2-6, A-7-6	0	0-16	65-84	36-84	29-79	16-49	31-47	13-25
	28-38	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
558:												
Wortley-----	0-2	CB-COSL, COSL	SC-SM, SM	A-1-b, A-2-4	0	4-17	87-96	70-96	42-63	24-37	20-28	3-7
	2-9	CB-COSL, COSL	SC-SM, SM	A-1-b, A-2-4, A-4	0	6-17	92-98	70-98	42-64	24-38	20-28	3-7
	9-19	WB	---	---	---	---	---	---	---	---	---	---
560:												
Sacatar-----	0-2	LCOS, GR-LCOS	SM, SC-SM	A-1-b, A-2-4	0	0-4	95-100	82-100	43-58	16-25	18-26	2-6
	2-10	COSL, GR-COSL	SC-SM, SM	A-2-4, A-4	0	0-4	95-100	81-100	48-64	26-37	18-26	2-6
	10-34	COSL	SC, SC-SM	A-2-4, A-6	0	0-4	95-100	81-100	47-67	27-41	21-31	6-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Wortley-----	0-2	GR-COSL, COSL	SC-SM, SM	A-4, A-2-4	0	0-9	84-95	69-95	41-62	23-37	20-30	3-7
	2-8	COSL, GR-COSL	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-9	84-95	69-95	41-62	23-37	20-28	3-7
	8-18	WB	---	---	---	---	---	---	---	---	---	---
Calpine-----	0-10	COSL, LCOS	SC-SM, SM	A-4, A-2-4	0	0-3	96-100	82-100	45-58	17-25	19-31	3-6
	10-68	SL, COSL	SM, SC-SM	A-2-4, A-4	0	0-3	94-100	81-100	49-66	28-39	19-26	3-7
561:												
Scodie-----	0-10	LCOS, GR-LCOS, GRV-LCOS	SW-SM, SM	A-2-4, A-1-a, A-1-b	0-4	0-4	69-87	42-87	21-51	7-22	0-29	NP-6
	10-20	WB	---	---	---	---	---	---	---	---	---	---
Sacatar-----	0-2	LCOS, GR-LCOS	SM, SC-SM	A-1-b, A-2-4	0	0-4	95-100	82-100	43-58	16-25	18-26	2-6
	2-34	COSL, GR-COSL	SC-SM, SC	A-2-4, A-6	0	0-4	95-100	81-100	47-67	27-41	21-32	6-12
	34-44	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-6	GR-LCOS, GR-LS	SM, SC-SM, SP-SM	A-1-b, A-2-4	0-8	0-9	65-88	64-88	49-73	12-23	0-24	NP-6
	6-16	GR-LCOS	SP-SM, SM, SC-SM	A-1-b	0-5	0-5	62-78	61-77	31-45	11-19	0-24	NP-6
	16-26	WB	---	---	---	---	---	---	---	---	---	---
562:												
Deerspring, partially drained--	0-21	L	SC-SM, CL	A-6, A-4	0	0	79-100	78-100	64-92	44-67	21-33	4-12
	21-60	L, FSL	SC-SM, SC	A-6, A-2-4	0	0	79-100	78-100	69-98	27-44	20-31	4-12
570:												
Deadfoot-----	0-10	BYX-LCOS, LCOS, BYV-LCOS	SC-SM, SP-SM, SM	A-2-4, A-1-b	7-37	3-22	57-96	55-96	29-56	10-24	0-26	NP-6
	10-23	STX-LCOS, STV-LCOS, LCOS	SP-SM, SC-SM, SM	A-2-4, A-1-b	7-37	3-22	55-96	55-96	29-56	10-24	0-24	NP-6
	23-33	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
570: Scodie-----	0-9	BY-LCOS	SM, SW-SM	A-2-4, A-1-b	4-17	0-6	74-92	48-92	25-54	9-23	0-29	NP-6
	9-19	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
590: Xyno-----	0-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-6	67-78	65-77	34-45	12-19	15-24	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-7	LCOS, GR-LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	7-17	GR-LCOS, COS, LCOS, GR-COS	SM, SC-SM, SW-SM	A-2-4, A-1-b	0-5	0-5	76-92	61-92	31-54	11-23	0-24	NP-6
	17-27	WB	---	---	---	---	---	---	---	---	---	---
Pilotwell-----	0-5	GR-LCOS, LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-53	11-23	17-24	2-6
	5-26	GR-LCOS, LCOS	SC-SM, SW-SM	A-1-b, A-2-4	0-3	0-3	77-92	57-92	30-54	11-23	15-23	1-6
	26-36	WB	---	---	---	---	---	---	---	---	---	---
591: Xyno-----	0-11	GR-LCOS	SP-SM, SC-SM	A-1-b	0-13	0-7	67-79	66-78	34-45	12-19	15-24	1-6
	11-21	WB	---	---	---	---	---	---	---	---	---	---
Canebrake-----	0-6	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b, A-1-a	0-9	0-9	71-89	46-89	24-52	8-22	0-24	NP-6
	6-15	GR-LCOS, LCOS	SM, SC-SM, SW-SM	A-2-4, A-1-b, A-1-a	0-9	0-9	71-89	46-89	24-52	8-22	0-24	NP-6
	15-25	WB	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
599. Rock outcrop												
610: Hyte-----	0-5	SL, GR-SL, GRV-SL	SC-SM, SM, SC	A-4, A-1-b, A-2-4	0-5	0-5	72-87	47-87	35-71	17-39	20-31	3-10
	5-14	SL, GRV-COSL, COSL, GR-SL, GR-COSL, GRV-SL	SC-SM, SC	A-2-4, A-1-b, A-6	0-5	0-5	75-92	51-92	37-74	18-40	21-31	6-12
	14-24	WB	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
610: Erskine-----	0-7	GR-SL, GRV-SL, SL	SC-SM, SC	A-4, A-2-4	0-35	0-21	69-100	68-100	51-81	26-44	20-28	4-9
	7-19	GR-SL, GRV-SL, SL	SC, SC-SM	A-6, A-2-4	0-31	0-23	67-100	66-100	49-80	24-43	21-31	6-12
	19-29	WB	---	---	---	---	---	---	---	---	---	---
650: Stineway-----	0-3	GRV-L, GR-L	SC-SM, SC, GC	A-2-4, A-6	3-8	5-23	44-84	42-83	34-78	24-57	21-37	4-13
	3-6	GRX-SL, GRX-L, GRV-L, GRV-SL	GC-GM	A-2-6, A-2-4	5-23	16-23	37-59	37-59	31-53	22-39	26-35	9-13
	6-16	CB-L, CBX-L, CBV-L	GC	A-6, A-2-4, A-2-6	3-16	10-43	46-89	44-88	37-83	26-61	25-37	9-17
	16-26	BR	---	---	---	---	---	---	---	---	---	---
Kiscove-----	0-2	L, GRV-L, GR-L	CL, SC	A-7-6, A-2-4, A-6	0	0-5	65-82	42-82	35-77	25-57	26-41	10-17
	2-9	GR-CL, L, GRV-L, CL, GRV-CL, GR-L	CL, SC	A-2-6, A-7-6, A-6	0	0-17	66-86	37-86	31-85	23-68	31-47	13-25
	9-12	WB	---	---	---	---	---	---	---	---	---	---
	12-22	BR	---	---	---	---	---	---	---	---	---	---
Rock outcrop.												
3250: Jawbone-----	0-2	LS	SM	A-2-4	0	0	94-100	73-100	55-78	16-24	0-19	NP-3
	2-6	LS	SC-SM, SM	A-2-4	0	0	98-100	84-100	65-80	17-25	0-21	NP-4
	6-59	BR	---	---	---	---	---	---	---	---	---	---
Jawbone, moderately deep-----	0-1	LS	SM	A-2-4	0	0	94-100	73-100	55-78	16-24	0-19	NP-3
	1-7	LS	SC-SM, SM	A-2-4	0	0	98-100	82-100	62-80	17-25	0-21	NP-4
	7-34	S, GR-COS	SP-SM	A-1-b	0	0	97-100	76-100	38-51	10-15	0-17	NP-2
	34-44	BR	---	---	---	---	---	---	---	---	---	---
4432: Koehn, occasionally flooded----	0-1	S	SM	A-2-4	0	0	97-100	85-96	71-80	13-17	0-21	NP-4
	1-63	COS, LS, LCOS, S	SM, SC-SM	A-2-4	0	0-5	94-100	82-98	63-83	10-19	0-22	NP-6
Koehn, frequently flooded-----	0-1	S	SM	A-2-4	0	0	97-100	85-96	71-80	13-17	0-21	NP-4
	1-63	COS, LS, LCOS, S	SM, SC-SM	A-2-4	0	0-5	94-100	82-98	63-83	10-19	0-22	NP-6

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
5201:												
Wingap-----	0-3	LS, LCOS	SM	A-1-b, A-2-4	0	0	93-100	78-92	42-55	16-24	16-23	1-6
	3-14	LS, LCOS	SM, SC-SM	A-2-4	0	0	93-98	78-92	59-75	16-25	15-22	1-6
	14-41	GR-SL, GR-COSL	SC, SC-SM	A-2-4, A-2-6, A-1-b	0	0	80-92	53-77	29-49	13-26	20-30	6-12
	41-54	GR-LS, GR-LCOS	SM, SC-SM	A-1-b	0	0	80-93	54-78	28-46	11-20	15-22	1-6
	54-64	BR	---	---	---	---	---	---	---	---	---	---
Pinyonpeak-----	0-2	GR-SL	SC-SM	A-1-b, A-2-4	0	0	85-95	50-75	35-50	15-25	16-25	2-7
	2-6	GR-SL, GR-COSL	SC, SC-SM	A-2-4, A-2-6	0	0	85-95	50-75	30-45	20-30	20-30	6-12
	6-8	GR	---	---	0	0	25	0-5	0-2	0-1	---	---
	8-16	WB	---	---	---	---	---	---	---	---	---	---
	16-26	BR	---	---	---	---	---	---	---	---	---	---
5210:												
Grandora-----	0-3	COS	SW-SM	A-1-b, A-2-4	0	0	95-100	77-92	35-46	9-15	0-20	NP-3
	3-60	GR-LCOS, GR-S, S, PCB-LCOS, GR-COS, PCB-COS, LS, GR-LS	SP-SM	A-1-b, A-2-4	0	0	85-95	55-90	30-60	5-12	0-20	NP-3
Grandora, warm-----	0-2	COS	SW-SM	A-1-b, A-2-4	0	0	95-100	77-92	35-46	9-15	0-20	NP-3
	2-60	LCOS, GR-COS, PST-COS, GR-LCOS, LS, GR-LS, GR-S, S	SP-SM	A-1-b, A-2-4	0	0	85-95	55-90	30-60	5-12	0-20	NP-3
Pinyonpeak-----	0-2	GR-SL	SC-SM	A-1-b, A-2-4	0	0	85-95	50-75	35-50	15-25	16-25	2-7
	2-6	GR-COSL, GR-SL	SC, SC-SM	A-2-4, A-2-6	0	0	85-95	50-75	30-45	20-30	20-30	6-12
	6-8	GR	---	---	0	0	25	0-5	0-2	0-1	---	---
	8-16	WB	---	---	---	---	---	---	---	---	---	---
	16-26	BR	---	---	---	---	---	---	---	---	---	---
6001:												
Goldpeak-----	0-2	LS, GR-LS	SM	A-2-4	0	0	93-98	70-91	54-74	17-27	0-22	NP-5
	2-94	SL, GR-COSL, GR-SL, GR-SCL, COSL	SC	A-2-4	0	0	90-100	64-92	38-61	21-38	20-30	6-12
Pinyonpeak-----	0-2	GR-SL	SC-SM	A-1-b, A-2-4	0	0	85-95	50-75	35-50	15-25	16-25	2-7
	2-6	GR-SL, GR-COSL	SC, SC-SM	A-2-4, A-2-6	0	0	85-95	50-75	30-45	20-30	20-30	6-12
	6-8	GR	---	---	0	0	25	0-5	0-2	0-1	---	---
	8-16	WB	---	---	---	---	---	---	---	---	---	---
	16-26	BR	---	---	---	---	---	---	---	---	---	---

Table 16.--Engineering Index Properties--Continued

Map symbol and component name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
6001: Wingap-----	0-3	LCOS, LS	SM	A-1-b, A-2-4	0	0	93-100	78-92	42-55	16-24	16-23	1-6
	3-14	LCOS, LS	SM, SC-SM	A-2-4	0	0	93-98	78-92	59-75	16-25	15-22	1-6
	14-41	GR-COSL, GR-SL	SC, SC-SM	A-2-4, A-2-6, A-1-b	0	0	80-92	53-77	29-49	13-26	20-30	6-12
	41-54	GR-LS, GR-LCOS	SM, SC-SM	A-1-b	0	0	80-93	54-78	28-46	11-20	15-22	1-6
	54-60	BR	---	---	0	0	---	---	---	---	---	---
W. Water												

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
115: Chanac-----	0-18	27-35	1.40-1.50	4.00-14.00	0.16-0.18	3.0-5.9	0.5-1.0
	18-46	20-35	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.0-0.0
	46-60	15-20	1.45-1.55	1.40-4.00	0.12-0.16	0.0-2.9	0.0-0.0
128: Pits.							
Delano-----	0-18	10-20	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2
Oil waste land.							
136: Hesperia-----	0-20	8-18	1.50-1.60	14.00-42.00	0.09-0.13	0.0-2.9	0.0-0.5
	20-60	8-18	1.55-1.70	14.00-42.00	0.08-0.11	0.0-2.9	0.0-0.0
138: Hesperia-----	0-18	8-18	1.50-1.60	14.00-42.00	0.09-0.13	0.0-2.9	0.0-0.5
	18-34	8-18	1.50-1.60	14.00-42.00	0.09-0.13	0.0-2.9	0.0-0.0
	34-70	8-18	1.50-1.60	14.00-42.00	0.08-0.11	0.0-2.9	0.0-0.0
139. Riverwash							
143: Calicreek-----	0-7	4-10	1.45-1.60	42.34-141.14	0.07-0.09	0.0-2.9	0.2-0.8
	7-30	4-10	1.35-1.55	14.11-42.34	0.08-0.11	0.0-2.9	0.1-0.5
	30-60	2-5	1.50-1.65	14.11-42.34	0.05-0.08	0.0-2.9	0.1-0.5
144: Calicreek-----	0-5	9-15	1.50-1.55	14.11-42.34	0.09-0.11	0.0-2.9	0.3-0.9
	5-60	2-12	1.50-1.65	14.11-42.34	0.05-0.08	0.0-2.9	0.0-0.5
145: Delano-----	0-7	2-10	1.40-1.55	14.11-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	7-20	8-18	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.0-0.5
	20-55	20-35	1.40-1.55	1.41-4.23	0.15-0.18	3.0-5.9	0.0-0.5
	55-60	5-15	1.45-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
146: Delano-----	0-18	10-20	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2
147: Chanac-----	0-18	27-35	1.40-1.50	4.00-14.00	0.16-0.18	3.0-5.9	0.5-1.0
	18-46	20-35	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.0-0.0
	46-60	15-20	1.45-1.55	1.40-4.00	0.12-0.16	0.0-2.9	0.0-0.0
148: Delano-----	0-18	10-25	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2
149: Delano-----	0-18	10-20	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility		Organic matter
	In	Pct					Pct	Pct	
150:									
Pits.									
Dumps.									
152:									
Pleito-----	0-27	15-35	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0		
	27-38	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-2.0		
	38-60	15-25	1.45-1.60	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5		
153:									
Chanac-----	0-18	27-35	1.40-1.50	4.00-14.00	0.16-0.18	3.0-5.9	0.5-1.0		
	18-46	15-35	1.30-1.45	1.40-4.00	0.14-0.18	3.0-5.9	0.0-0.0		
	46-60	15-20	1.45-1.55	1.40-4.00	0.12-0.16	0.0-2.9	0.0-0.0		
154.									
Dam									
166:									
Delano-----	0-18	10-20	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0		
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5		
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2		
Urban land.									
174:									
Xeric Torriorthents, silty---	0-15	15-30	1.45-1.55	4.00-14.00	0.14-0.16	3.0-5.9	0.1-1.0		
	15-20	15-30	1.45-1.55	4.00-14.00	0.13-0.15	3.0-5.9	0.1-0.5		
	20-50	25-45	1.35-1.50	0.42-1.40	0.03-0.12	6.0-9.0	0.0-0.2		
	50-60	25-45	1.35-1.50	0.42-1.40	0.02-0.11	6.0-9.0	0.0-0.2		
Calcic Haploxerepts-----	0-2	27-35	1.45-1.55	1.41-4.00	0.17-0.20	3.0-5.9	0.5-2.0		
	2-12	20-27	1.45-1.55	4.10-14.00	0.16-0.19	3.0-5.9	0.3-1.0		
	12-23	15-25	1.45-1.55	4.10-14.00	0.15-0.18	3.0-5.9	0.1-0.5		
	23-60	15-25	1.45-1.55	4.10-14.00	0.08-0.12	3.0-5.9	0.0-0.3		
176:									
Elkhills, eroded-----	0-8	10-25	1.45-1.55	14.11-42.34	0.12-0.14	0.0-2.9	0.0-0.5		
	8-17	10-25	1.45-1.55	14.11-42.34	0.12-0.14	0.0-2.9	0.0-0.5		
	17-34	10-20	1.50-1.60	14.11-42.34	0.13-0.15	0.0-2.9	0.0-0.5		
	34-42	10-18	1.55-1.65	14.11-42.34	0.16-0.18	0.0-2.9	0.0-0.2		
	42-60	10-16	1.50-1.60	14.11-42.34	0.16-0.18	0.0-2.9	0.0-0.1		
177:									
Chanac-----	0-7	20-35	1.40-1.50	4.23-14.11	0.13-0.17	3.0-5.9	0.5-1.0		
	7-36	20-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.2-0.9		
	36-60	12-28	1.45-1.60	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5		
Torriorthents, stratified---	0-4	8-30	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0		
	4-54	5-35	1.45-1.70	1.41-4.23	0.05-0.13	3.0-5.9	0.0-0.5		
	54-60	18-60	1.35-1.55	0.42-4.23	0.05-0.12	6.0-8.9	0.0-0.5		
178:									
Delano-----	0-8	20-27	1.45-1.55	4.23-14.11	0.13-0.16	0.0-2.9	0.5-1.0		
	8-36	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.2-0.8		
	36-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.1-0.3		
Cuyama-----	0-10	5-18	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.1-0.5		
	10-21	18-25	1.40-1.50	4.23-14.11	0.13-0.16	0.0-2.9	0.0-0.5		
	21-39	20-35	1.35-1.50	1.41-4.23	0.09-0.15	3.0-5.9	0.0-0.5		
	39-60	10-30	1.40-1.55	4.23-14.11	0.06-0.13	0.0-2.9	0.0-0.5		

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct		g/cc	um/sec	In/in	Pct	Pct
178:								
Premier-----	0-12	5-18	1.55-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0	
	12-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0	
179:								
Torriorthents, stratified, eroded-----	0-4	8-20	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0	
	4-54	5-35	1.45-1.70	1.41-4.23	0.05-0.13	3.0-5.9	0.0-0.5	
	54-60	18-60	1.35-1.55	0.42-4.23	0.05-0.12	6.0-8.9	0.0-0.5	
Elkhills-----	0-29	5-18	1.50-1.60	14.11-42.34	0.09-0.13	0.0-2.9	0.5-1.0	
	29-49	5-18	1.50-1.60	14.11-42.34	0.09-0.15	0.0-2.9	0.0-0.0	
	49-65	5-18	1.50-1.70	14.11-42.34	0.07-0.12	0.0-2.9	0.0-0.0	
184:								
Cuyama-----	0-10	8-18	1.50-1.60	4.23-14.11	0.08-0.09	0.0-2.9	0.1-0.5	
	10-21	18-30	1.45-1.55	4.23-14.11	0.13-0.16	0.0-2.9	0.1-0.5	
	21-32	10-20	1.50-1.60	4.23-14.11	0.07-0.09	0.0-2.9	0.0-0.5	
	32-44	10-20	1.50-1.60	4.23-14.11	0.07-0.09	0.0-2.9	0.0-0.4	
	44-54	8-20	1.50-1.60	4.23-14.11	0.07-0.09	0.0-2.9	0.0-0.2	
	54-60	8-20	1.50-1.60	4.23-14.11	0.07-0.09	0.0-2.9	0.0-0.1	
185:								
Brecken-----	0-3	10-20	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	1.0-3.0	
	3-12	18-25	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	1.0-2.0	
	12-19	20-35	1.45-1.55	1.41-4.23	0.10-0.14	3.0-5.9	0.5-1.0	
	19-39	18-30	1.45-1.60	1.41-4.23	0.08-0.12	3.0-5.9	0.0-0.5	
	39-60	10-22	1.45-1.60	14.11-42.34	0.07-0.11	0.0-2.9	0.0-0.5	
Cuyama-----	0-4	5-18	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.1-0.5	
	4-22	18-25	1.40-1.50	4.23-14.11	0.13-0.16	0.0-2.9	0.0-0.5	
	22-60	10-30	1.45-1.70	4.23-14.11	0.08-0.15	0.0-2.9	0.0-0.5	
Pleito-----	0-12	20-35	1.40-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0	
	12-24	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-2.0	
	24-60	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	0.4-1.5	
186:								
Cuyama-----	0-4	10-20	1.45-1.55	4.23-14.11	0.14-0.16	0.0-2.9	0.1-0.5	
	4-28	20-35	1.35-1.50	1.41-4.23	0.09-0.15	3.0-5.9	0.0-0.5	
	28-36	18-25	1.40-1.50	4.23-14.11	0.13-0.16	0.0-2.9	0.0-0.5	
	36-60	10-30	1.40-1.55	4.23-14.11	0.06-0.13	0.0-2.9	0.0-0.5	
187:								
Trigo-----	0-2	8-15	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	
	2-10	8-18	1.45-1.60	14.11-42.34	0.11-0.16	0.0-2.9	0.0-0.5	
	10-20	---	---	0.42-1.41	---	---	---	
Chanac-----	0-8	18-27	1.35-1.45	4.23-14.11	0.14-0.16	3.0-5.9	0.5-1.0	
	8-36	15-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.3-1.0	
	36-60	15-20	1.45-1.55	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5	
188:								
Tweedy-----	0-11	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	11-31	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0	
	31-38	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-1.0	
	38-48	---	---	0.42-1.41	---	---	---	
Tollhouse-----	0-5	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	5-14	5-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	1.0-2.0	
	14-24	---	---	0.43-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
188:							
Locobill-----	0-3	7-14	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	3-28	10-18	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	28-35	20-25	1.50-1.60	1.41-4.23	0.12-0.15	3.0-5.9	0.1-0.5
	35-45	---	---	0.42-1.41	---	---	---
189:							
Tweedy-----	0-7	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	7-40	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	40-50	---	---	0.42-1.41	---	---	---
Walong-----	0-13	7-18	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0
	13-25	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0
	25-35	---	---	0.42-1.41	---	---	---
192:							
Chanac-----	0-8	18-28	1.45-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	8-22	18-28	1.45-1.55	4.23-14.11	0.13-0.15	0.0-2.9	0.3-0.9
	22-31	18-28	1.45-1.55	4.23-14.11	0.13-0.15	0.0-2.9	0.3-0.9
	31-42	18-28	1.45-1.55	4.23-14.11	0.13-0.15	0.0-2.9	0.2-0.6
	42-52	18-28	1.45-1.55	4.23-14.11	0.13-0.15	0.0-2.9	0.0-0.5
	52-60	20-35	1.40-1.50	1.41-4.23	0.17-0.19	3.0-5.9	0.0-0.1
Pleito-----	0-21	20-35	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0
	21-53	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-2.0
	53-60	15-20	1.45-1.55	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5
193:							
Chanac-----	0-9	20-35	1.40-1.50	4.23-14.11	0.13-0.17	3.0-5.9	0.5-1.0
	9-50	20-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.3-1.0
	50-63	10-20	1.45-1.60	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5
Pleito-----	0-25	20-35	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0
	25-48	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-2.0
	48-60	18-35	1.40-1.55	0.42-1.41	0.10-0.14	3.0-5.9	0.2-1.0
194:							
Pleito-----	0-30	27-35	1.40-1.50	0.42-1.41	0.17-0.19	3.0-5.9	1.0-2.0
	30-48	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-1.5
	48-60	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	0.2-1.0
Delvar-----	0-17	25-35	1.45-1.55	1.41-4.23	0.14-0.18	0.0-2.9	1.0-3.0
	17-35	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0
	35-55	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0
	55-60	25-35	1.45-1.55	1.41-4.23	0.14-0.18	0.0-2.9	0.4-1.0
195:							
Centerville-----	0-10	40-60	1.25-1.35	0.42-1.41	0.12-0.15	6.0-8.9	1.0-2.0
	10-39	35-60	1.25-1.40	0.42-1.41	0.12-0.15	6.0-8.9	0.3-1.0
	39-56	20-35	1.40-1.50	1.41-4.23	0.16-0.18	3.0-5.9	0.1-0.5
	56-60	15-20	1.40-1.60	1.41-4.23	0.16-0.18	3.0-5.9	0.1-0.3
Delvar-----	0-18	27-40	1.40-1.50	1.41-4.23	0.16-0.18	3.0-5.9	1.0-3.0
	18-48	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0
	48-60	15-35	1.45-1.60	1.41-14.11	0.10-0.13	3.0-5.9	0.0-0.5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter
	In	Pct		g/cc	um/sec	In/in	Pct	Pct
196:								
Exeter-----	0-4	10-20	1.50-1.60	4.23-14.11	0.09-0.11	0.0-2.9	0.0-1.0	
	4-8	10-20	1.50-1.60	4.23-14.11	0.09-0.11	0.0-2.9	0.0-1.0	
	8-12	20-30	1.45-1.55	4.23-14.11	0.16-0.20	3.0-5.9	0.0-0.5	
	12-18	20-30	1.45-1.55	4.23-14.11	0.16-0.20	3.0-5.9	0.0-0.5	
	18-25	18-30	1.40-1.50	4.23-14.11	0.16-0.20	3.0-5.9	0.0-0.5	
	25-39	---	---	0.00-0.07	---	---	0.0-0.0	
	39-60	5-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.0-0.0	
197:								
Nord-----	0-9	10-18	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	1.0-2.0	
	9-65	10-18	1.50-1.60	4.23-14.11	0.11-0.15	0.0-2.9	0.0-0.5	
198:								
Centerville-----	0-6	40-60	1.25-1.35	0.42-1.41	0.12-0.15	6.0-8.9	1.0-2.0	
	6-26	35-60	1.25-1.40	0.42-1.41	0.12-0.15	6.0-8.9	0.5-1.0	
	26-48	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	0.2-1.0	
	48-60	20-35	1.40-1.60	0.42-1.41	0.14-0.18	3.0-5.9	0.1-0.3	
Delvar-----	0-21	27-40	1.40-1.50	1.41-4.23	0.16-0.18	3.0-5.9	1.0-3.0	
	21-48	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0	
	48-60	15-35	1.45-1.60	1.41-14.11	0.10-0.13	3.0-5.9	0.0-0.5	
199:								
Exeter-----	0-20	10-20	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	0.0-1.0	
	20-38	18-30	1.40-1.50	1.41-14.11	0.14-0.17	3.0-5.9	0.0-0.5	
	38-42	---	---	0.00-0.07	---	---	---	
200:								
Urban land.								
Delano-----	0-18	10-20	1.50-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0	
	18-37	20-35	1.40-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-0.5	
	37-60	10-27	1.45-1.60	4.23-14.11	0.09-0.16	0.0-2.9	0.0-0.2	
201:								
Pleito-----	0-7	20-35	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0	
	7-53	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	1.0-1.5	
	53-66	15-20	1.45-1.55	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5	
Chanac-----	0-17	15-35	1.40-1.50	4.23-14.11	0.13-0.17	3.0-5.9	0.5-1.0	
	17-52	15-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.3-1.0	
	52-62	10-20	1.45-1.60	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5	
Raggulch-----	0-4	14-19	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	1.0-2.0	
	4-16	20-35	1.45-1.55	1.41-4.23	0.14-0.18	3.0-5.9	0.1-1.0	
	16-18	---	---	0.42-1.41	---	---	---	
	18-28	---	---	0.00-0.07	---	---	---	
205:								
Pleito-----	0-13	27-35	1.40-1.55	1.41-4.23	0.15-0.17	3.0-5.9	1.0-2.0	
	13-42	15-35	1.40-1.55	1.41-4.23	0.14-0.16	3.0-5.9	1.0-1.5	
	42-60	20-35	1.40-1.55	1.41-4.23	0.13-0.15	3.0-5.9	0.2-1.0	
Trigo-----	0-2	8-15	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	0.5-1.0	
	2-9	8-18	1.45-1.60	14.11-42.34	0.11-0.16	0.0-2.9	0.0-0.5	
	9-19	---	---	0.42-1.41	---	---	---	
Chanac-----	0-8	18-27	1.35-1.45	4.23-14.11	0.14-0.16	3.0-5.9	0.5-1.0	
	8-36	15-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.3-1.0	
	36-60	15-20	1.45-1.55	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter
	In	Pct		g/cc	um/sec	In/in	Pct	Pct
207:								
Whitewolf-----	0-10	0-7	1.55-1.65	42.34-141.14	0.05-0.10	0.0-2.9	0.5-1.0	
	10-60	0-5	1.60-1.70	42.34-141.14	0.04-0.08	0.0-2.9	0.0-0.5	
209:								
Whitewolf-----	0-15	0-7	1.55-1.65	42.34-141.14	0.05-0.10	0.0-2.9	0.5-1.0	
	15-25	0-7	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.2-0.8	
	25-60	0-5	1.60-1.70	42.34-141.14	0.04-0.08	0.0-2.9	0.0-0.2	
210:								
Kernfork-----	0-6	8-18	1.50-1.60	14.11-42.34	0.12-0.14	0.0-2.9	1.0-6.0	
	6-27	8-18	1.50-1.60	14.11-42.34	0.12-0.15	0.0-2.9	1.0-3.0	
	27-30	3-10	1.60-1.70	42.34-141.14	0.06-0.09	0.0-2.9	0.5-2.0	
	30-60	8-18	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.5	
212:								
Kernfork-----	0-10	8-18	1.50-1.60	14.11-42.34	0.12-0.14	0.0-2.9	1.0-4.0	
	10-31	8-18	1.50-1.60	14.11-42.34	0.12-0.15	0.0-2.9	1.0-3.0	
	31-60	8-18	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.5	
213:								
Calicreek-----	0-7	4-10	1.45-1.60	42.34-141.14	0.06-0.08	0.0-2.9	0.2-0.8	
	7-26	4-10	1.35-1.55	14.11-42.34	0.08-0.11	0.0-2.9	0.0-0.5	
	26-60	1-5	1.50-1.65	14.11-42.34	0.05-0.08	0.0-2.9	0.0-0.5	
215:								
Kelval-----	0-7	4-10	1.50-1.65	42.34-141.14	0.06-0.09	0.0-2.9	1.0-2.0	
	7-43	4-10	1.55-1.70	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0	
	43-60	3-15	1.50-1.65	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
216:								
Inyo-----	0-14	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	14-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
Riverwash.								
217:								
Whitewolf-----	0-14	2-8	1.55-1.65	42.34-141.14	0.04-0.06	0.0-2.9	0.0-0.0	
	14-60	2-8	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.0-0.0	
Riverwash.								
220:								
Aquents-----	0-7	2-11	1.55-1.65	42.34-141.14	0.08-0.12	0.0-2.9	0.5-1.0	
	7-18	10-18	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.1-0.9	
	18-60	1-12	1.50-1.60	4.23-42.34	0.07-0.10	0.0-2.9	0.1-0.2	
Aquolls-----	0-3	5-30	1.40-1.50	4.23-14.11	0.14-0.17	0.0-2.9	1.0-3.0	
	3-12	5-18	1.40-1.50	4.23-14.11	0.13-0.16	0.0-2.9	1.0-3.0	
	12-60	5-18	1.45-1.65	14.11-42.34	0.07-0.12	0.0-2.9	0.1-0.6	
Riverwash.								
222:								
Kelval-----	0-13	9-14	1.40-1.55	14.11-42.34	0.13-0.15	0.0-2.9	1.0-2.0	
	13-60	4-8	1.55-1.70	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0	
223:								
Kelval-----	0-13	7-12	1.50-1.65	42.34-141.14	0.04-0.06	0.0-2.9	1.0-2.0	
	13-60	4-11	1.45-1.60	14.11-42.34	0.05-0.07	0.0-2.9	0.5-1.0	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
224:								
Inyo-----	0-12	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	12-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
238:								
Cinco-----	0-3	1-5	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	3-60	1-5	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.0-0.5	
240:								
Dune land-----	0-6	0-1	1.50-1.60	42.34-141.14	0.03-0.04	0.0-2.9	0.0-0.1	
	6-60	0-1	1.50-1.60	42.34-141.14	0.03-0.05	0.0-2.9	0.0-0.1	
241:								
Inyo-----	0-8	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	8-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
242:								
Inyo-----	0-6	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	6-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
243:								
Kernfork, saline-sodic, occasionally flooded-----	0-10	8-20	1.45-1.55	4.23-14.11	0.08-0.15	0.0-2.9	1.0-6.0	
	10-60	8-18	1.45-1.65	4.23-14.11	0.06-0.10	0.0-2.9	1.0-6.0	
245:								
Chollawell-----	0-21	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0	
	21-46	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	46-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
246:								
Chollawell-----	0-19	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0	
	19-54	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	54-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
247:								
Inyo-----	0-8	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	8-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
Tips-----	0-5	5-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	5-12	12-18	1.45-1.55	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5	
	12-22	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
249:								
Hoffman-----	0-11	4-10	1.55-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0	
	11-22	8-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.1-0.5	
	22-34	12-18	1.40-1.55	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5	
	34-44	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
250:								
Hoffman-----	0-11	4-10	1.55-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0	
	11-22	8-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.1-0.5	
	22-34	12-18	1.40-1.55	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5	
	34-44	---	---	0.42-1.41	---	---	---	
Tips-----	0-5	5-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	5-10	12-18	1.45-1.55	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5	
	10-20	---	---	0.42-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
250:							
Pilotwell-----	0-3	5-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.4-1.0
	3-38	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5
	38-48	---	---	0.42-1.41	---	---	---
253:							
Sorrell-----	0-9	5-10	1.55-1.65	42.34-141.14	0.04-0.06	0.0-2.9	1.0-3.0
	9-23	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	23-33	---	---	0.42-1.41	---	---	---
Martee-----	0-5	4-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	2.0-4.0
	5-11	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	1.0-4.0
	11-12	---	---	0.42-1.41	---	---	---
	12-22	---	---	0.00-0.70	---	---	---
Rock outcrop.							
254:							
Martee-----	0-4	4-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	2.0-4.0
	4-12	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	1.0-4.0
	12-15	---	---	0.42-1.41	---	---	---
	15-25	---	---	0.00-0.07	---	---	---
Rock outcrop.							
255:							
Kernfork, occasionally flooded-----	0-10	8-20	1.45-1.55	4.23-14.11	0.08-0.15	0.0-2.9	1.0-6.0
	10-60	8-18	1.45-1.65	4.23-14.11	0.06-0.10	0.0-2.9	1.0-6.0
Kernfork, frequently flooded	0-8	8-19	1.45-1.55	14.11-42.00	0.07-0.11	0.0-2.9	1.0-6.0
	8-60	8-18	1.45-1.65	4.23-14.11	0.06-0.10	0.0-2.9	1.0-6.0
257:							
Hoffman-----	0-11	4-10	1.55-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	11-22	8-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.1-0.5
	22-34	12-18	1.40-1.55	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5
	34-44	---	---	0.42-1.14	---	---	---
Tips-----	0-5	5-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
	5-10	12-18	1.45-1.55	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
	10-20	---	---	0.42-1.41	---	---	---
Rock outcrop.							
259:							
Cowspring-----	0-3	3-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	3-27	12-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
	27-37	---	---	0.42-1.41	---	---	---
260:							
Cowspring-----	0-3	3-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	3-27	12-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
	27-37	---	---	0.42-1.41	---	---	---
Tips-----	0-5	5-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
	5-12	12-18	1.45-1.55	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
	12-22	---	---	0.42-1.41	---	---	---
Rock outcrop.							

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
261:								
Blasingame-----	0-14	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-1.0	
	14-21	20-30	1.35-1.50	1.41-4.23	0.14-0.18	3.0-5.9	0.1-1.0	
	21-31	---	---	1.41-4.23	---	---	---	
Arujo-----	0-14	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	14-45	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	45-58	15-25	1.45-1.55	4.23-14.11	0.14-0.17	3.0-5.9	0.0-0.5	
	58-68	---	---	4.23-14.11	---	---	---	
Cieneba-----	0-16	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.5-1.0	
	16-26	---	---	0.42-1.41	---	---	---	
264:								
Arujo-----	0-14	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	14-20	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	20-58	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	58-68	---	---	1.41-4.23	---	---	---	
Walong-----	0-13	7-18	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	13-25	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0	
	25-35	---	---	0.42-1.41	---	---	---	
Tunis-----	0-3	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	3-16	8-18	1.45-1.60	4.23-42.34	0.09-0.14	0.0-2.9	0.9-1.2	
	16-26	---	---	0.42-1.41	---	---	---	
265:								
Arujo-----	0-14	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	14-20	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	20-58	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	58-68	---	---	1.41-4.23	---	---	---	
266:								
Tunis-----	0-3	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	3-16	8-18	1.45-1.60	4.23-42.34	0.09-0.14	0.0-2.9	0.9-1.2	
	16-26	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
267:								
Cieneba-----	0-6	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.5-1.0	
	6-16	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.1-0.5	
	16-26	---	---	0.42-1.41	---	---	---	
Vista-----	0-4	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	4-12	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.1-1.0	
	12-27	7-15	1.50-1.60	0.42-1.41	0.08-0.12	0.0-2.9	0.1-1.0	
	27-37	---	---	---	---	---	---	
Rock outcrop.								
268:								
Tunis-----	0-5	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	5-16	8-18	1.45-1.60	4.23-42.34	0.09-0.14	0.0-2.9	0.9-1.2	
	16-26	---	---	0.42-1.41	---	---	---	
Tollhouse-----	0-13	5-18	1.55-1.60	14.11-42.34	0.07-0.10	0.0-2.9	1.0-2.0	
	13-23	---	---	0.42-1.41	---	---	---	
Sorrell-----	0-11	8-14	1.50-1.65	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0	
	11-36	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0	
	36-46	---	---	0.42-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
269:								
Tollhouse-----	0-11	5-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	1.0-2.0	
	11-21	---	---	0.42-1.41	---	---	---	
Sorrell-----	0-2	8-14	1.50-1.65	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0	
	2-27	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.8-1.5	
	27-37	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
270:								
Locobill-----	0-3	7-14	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	3-13	10-18	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	13-28	12-18	1.45-1.55	14.11-42.34	0.07-0.10	0.0-2.9	0.1-0.5	
	28-35	20-25	1.50-1.60	1.41-4.23	0.12-0.15	3.0-5.9	0.1-0.5	
	35-45	---	---	0.42-1.41	---	---	---	
Backcanyon-----	0-3	8-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.9-3.0	
	3-15	8-30	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.1-1.0	
	15-23	---	---	0.42-1.41	---	---	---	
	23-33	---	---	0.00-0.07	---	---	---	
Sesame-----	0-9	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	9-24	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8	
	24-33	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.0-0.2	
	33-43	---	---	0.42-1.41	---	---	---	
271:								
Walong-----	0-9	7-16	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	9-30	8-18	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	0.4-1.0	
	30-40	---	---	0.42-1.41	---	---	---	
Tunis-----	0-18	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	18-28	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
272:								
Tollhouse-----	0-14	5-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	14-24	---	---	0.42-1.41	---	---	---	
Edmundston-----	0-25	8-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	1.0-3.0	
	25-57	8-18	1.45-1.55	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0	
	57-67	---	---	0.43-1.41	---	---	---	
Sorrell-----	0-10	8-14	1.50-1.65	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0	
	10-39	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0	
	39-49	---	---	0.42-1.41	---	---	---	
274:								
Sesame-----	0-9	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	9-19	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8	
	19-24	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.0-0.2	
	24-34	---	---	0.42-1.41	---	---	---	
Tweedy-----	0-7	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	7-24	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0	
	24-34	---	---	0.42-1.41	---	---	---	
Rock outcrop.								

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
275:							
Strahle-----	0-4	12-20	1.55-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	4-12	25-35	1.40-1.50	1.41-4.23	0.11-0.15	3.0-5.9	0.1-1.0
	12-14	---	---	0.42-1.41	---	---	---
	14-24	---	---	0.00-0.70	---	---	---
Sesame-----	0-9	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	9-24	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8
	24-34	---	---	0.42-1.41	---	---	---
Tweedy-----	0-3	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	3-25	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	25-35	---	---	0.42-1.41	---	---	---
276:							
Tips-----	0-4	5-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
	4-7	7-10	1.40-1.50	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
	7-11	12-18	1.45-1.55	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5
	11-21	---	---	0.42-1.41	---	---	---
Hoffman-----	0-4	4-10	1.55-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	4-10	8-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	0.1-0.5
	10-39	12-18	1.40-1.55	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5
	39-49	---	---	0.42-1.41	---	---	---
Cinco-----	0-9	0-5	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	9-60	0-5	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.0-0.5
277:							
Feethill-----	0-4	8-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-3.0
	4-18	15-30	1.40-1.55	14.11-42.34	0.16-0.18	3.0-5.9	1.0-2.0
	18-24	15-30	1.40-1.55	14.11-42.34	0.16-0.18	3.0-5.9	0.5-0.5
	24-30	15-30	1.40-1.55	14.11-42.34	0.16-0.18	3.0-5.9	0.5-0.5
	30-40	---	---	0.42-1.41	---	---	---
Vista-----	0-4	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0
	4-21	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.1-1.0
	21-31	---	---	0.42-1.41	---	---	---
Walong-----	0-18	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-2.0
	18-28	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0
	28-38	---	---	0.42-1.41	---	---	---
279:							
Strahle-----	0-6	12-20	1.55-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	6-16	25-35	1.40-1.50	1.41-4.23	0.11-0.15	3.0-5.9	0.1-1.0
	16-18	---	---	0.42-1.41	---	---	---
	18-28	---	---	0.00-0.07	---	---	---
Rock outcrop.							
Sesame-----	0-9	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	9-24	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8
	24-34	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.0-0.2
	34-44	---	---	0.42-1.41	---	---	---
280:							
Tollhouse-----	0-12	5-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	12-22	---	---	0.42-1.41	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
280:							
Martee -----	0-5	4-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	2.0-4.0
	5-11	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	1.0-4.0
	11-12	---	---	0.42-1.41	---	---	---
	12-22	---	---	0.00-0.07	---	---	---
Edmundston -----	0-12	8-18	1.45-1.55	14.11-42.34	0.08-0.11	0.0-2.9	1.0-3.0
	12-44	8-18	1.45-1.55	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0
	44-54	---	---	0.42-1.41	---	---	---
281:							
Havala -----	0-13	12-18	1.50-1.60	14.11-42.34	0.09-0.13	0.0-2.9	1.0-2.0
	13-29	20-35	1.40-1.55	1.41-4.23	0.15-0.18	3.0-5.9	0.1-1.0
	29-60	12-20	1.50-1.60	14.11-42.34	0.09-0.13	0.0-2.9	0.0-0.5
Walong -----	0-14	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-2.0
	14-29	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0
	29-39	---	---	0.42-1.41	---	---	---
Kernfork -----	0-10	8-18	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	1.0-5.0
	10-26	8-18	1.50-1.60	14.11-42.34	0.12-0.15	0.0-2.9	0.2-1.0
	26-60	8-18	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.0-0.2
282:							
Tollhouse -----	0-10	5-18	1.55-1.60	14.11-42.34	0.07-0.10	0.0-2.9	1.0-2.0
	10-20	---	---	0.42-1.41	---	---	---
Sesame -----	0-15	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	15-26	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8
	26-36	---	---	0.42-1.41	---	---	---
Friant -----	0-5	10-18	1.45-1.55	14.11-42.34	0.08-0.10	0.0-2.9	1.0-2.0
	5-15	10-18	1.45-1.55	14.11-42.34	0.08-0.10	0.0-2.9	0.1-1.0
	15-25	---	---	0.00-0.07	---	---	---
283:							
Tollhouse -----	0-12	5-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	1.0-2.0
	12-22	---	---	0.42-1.41	---	---	---
Martee -----	0-5	4-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	2.0-4.0
	5-11	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	1.0-4.0
	11-12	---	---	0.43-1.41	---	---	---
	12-22	---	---	0.00-0.07	---	---	---
Rock outcrop.							
284:							
Tollhouse -----	0-14	5-18	1.55-1.60	14.11-42.34	0.07-0.10	0.0-2.9	1.0-2.0
	14-24	---	---	0.42-1.41	---	---	---
Rock outcrop.							
285:							
Inyo -----	0-12	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	12-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5
Kelval -----	0-7	4-10	1.50-1.65	42.34-141.14	0.06-0.09	0.0-2.9	1.0-2.0
	7-60	4-8	1.55-1.70	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
286:							
Tollhouse-----	0-12	5-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	12-22	---	---	0.42-1.41	---	---	---
Tweedy-----	0-11	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	11-33	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	33-43	---	---	0.42-1.41	---	---	---
Locobill-----	0-3	7-14	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	3-28	10-18	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0
	28-35	20-25	1.50-1.60	1.41-4.23	0.12-0.15	3.0-5.9	0.1-0.5
	35-45	---	---	0.42-1.41	---	---	---
287:							
Tweedy-----	0-11	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	11-31	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	31-38	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-1.0
	38-48	---	---	0.42-1.41	---	---	---
Strahle-----	0-5	12-20	1.55-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	5-10	25-35	1.40-1.50	1.41-4.23	0.11-0.15	3.0-5.9	0.1-1.0
	10-12	---	---	0.42-1.41	---	---	---
	12-22	---	---	0.00-0.07	---	---	---
288:							
Sorrell-----	0-9	5-10	1.55-1.65	42.34-141.14	0.04-0.06	0.0-2.9	1.0-3.0
	9-23	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	23-33	---	---	0.42-1.41	---	---	---
Arujo-----	0-23	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	23-41	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-0.9
	41-48	15-25	1.45-1.55	4.23-14.11	0.14-0.17	3.0-5.9	0.0-0.5
	48-58	---	---	4.23-14.11	---	---	---
Rock outcrop.							
289:							
Erskine-----	0-8	3-10	1.60-1.70	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	8-18	8-18	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	0.2-1.0
	18-28	---	---	0.42-1.41	---	---	---
Hyte-----	0-5	7-15	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	1.0-2.0
	5-14	10-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.2-1.0
	14-24	---	---	0.42-1.41	---	---	---
Rock outcrop.							
294:							
Edmundston-----	0-26	8-18	1.45-1.55	14.11-42.34	0.08-0.11	0.0-2.9	1.0-3.0
	26-50	8-18	1.45-1.55	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0
	50-60	---	---	0.42-1.41	---	---	---
Tweedy-----	0-10	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	10-32	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	32-42	---	---	0.42-1.41	---	---	---
Walong-----	0-13	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-2.0
	13-25	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0
	25-35	---	---	0.42-1.41	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
295:								
Tweedy-----	0-10	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	10-26	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.8-1.2	
	26-36	---	---	0.42-1.41	---	---	---	
Tunis-----	0-5	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	5-14	8-18	1.45-1.60	4.23-42.34	0.09-0.14	0.0-2.9	0.9-1.2	
	14-24	---	---	0.42-1.41	---	---	---	
Rankor-----	0-5	10-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-3.0	
	5-21	20-30	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	1.0-3.0	
	21-33	20-35	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	0.5-2.0	
	33-58	10-30	1.45-1.60	1.41-4.23	0.12-0.14	3.0-5.9	0.1-1.0	
	58-68	---	---	1.41-4.23	---	---	---	
296:								
Arujo-----	0-21	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	21-52	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	52-62	---	---	1.41-4.23	---	---	---	
Walong-----	0-17	7-18	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	17-39	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0	
	39-49	---	---	1.41-4.23	---	---	---	
Tunis-----	0-7	8-18	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	7-14	8-18	1.45-1.60	4.23-42.34	0.09-0.14	0.0-2.9	0.9-1.2	
	14-24	---	---	1.41-4.23	---	---	---	
297:								
Walong-----	0-11	---	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-2.0	
	11-27	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0	
	27-32	7-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.3-1.0	
	32-42	---	---	0.42-1.41	---	---	---	
Blasingame-----	0-3	8-20	1.50-1.60	4.23-14.11	0.08-0.10	1.0-3.0	0.5-1.0	
	3-10	8-18	1.50-1.60	4.23-14.11	0.08-0.10	2.0-4.0	0.1-1.0	
	10-17	18-30	1.45-1.55	4.23-14.11	0.16-0.18	5.0-7.0	0.1-0.5	
	17-27	18-30	1.45-1.55	4.23-14.11	0.16-0.18	5.0-7.0	0.1-0.3	
	27-33	18-30	1.45-1.55	4.23-14.11	0.16-0.18	5.0-7.0	0.1-0.2	
	33-43	---	---	1.41-4.23	---	---	0.0-0.1	
Rock outcrop.								
298:								
Arujo-----	0-12	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	12-24	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	24-56	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	56-66	---	---	1.41-4.23	---	---	---	
Feethill-----	0-4	8-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-3.0	
	4-14	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	1.0-2.0	
	14-38	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-0.5	
	38-48	---	---	0.42-1.41	---	---	---	
Sesame-----	0-4	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	4-28	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8	
	28-38	---	---	0.42-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
299:								
Arujo-----	0-12	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	12-24	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	24-56	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	56-66	---	---	1.41-4.23	---	---	---	
Feethill-----	0-4	8-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-3.0	
	4-14	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	1.0-2.0	
	14-38	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-0.5	
	38-48	---	---	0.42-1.41	---	---	---	
Sesame-----	0-4	10-20	1.50-1.60	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	4-28	18-27	1.45-1.55	4.23-14.11	0.15-0.17	3.0-5.9	0.2-0.8	
	28-38	---	---	0.42-1.41	---	---	---	
300:								
Steinway-----	0-4	8-20	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	4-10	15-20	1.45-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0	
	10-13	15-25	1.45-1.55	4.23-14.11	0.08-0.12	0.0-2.9	0.2-1.0	
	13-23	---	---	0.00-0.07	---	---	---	
Kiscove-----	0-3	15-25	1.45-1.55	4.23-14.11	0.11-0.14	3.0-5.9	0.0-2.0	
	3-9	20-35	1.35-1.45	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0	
	9-12	---	---	0.42-1.41	---	---	---	
	12-22	---	---	0.00-0.07	---	---	---	
301:								
Feethill-----	0-8	8-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	1.0-3.0	
	8-14	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	1.0-2.0	
	14-22	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-0.5	
	22-32	---	---	0.42-1.41	---	---	---	
Vista-----	0-3	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	3-24	7-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.1-1.0	
	24-34	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
302:								
Feethill-----	0-3	10-20	1.45-1.55	4.23-14.11	0.12-0.16	0.0-2.9	1.0-3.0	
	3-19	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	1.0-2.0	
	19-26	20-30	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-0.5	
	26-36	---	---	0.42-1.41	---	---	---	
Cibo-----	0-5	35-40	1.30-1.40	0.42-1.41	0.14-0.17	6.0-8.9	1.0-2.0	
	5-9	35-50	1.25-1.35	0.42-1.41	0.14-0.17	6.0-8.9	0.5-1.0	
	9-23	35-50	1.25-1.35	0.42-1.41	0.14-0.17	6.0-8.9	0.5-1.0	
	23-33	---	---	0.00-0.07	---	---	---	
Cieneba-----	0-15	7-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.5-1.0	
	15-25	---	---	0.42-1.41	---	---	---	
303:								
Steuber-----	0-12	8-18	1.50-1.60	14.00-42.00	0.08-0.11	0.0-2.9	0.5-1.0	
	12-60	5-20	1.45-1.60	14.00-42.00	0.08-0.11	0.0-2.9	0.0-0.5	
304:								
Cibo-----	0-19	40-50	1.35-1.45	0.42-1.40	0.10-0.15	6.0-8.9	1.0-2.0	
	19-35	35-50	1.35-1.45	0.42-1.40	0.12-0.15	6.0-8.9	1.0-2.0	
	35-45	---	---	0.00-0.07	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct		g/cc	um/sec	In/in	Pct	Pct
305:								
Chanac-----	0-2	18-27	1.35-1.45	4.23-14.11	0.14-0.16	3.0-5.9	0.5-1.0	
	2-47	20-35	1.30-1.45	1.41-4.23	0.14-0.18	3.0-5.9	0.3-1.0	
	47-60	10-20	1.45-1.60	1.41-4.23	0.12-0.16	0.0-2.9	0.1-0.5	
Pleito-----	0-24	20-35	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0	
	24-60	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	0.2-1.5	
Premier-----	0-7	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0	
	7-16	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.1-0.5	
	16-51	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0	
	51-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0	
306:								
Xerofluvents, occasionally flooded-----	0-6	5-40	1.45-1.55	4.23-14.11	0.13-0.15	3.0-5.0	0.5-3.0	
	6-12	2-40	1.45-1.55	4.23-14.11	0.13-0.15	3.0-5.0	0.2-1.0	
	12-19	2-40	1.40-1.50	1.41-4.23	0.17-0.19	4.0-6.0	0.0-0.2	
	19-25	2-40	1.55-1.65	14.11-42.34	0.06-0.08	2.0-4.0	0.0-0.2	
	25-28	2-40	1.45-1.55	1.41-4.23	0.15-0.17	4.0-6.0	0.0-0.2	
	28-50	2-40	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.0	0.0-0.2	
	50-60	2-40	1.70-1.80	141.14-423.30	0.03-0.05	0.0-2.0	0.0-0.2	
	Riverwash.							
307:								
Typic Xeropsammets-----	0-6	0-5	1.55-1.65	42.34-141.14	0.05-0.10	0.0-2.9	0.5-1.0	
	6-20	0-5	1.55-1.70	42.34-141.14	0.05-0.08	0.0-2.9	0.1-1.0	
	20-60	0-5	1.55-1.70	42.34-141.14	0.05-0.08	0.0-2.9	0.1-1.0	
308:								
Rankor-----	0-4	10-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-3.0	
	4-23	20-30	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	1.0-3.0	
	23-31	20-35	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	0.5-2.0	
	31-46	10-30	1.45-1.60	1.41-4.23	0.12-0.14	3.0-5.9	0.1-1.0	
	46-56	---	---	1.41-4.23	---	---	---	
Edmundston-----	0-23	8-18	1.45-1.55	14.11-42.34	0.08-0.11	0.0-2.9	1.0-3.0	
	23-48	8-18	1.45-1.55	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0	
	48-58	---	---	0.42-1.41	---	---	---	
Tweedy-----	0-4	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	4-39	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0	
	39-49	---	---	0.42-1.41	---	---	---	
309:								
Rankor-----	0-4	10-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-3.0	
	4-23	20-30	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	1.0-3.0	
	23-31	20-35	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	0.5-2.0	
	31-46	10-30	1.45-1.60	1.41-4.23	0.12-0.14	3.0-5.9	0.1-1.0	
	46-56	---	---	1.41-4.23	---	---	---	
Edmundston-----	0-23	8-18	1.45-1.55	14.11-42.34	0.08-0.11	0.0-2.9	1.0-3.0	
	23-48	8-18	1.45-1.55	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0	
	48-58	---	---	0.42-1.41	---	---	---	
Tweedy-----	0-4	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	4-39	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0	
	39-49	---	---	0.42-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
310:							
Stineway-----	0-4	8-20	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0
	4-14	15-20	1.45-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0
	14-24	---	---	0.00-0.07	---	---	---
Kiscove-----	0-2	8-18	1.50-1.60	14.11-42.34	0.07-0.11	0.0-2.9	0.0-1.0
	2-9	20-35	1.35-1.45	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0
	9-12	---	---	0.42-1.41	---	---	---
	12-22	---	---	0.00-0.07	---	---	---
311:							
Xerorthents-----	0-5	5-25	1.45-1.55	4.23-14.11	0.16-0.18	1.0-5.0	0.0-0.8
	5-15	---	---	0.42-1.41	0.00-0.00	---	---
Rock outcrop.							
312:							
Havala-----	0-24	12-18	1.50-1.60	14.00-42.00	0.09-0.13	0.0-2.9	1.0-2.0
	24-48	16-30	1.45-1.55	1.40-4.00	0.11-0.16	3.0-5.9	0.0-0.5
	48-65	12-20	1.50-1.60	14.00-42.00	0.09-0.13	0.0-2.9	0.0-0.0
313.							
Dumps							
314:							
Premier-----	0-14	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0
	14-30	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.1-0.5
	30-47	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
	47-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
Haplodurids-----	0-14	10-18	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	0.2-1.0
	14-25	10-18	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	0.2-0.8
	25-38	---	---	0.00-0.07	---	---	---
	38-50	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
	50-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
315:							
Premier-----	0-14	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0
	14-30	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.1-0.5
	30-47	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
	47-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
Haplodurids-----	0-14	10-18	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	0.2-1.0
	14-25	10-18	1.50-1.60	4.23-14.11	0.10-0.13	0.0-2.9	0.2-0.8
	25-38	---	---	0.00-0.07	---	---	---
	38-50	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
	50-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
316:							
Premier-----	0-12	5-18	1.55-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0
	12-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
317:							
Premier-----	0-12	5-18	1.55-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.5-1.0
	12-60	5-18	1.45-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.0
320:							
Southlake-----	0-4	5-15	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-1.0
	4-19	10-18	1.50-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.0-1.0
	19-42	18-35	1.45-1.55	1.41-4.23	0.09-0.12	3.0-5.9	0.1-0.5
	42-60	10-18	1.45-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.1-0.5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
325:								
Walong-----	0-14	7-18	1.50-1.60	14.00-42.00	0.09-0.11	0.0-2.9	1.0-2.0	
	14-27	7-18	1.50-1.60	14.00-42.00	0.07-0.10	0.0-2.9	0.5-1.0	
	27-37	---	---	0.42-1.41	---	---	---	
326:								
Walong-----	0-14	7-18	1.50-1.60	14.00-42.00	0.09-0.11	0.0-2.9	1.0-2.0	
	14-27	7-18	1.50-1.60	14.00-42.00	0.07-0.10	0.0-2.9	0.5-1.0	
	27-37	---	---	0.42-1.41	---	---	---	
330:								
Kernville-----	0-5	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0	
	5-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0	
	16-19	---	---	0.42-1.41	---	---	---	
	19-29	---	---	0.00-0.07	---	---	---	
Faycreek-----	0-5	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-3.0	
	5-12	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-2.0	
	12-22	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
350:								
Southlake, stony-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	6-60	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5	
Goodale-----	0-3	5-10	1.60-1.70	42.34-141.14	0.03-0.05	0.0-2.9	0.5-1.0	
	3-60	5-10	1.60-1.75	42.34-141.14	0.01-0.04	0.0-2.9	0.0-0.5	
352:								
Goodale-----	0-3	5-10	1.60-1.70	42.34-141.14	0.03-0.05	0.0-2.9	0.5-1.0	
	3-60	5-10	1.60-1.75	42.34-141.14	0.01-0.04	0.0-2.9	0.0-0.5	
Riverwash.								
360:								
Kernville, bouldery-----	0-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0	
	16-20	---	---	0.42-1.41	---	---	---	
	20-30	---	---	0.00-0.07	---	---	---	
Hogeye-----	0-2	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0	
	2-29	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	29-40	---	---	0.42-1.41	---	---	---	
	40-50	---	---	0.00-0.07	---	---	---	
Southlake-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	6-60	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5	
380:								
Delvar-----	0-20	27-40	1.40-1.50	1.41-4.23	0.16-0.18	3.0-5.9	1.0-3.0	
	20-51	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0	
	51-60	15-35	1.45-1.60	1.41-14.11	0.10-0.13	3.0-5.9	0.0-0.5	
Pleito-----	0-30	20-35	1.40-1.55	4.23-14.11	0.14-0.18	3.0-5.9	1.0-2.0	
	30-60	20-35	1.40-1.55	0.42-1.41	0.14-0.18	3.0-5.9	0.2-1.2	
407:								
Centerville-----	0-7	40-60	1.25-1.35	0.42-1.41	0.12-0.15	6.0-8.9	1.0-2.0	
	7-48	35-60	1.25-1.40	0.42-1.41	0.12-0.15	6.0-8.9	0.5-1.0	
	48-60	27-50	1.35-1.55	0.42-4.23	0.07-0.09	3.0-5.9	0.1-0.5	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
410:								
Stineway-----	0-4	8-20	1.50-1.60	14.11-42.34	0.08-0.11	0.0-2.9	1.0-2.0	
	4-14	15-20	1.45-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0	
	14-24	---	---	0.00-0.07	---	---	---	
Kiscove-----	0-2	8-18	1.50-1.60	14.11-42.34	0.07-0.11	0.0-2.9	0.0-1.0	
	2-9	20-35	1.35-1.45	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0	
	9-12	---	---	0.42-1.41	---	---	---	
	12-22	---	---	0.00-0.07	---	---	---	
Urban land.								
411:								
Delvar-----	0-12	27-40	1.40-1.50	1.41-4.23	0.16-0.18	3.0-5.9	1.0-3.0	
	12-19	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0	
	19-28	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	1.0-2.0	
	28-42	40-55	1.40-1.50	0.42-1.41	0.11-0.14	6.0-8.9	0.4-1.0	
	42-60	15-35	1.45-1.60	1.41-14.11	0.10-0.13	3.0-5.9	0.0-0.5	
412:								
Chollawell-----	0-22	7-12	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.5-1.0	
	22-40	10-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5	
	40-60	3-5	1.50-1.60	14.11-42.34	0.03-0.05	0.0-2.9	0.0-0.5	
Urban land.								
417:								
Southlake-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	6-15	5-15	1.50-1.60	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0	
	15-40	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5	
	40-60	15-25	1.45-1.60	1.41-4.23	0.09-0.12	0.0-2.9	0.1-0.5	
Southlake, gravelly-----	0-6	5-15	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-1.0	
	6-19	10-18	1.50-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.0-1.0	
	19-42	18-35	1.45-1.55	1.41-4.23	0.09-0.12	3.0-5.9	0.1-0.5	
	42-60	10-18	1.45-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.1-0.5	
Goodale-----	0-8	5-10	1.60-1.70	42.34-141.14	0.03-0.05	0.0-2.9	0.5-1.0	
	8-60	5-10	1.60-1.75	42.34-141.14	0.01-0.04	0.0-2.9	0.0-0.5	
Urban land.								
420:								
Southlake-----	0-4	5-15	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-1.0	
	4-19	10-18	1.50-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.0-1.0	
	19-42	18-35	1.45-1.55	1.41-4.23	0.09-0.12	3.0-5.9	0.1-0.5	
	42-60	10-26	1.45-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.1-0.5	
Urban land.								
422:								
Kelval-----	0-13	9-14	1.40-1.55	14.11-42.34	0.13-0.15	0.0-2.9	1.0-2.0	
	13-60	4-10	1.55-1.70	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0	
Urban land.								
423:								
Auberry-----	0-16	8-15	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.9-2.0	
	16-22	10-20	1.45-1.55	4.00-14.00	0.11-0.15	0.0-2.9	0.5-1.0	
	22-43	20-30	1.45-1.55	1.40-4.00	0.14-0.18	3.0-5.9	0.5-1.0	
	43-56	10-18	1.50-1.60	14.00-42.00	0.09-0.12	0.0-2.9	0.0-0.5	
	56-66	---	---	1.40-4.00	0.00-0.00	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
423:							
Crouch-----	0-22	7-12	1.55-1.60	14.00-42.00	0.10-0.13	0.0-2.9	1.0-3.0
	22-43	7-15	1.55-1.60	14.00-42.00	0.10-0.14	0.0-2.9	0.5-1.0
	43-70	1-7	1.55-1.65	14.00-42.00	0.06-0.08	0.0-2.9	0.1-1.0
	70-80	---	---	0.42-1.41	0.00-0.00	---	---
Rock outcrop.							
424:							
Inyo-----	0-12	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	12-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5
Urban land.							
430:							
Friant-----	0-5	10-18	1.45-1.55	14.11-42.34	0.08-0.10	0.0-2.9	1.0-2.0
	5-15	10-18	1.45-1.55	14.11-42.34	0.08-0.10	0.0-2.9	0.1-1.0
	15-25	---	---	0.00-0.07	---	---	---
Rock outcrop.							
432:							
Alberti, gravelly-----	0-1	22-27	1.45-1.55	4.23-14.11	0.13-0.15	3.0-5.9	0.5-1.0
	1-17	35-60	1.30-1.40	0.42-1.41	0.12-0.14	6.0-8.9	0.1-0.5
	17-22	---	---	0.42-1.41	---	---	---
	22-32	---	---	0.00-0.07	---	---	---
Urban land.							
441:							
Inyo-----	0-8	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	8-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5
Urban land.							
442:							
Inyo-----	0-6	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5
	6-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5
Urban land.							
445:							
Chollawell-----	0-21	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	21-46	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5
	46-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5
Urban land.							
450:							
Southlake, stony-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0
	6-60	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5
Goodale-----	0-3	5-10	1.60-1.70	42.34-141.14	0.03-0.05	0.0-2.9	0.5-1.0
	3-60	5-10	1.60-1.75	42.34-141.14	0.01-0.04	0.0-2.9	0.0-0.5
Urban land.							
460:							
Kernville, bouldery-----	0-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	16-20	---	---	0.42-1.41	---	---	---
	20-30	---	---	0.00-0.07	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct		g/cc	um/sec	In/in	Pct	Pct
460:								
Hogeye-----	0-2	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0	
	2-29	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	29-40	---	---	0.42-1.41	---	---	---	
	40-50	---	---	0.00-0.07	---	---	---	
Southlake-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	6-60	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5	
Urban land.								
465:								
Arujo-----	0-14	10-20	1.45-1.55	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	14-20	12-25	1.40-1.50	4.23-14.11	0.14-0.19	3.0-5.9	1.0-2.0	
	20-58	25-35	1.35-1.50	1.41-4.23	0.15-0.19	3.0-5.9	0.1-1.0	
	58-68	---	---	1.41-4.23	---	---	---	
Urban land.								
485:								
Inyo-----	0-12	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	12-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
Kelval-----	0-7	4-10	1.50-1.65	42.34-141.14	0.06-0.09	0.0-2.9	1.0-2.0	
	7-60	4-10	1.55-1.70	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0	
Urban land.								
488:								
Tweedy-----	0-11	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	11-31	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0	
	31-38	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-1.0	
	38-48	---	---	0.42-1.41	---	---	---	
Tollhouse-----	0-5	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0	
	5-14	5-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	1.0-2.0	
	14-24	---	---	0.42-1.41	---	---	---	
Locobill-----	0-3	7-14	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	3-28	10-18	1.45-1.55	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
	28-35	20-25	1.50-1.60	1.41-4.23	0.12-0.15	3.0-5.9	0.1-0.5	
	35-45	---	---	0.42-1.41	---	---	---	
Urban land.								
501:								
Hyte-----	0-4	7-15	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	4-17	10-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.2-1.0	
	17-27	---	---	0.42-1.41	---	---	---	
Erskine-----	0-4	8-15	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-1.0	
	4-13	8-18	1.50-1.60	14.11-42.34	0.11-0.13	0.0-2.9	0.2-1.0	
	13-23	---	---	0.42-1.41	---	---	---	
Sorrell-----	0-11	8-14	1.50-1.65	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0	
	11-36	10-18	1.55-1.65	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0	
	36-46	---	---	0.42-1.41	---	---	---	
503:								
Tips-----	0-5	4-10	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	5-14	12-18	1.50-1.65	14.11-42.34	0.06-0.09	0.0-2.9	0.0-0.5	
	14-24	---	---	0.42-1.41	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
503:								
Erskine-----	0-8	8-14	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	0.5-1.0	
	8-18	11-18	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.2-1.0	
	18-28	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
505:								
Chollawell-----	0-19	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0	
	19-54	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	54-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
507:								
Xyno-----	0-2	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	2-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
	11-21	---	---	0.00-0.07	---	---	---	
Canebrake-----	0-7	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	7-17	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	17-27	---	---	0.42-1.41	---	---	---	
Pilotwell-----	0-3	5-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.4-1.0	
	3-38	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
	38-48	---	---	0.42-1.41	---	---	---	
508:								
Pilotwell-----	0-5	5-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.4-1.0	
	5-25	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
	25-35	---	---	---	---	---	---	
Xyno-----	0-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	11-21	---	---	0.00-0.07	---	---	---	
Rock outcrop.								
509:								
Xyno-----	0-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
	11-15	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	15-25	---	---	0.00-0.07	---	---	---	
Faycreek-----	0-2	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-3.0	
	2-10	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-2.0	
	10-20	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
510:								
Xyno-----	0-2	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	2-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-0.5	
	11-21	---	---	0.00-0.07	---	---	---	
Canebrake-----	0-7	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	7-17	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	17-27	---	---	0.42-1.42	---	---	---	
Pilotwell, bouldery-----	0-5	5-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.4-1.0	
	5-25	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
	25-35	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
512:								
Chollawell, cobbly substratum	0-22	7-12	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.5-1.0	
	22-40	10-18	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-0.5	
	40-60	3-5	1.50-1.60	14.11-42.34	0.03-0.05	0.0-2.9	0.0-0.5	
Chollawell, gravelly-----	0-19	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0	
	19-54	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	54-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
514:								
Chollawell-----	0-19	4-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0	
	19-54	10-18	1.25-1.40	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5	
	54-60	1-10	1.20-1.35	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5	
Inyo-----	0-1	2-8	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	0.1-0.5	
	1-60	2-8	1.60-1.70	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
515:								
Scodie-----	0-8	3-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	1.0-3.0	
	8-18	---	---	0.42-1.41	---	---	---	
Canebrake-----	0-3	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	3-13	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	13-23	---	---	0.42-1.41	---	---	---	
Xyno-----	0-2	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	2-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
	11-21	---	---	0.00-0.07	---	---	---	
516:								
Xyno-----	0-2	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	2-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.0-0.5	
	11-21	---	---	0.00-0.07	---	---	---	
Rock outcrop.								
Canebrake-----	0-4	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	4-12	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	12-22	---	---	0.42-1.41	---	---	---	
517:								
Southlake-----	0-6	5-15	1.50-1.60	14.11-42.34	0.08-0.12	0.0-2.9	0.5-1.0	
	6-15	5-15	1.50-1.60	14.11-42.34	0.06-0.11	0.0-2.9	0.5-1.0	
	15-40	18-35	1.45-1.60	1.41-4.23	0.09-0.13	3.0-5.9	0.1-0.5	
	40-60	15-25	1.45-1.60	1.41-4.23	0.09-0.12	0.0-2.9	0.1-0.5	
Southlake, gravelly-----	0-6	5-15	1.50-1.60	14.11-42.34	0.07-0.10	0.0-2.9	0.0-1.0	
	6-19	10-18	1.50-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.0-1.0	
	19-42	18-35	1.45-1.55	1.41-4.23	0.09-0.12	3.0-5.9	0.1-0.5	
	42-60	10-18	1.45-1.60	14.11-42.34	0.05-0.08	0.0-2.9	0.1-0.5	
Goodale-----	0-8	5-10	1.60-1.70	42.34-141.14	0.03-0.05	0.0-2.9	0.5-1.0	
	8-60	5-10	1.60-1.75	42.34-141.14	0.01-0.04	0.0-2.9	0.0-0.5	
518:								
Backcanyon-----	0-2	8-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.9-2.5	
	2-11	8-18	1.50-1.60	14.11-42.34	0.06-0.09	0.0-2.9	0.1-1.0	
	11-15	---	---	0.42-1.41	---	---	---	
	15-25	---	---	0.00-0.07	---	---	---	
Rock outcrop.								

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
520:							
Kernville-----	0-5	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	5-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	16-19	---	---	0.42-1.41	---	---	---
	19-29	---	---	0.00-0.07	---	---	---
Hogeye-----	0-20	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	20-29	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5
	29-40	---	---	0.42-1.41	---	---	---
	40-50	---	---	0.00-0.07	---	---	---
Rock outcrop.							
523:							
Kernville, bouldery-----	0-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	16-20	---	---	0.42-1.41	---	---	---
	20-30	---	---	0.00-0.07	---	---	---
Faycreek-----	0-6	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-3.0
	6-12	4-10	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-2.0
	12-22	---	---	0.42-1.41	---	---	---
Rock outcrop.							
525:							
Hungrygulch-----	0-19	8-15	1.55-1.60	14.11-42.34	0.08-0.11	0.0-2.9	0.5-1.0
	19-26	8-15	1.55-1.65	14.11-42.34	0.07-0.09	0.0-2.9	0.2-1.0
	26-36	---	---	0.42-1.41	---	---	---
Kernville-----	0-5	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	5-16	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.5-1.0
	16-20	---	---	0.42-1.41	---	---	---
	20-30	---	---	0.00-0.07	---	---	---
Hogeye-----	0-2	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	2-29	10-18	1.55-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.0-0.5
	29-40	---	---	0.42-1.41	---	---	---
	40-50	---	---	0.00-0.07	---	---	---
530:							
Alberti, cobbly-----	0-4	28-35	1.40-1.50	1.41-4.23	0.13-0.16	3.0-5.9	0.7-1.0
	4-16	35-60	1.30-1.40	0.42-1.41	0.12-0.14	6.0-8.9	0.1-0.5
	16-22	---	---	0.42-1.41	---	---	---
	22-32	---	---	0.00-0.07	---	---	---
Alberti, gravelly-----	0-5	28-35	1.40-1.50	1.41-4.23	0.13-0.16	3.0-5.9	0.7-1.0
	5-15	35-60	1.30-1.40	0.42-1.41	0.12-0.14	6.0-8.9	0.1-0.5
	15-23	---	---	0.42-1.41	---	---	---
	23-33	---	---	0.00-0.07	---	---	---
531:							
Tweedy-----	0-11	12-20	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	1.0-2.0
	11-36	20-35	1.40-1.55	1.41-4.23	0.16-0.18	3.0-5.9	0.5-1.0
	36-46	---	---	0.32-1.41	---	---	---
Erskine-----	0-7	8-14	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	7-19	11-18	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.2-1.0
	19-29	---	---	0.42-1.41	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
531:							
Alberti, gravelly-----	0-5	28-35	1.40-1.50	1.41-4.23	0.13-0.16	3.0-5.9	0.7-1.0
	5-17	35-60	1.30-1.40	0.42-1.41	0.12-0.14	6.0-8.9	0.1-0.5
	17-20	---	---	0.42-1.41	---	---	---
	20-30	---	---	0.00-0.07	---	---	---
532:							
Alberti, gravelly-----	0-1	23-27	1.45-1.55	4.23-14.11	0.13-0.15	3.0-5.9	0.7-1.0
	1-17	35-60	1.30-1.40	0.42-1.41	0.12-0.14	6.0-8.9	0.1-0.5
	17-22	---	---	0.42-1.41	---	---	---
	22-32	---	---	0.00-0.07	---	---	---
540:							
Canebrake-----	0-10	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	10-16	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0
	16-26	---	---	0.42-1.41	---	---	---
Lachim-----	0-3	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	3-13	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	13-26	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	26-36	---	---	1.41-4.23	---	---	---
541:							
Canebrake-----	0-9	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	9-12	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.1-0.5
	12-22	---	---	0.42-1.41	---	---	---
Lachim-----	0-6	3-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	6-16	3-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	16-26	3-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	26-36	---	---	1.41-4.23	---	---	---
Rock outcrop.							
543:							
Wortley-----	0-5	7-12	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0
	5-10	7-12	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0
	10-20	---	---	0.42-1.41	---	---	---
Indiano-----	0-6	10-20	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0
	6-12	20-35	1.45-1.55	1.41-4.23	0.12-0.14	3.0-5.9	1.0-3.0
	12-28	20-35	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	0.1-1.0
	28-38	---	---	0.42-1.41	---	---	---
Rock outcrop.							
544:							
Xeric Haplargids-----	0-24	5-15	1.50-1.65	14.00-141.00	0.07-0.10	0.0-2.9	0.1-0.5
	24-38	10-20	1.50-1.60	14.00-42.00	0.08-0.10	0.0-2.9	0.1-0.5
	38-40	18-25	1.50-1.60	1.41-4.23	0.10-0.13	3.0-5.9	0.0-0.2
	40-50	---	---	0.00-0.07	---	---	---
Lithic Xeric Haplargids-----	0-9	5-10	1.50-1.60	14.00-42.00	0.06-0.10	0.0-2.9	0.1-1.0
	9-18	8-12	1.50-1.60	14.00-42.00	0.06-0.10	0.0-2.9	0.1-1.0
	18-28	---	---	1.41-4.23	---	---	---
545:							
Sacatar-----	0-10	5-10	1.60-1.70	42.34-141.14	0.05-0.07	0.0-2.9	1.0-2.0
	10-34	10-18	1.55-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0
	34-44	---	---	0.42-1.41	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
545:							
Canebrake-----	0-4	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	4-14	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0
	14-24	---	---	0.42-1.41	---	---	---
549:							
Tunawee-----	0-10	5-9	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	1.0-1.5
	10-12	5-9	1.55-1.65	42.34-141.14	0.03-0.06	0.0-2.9	0.3-1.0
	12-22	---	---	0.42-1.41	---	---	---
Rock outcrop.							
550:							
Kenypeak-----	0-8	5-15	1.45-1.55	4.23-14.11	0.06-0.09	0.0-2.9	1.0-3.0
	8-18	---	---	0.00-0.07	---	---	---
Rubble land.							
Rock outcrop.							
551:							
Tunawee-----	0-11	5-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	1.0-2.0
	11-18	5-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.3-1.0
	18-28	---	---	0.42-1.41	---	---	---
552:							
Kenypeak-----	0-3	5-15	1.45-1.55	4.23-14.11	0.06-0.09	0.0-2.9	1.1-3.0
	3-12	5-15	1.45-1.55	4.23-14.11	0.04-0.07	0.0-2.9	1.0-2.5
	12-22	---	---	0.00-0.07	---	---	---
Torriorthentic Haploxerolls--	0-10	5-15	1.45-1.55	4.23-14.11	0.06-0.09	0.0-2.9	1.0-2.0
	10-34	5-15	1.45-1.55	4.23-14.11	0.06-0.09	0.0-2.9	1.0-2.0
	34-44	---	---	0.42-1.41	---	---	---
553:							
Tibbcreek-----	0-8	10-22	1.45-1.55	4.23-14.11	0.11-0.13	0.0-2.9	1.0-2.0
	8-18	18-36	1.40-1.55	1.41-4.23	0.12-0.15	3.0-5.9	0.3-1.0
	18-35	---	---	0.42-1.41	---	---	---
	35-45	---	---	0.00-0.07	---	---	---
554:							
Deerspring-----	0-11	8-15	1.50-1.60	14.11-42.34	0.13-0.15	0.0-2.9	1.0-4.0
	11-24	6-15	1.55-1.65	42.34-141.14	0.06-0.08	0.0-2.9	1.0-3.0
	24-80	5-18	1.45-1.65	4.23-14.11	0.09-0.12	0.0-2.9	0.5-3.0
555:							
Cumulic Endoaquolls, frigid--	0-28	7-18	1.35-1.45	14.11-42.34	0.11-0.14	0.0-2.9	2.0-4.0
	28-52	7-18	1.35-1.45	14.11-42.34	0.11-0.14	0.0-2.9	1.0-3.0
	52-65	7-18	1.35-1.45	14.11-42.34	0.12-0.16	0.0-2.9	0.5-2.0
556:							
Toll-----	0-6	2-8	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.5-1.0
	6-24	0-5	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	24-60	2-8	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
557:							
Scodie-----	0-3	3-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	1.0-3.0
	3-10	3-10	1.55-1.65	42.34-141.14	0.06-0.09	0.0-2.9	1.0-2.0
	10-20	---	---	0.42-1.41	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct	
557:								
Canebrake-----	0-3	3-8	1.70-1.80	141.14-141.14	0.02-0.04	0.0-2.9	0.5-1.0	
	3-12	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	12-22	---	---	0.42-1.41	---	---	---	
Deadfoot-----	0-10	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	1.0-2.0	
	10-29	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	29-39	---	---	0.42-1.41	---	---	---	
558:								
Indiano-----	0-6	10-20	1.50-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-3.0	
	6-12	20-35	1.45-1.55	1.41-4.23	0.12-0.14	3.0-5.9	1.0-3.0	
	12-28	20-35	1.45-1.55	1.41-4.23	0.14-0.16	3.0-5.9	0.1-1.0	
	28-38	---	---	0.42-1.41	---	---	---	
Wortley-----	0-2	7-12	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	2-9	7-12	1.55-1.60	14.11-42.34	0.07-0.09	0.0-2.9	1.0-2.0	
	9-19	---	---	0.42-1.41	---	---	---	
560:								
Sacatar-----	0-2	5-10	1.60-1.70	42.34-141.14	0.05-0.07	0.0-2.9	1.0-2.0	
	2-10	5-10	1.55-1.60	14.11-42.34	0.09-0.12	0.0-2.9	1.0-2.0	
	10-34	10-18	1.55-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.0	
	34-44	---	---	0.42-1.41	---	---	---	
Wortley-----	0-2	7-12	1.55-1.60	14.11-42.34	0.12-0.15	0.0-2.9	1.0-3.0	
	2-8	7-12	1.55-1.60	14.11-42.34	0.11-0.13	0.0-2.9	1.0-2.0	
	8-18	---	---	0.42-1.41	---	---	---	
Calpine-----	0-10	6-10	1.60-1.70	42.34-141.14	0.05-0.07	0.0-2.9	1.0-4.0	
	10-68	7-12	1.50-1.65	14.11-42.34	0.10-0.13	0.0-2.9	0.5-1.0	
561:								
Scodie-----	0-10	3-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	1.0-3.0	
	10-20	---	---	0.42-1.41	---	---	---	
Sacatar-----	0-2	5-10	1.60-1.70	42.34-141.14	0.05-0.07	0.0-2.9	1.0-2.0	
	2-34	10-18	1.55-1.60	14.11-42.34	0.09-0.12	0.0-2.9	0.5-1.5	
	34-44	---	---	0.42-1.41	---	---	---	
Canebrake-----	0-6	3-10	1.55-1.65	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	6-16	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0	
	16-26	---	---	0.42-1.41	---	---	---	
562:								
Deerspring, partially drained	0-21	8-18	1.45-1.55	4.23-14.11	0.14-0.16	0.0-2.9	1.0-2.0	
	21-60	8-18	1.50-1.60	14.11-42.34	0.11-0.14	0.0-2.9	0.5-1.0	
570:								
Deadfoot-----	0-10	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	1.0-2.0	
	10-23	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0	
	23-33	---	---	0.42-1.41	---	---	---	
Scodie-----	0-9	3-10	1.55-1.65	42.34-141.14	0.05-0.08	0.0-2.9	1.0-3.0	
	9-19	---	---	0.42-1.41	---	---	---	
Rock outcrop.								
590:								
Xyno-----	0-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0	
	11-21	---	---	0.00-0.07	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
590:							
Canebrake-----	0-7	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	7-17	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0
	17-27	---	---	0.42-1.41	---	---	---
Pilotwell-----	0-5	5-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.4-1.0
	5-26	4-10	1.55-1.65	42.34-141.14	0.05-0.07	0.0-2.9	0.0-0.5
	26-36	---	---	0.42-1.41	---	---	---
591:							
Xyno-----	0-11	4-10	1.55-1.65	42.34-141.14	0.04-0.07	0.0-2.9	0.1-1.0
	11-21	---	---	0.00-0.07	---	---	---
Canebrake-----	0-6	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.5-1.0
	6-15	3-10	1.60-1.70	42.34-141.14	0.04-0.06	0.0-2.9	0.2-1.0
	15-25	---	---	0.42-1.41	---	---	---
Rock outcrop.							
599.							
Rock outcrop							
610:							
Hyte-----	0-5	7-15	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	1.0-2.0
	5-14	10-18	1.50-1.60	14.11-42.34	0.09-0.11	0.0-2.9	0.2-1.0
	14-24	---	---	0.42-1.41	---	---	---
Erskine-----	0-7	8-14	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.5-1.0
	7-19	11-18	1.50-1.60	14.11-42.34	0.08-0.10	0.0-2.9	0.2-1.0
	19-29	---	---	0.42-1.41	---	---	---
650:							
Stineway-----	0-3	8-20	1.45-1.55	4.23-14.11	0.09-0.12	0.0-2.9	1.0-3.0
	3-6	15-20	1.45-1.60	4.23-14.11	0.08-0.12	0.0-2.9	0.5-2.0
	6-16	15-25	1.45-1.55	4.23-14.11	0.08-0.12	0.0-2.9	0.2-1.0
	16-26	---	---	0.00-0.07	---	---	---
Kiscove-----	0-2	15-25	1.45-1.55	4.23-14.11	0.11-0.14	3.0-5.9	0.0-2.0
	2-9	20-35	1.35-1.45	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0
	9-12	---	---	0.42-1.41	---	---	---
	12-22	---	---	0.00-0.07	---	---	---
Rock outcrop.							
3250:							
Jawbone-----	0-2	3-6	1.55-1.65	25.00-100.00	0.05-0.07	0.0-3.0	0.0-0.2
	2-6	3-7	1.55-1.65	25.00-100.00	0.05-0.07	0.0-3.0	0.0-0.5
	6-59	---	---	0.00-0.01	---	---	---
Jawbone, moderately deep----	0-1	3-6	1.55-1.65	25.00-100.00	0.05-0.07	0.0-3.0	0.0-0.2
	1-7	3-7	1.55-1.65	25.00-100.00	0.05-0.07	0.0-3.0	0.0-0.2
	7-34	3-4	1.45-1.55	25.00-100.00	0.04-0.05	0.0-3.0	0.0-0.2
	34-44	---	---	0.00-0.00	---	---	---
4432:							
Koehn, occasionally flooded--	0-1	3-7	1.60-1.70	25.00-100.00	0.05-0.08	0.0-3.0	0.0-0.5
	1-63	2-10	1.60-1.70	25.00-100.00	0.03-0.08	0.0-2.9	0.0-0.2
Koehn, frequently flooded----	0-1	3-7	1.60-1.70	25.00-100.00	0.05-0.08	0.0-3.0	0.0-0.5
	1-63	2-10	1.60-1.70	25.00-100.00	0.03-0.08	0.0-2.9	0.0-0.2

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 17.--Physical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter
	In	Pct	g/cc	um/sec	In/in	Pct	Pct
5201:							
Wingap-----	0-3	4-10	1.65-1.75	25.00-75.00	0.05-0.07	0.0-2.0	0.2-0.6
	3-14	4-10	1.60-1.70	25.00-75.00	0.06-0.08	0.0-2.0	0.0-0.5
	14-41	10-18	1.55-1.60	10.00-25.00	0.08-0.10	0.0-3.0	0.0-0.5
	41-54	4-10	1.65-1.75	25.00-75.00	0.04-0.05	0.0-2.0	0.0-0.5
	54-64	---	---	0.01-0.10	0.01-0.05	---	---
Pinyonpeak-----	0-2	5-12	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.2-0.5
	2-6	10-18	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.0-0.5
	6-8	---	---	50.00-100.00	0.02-0.04	---	---
	8-16	---	---	0.01-1.00	---	---	---
	16-26	---	---	0.00-0.01	---	---	---
5210:							
Grandora-----	0-3	2-6	1.50-1.60	25.00-100.00	0.04-0.08	0.0-1.0	0.5-1.0
	3-60	2-6	1.50-1.60	25.00-100.00	0.04-0.08	0.0-1.0	0.2-0.8
Grandora, warm-----	0-2	2-6	1.50-1.60	25.00-100.00	0.04-0.08	0.0-1.0	0.5-1.0
	2-60	2-6	1.50-1.60	25.00-100.00	0.04-0.08	0.0-1.0	0.2-0.8
Pinyonpeak-----	0-2	5-12	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.2-0.5
	2-6	10-18	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.0-0.5
	6-8	---	---	50.00-100.00	0.02-0.04	---	---
	8-16	---	---	0.01-1.00	---	---	---
	16-26	---	---	0.00-0.01	---	---	---
6001:							
Goldpeak-----	0-2	3-9	1.60-1.70	25.00-75.00	0.05-0.06	0.0-2.0	0.2-0.6
	2-94	10-18	1.55-1.60	5.00-25.00	0.08-0.12	0.0-3.0	0.0-0.5
Pinyonpeak-----	0-2	5-12	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.2-0.5
	2-6	10-18	1.50-1.60	10.00-25.00	0.06-0.11	0.0-3.0	0.0-0.5
	6-8	---	---	50.00-100.00	0.02-0.04	---	---
	8-16	---	---	0.01-1.00	---	---	---
	16-26	---	---	0.00-0.01	---	---	---
Wingap-----	0-3	4-10	1.65-1.75	25.00-75.00	0.05-0.07	0.0-2.0	0.2-0.6
	3-14	4-10	1.60-1.70	25.00-75.00	0.06-0.08	0.0-2.0	0.0-0.5
	14-41	10-18	1.55-1.60	10.00-25.00	0.08-0.10	0.0-3.0	0.0-0.5
	41-54	4-10	1.65-1.75	25.00-75.00	0.04-0.05	0.0-2.0	0.0-0.5
	54-60	---	---	0.01-0.10	0.01-0.05	---	---
W. Water							

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils

(Entries under "Erosion factors" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
115: Chanac-----	0-18	.24	.32	5	6	48
	18-46	.17	.24			
	46-60	.32	.43			
128: Pits.						
Delano-----	0-18	.28	.28	5	7	38
	18-37	.24	.24			
	37-60	.24	.24			
Oil waste land.						
136: Hesperia-----	0-20	.20	.24	5	3	86
	20-60	.17	.24			
138: Hesperia-----	0-18	.20	.24	5	3	86
	18-34	.20	.28			
	34-70	.15	.20			
139. Riverwash						
143: Calicreek-----	0-7	.10	.17	5	2	134
	7-30	.05	.10			
	30-60	.05	.10			
144: Calicreek-----	0-5	.17	.24	5	3	86
	5-60	.05	.10			
145: Delano-----	0-7	.28	.32	5	2	134
	7-20	.24	.28			
	20-55	.20	.24			
	55-60	.20	.24			
146: Delano-----	0-18	.28	.28	5	7	38
	18-37	.24	.24			
	37-60	.24	.24			
147: Chanac-----	0-18	.24	.32	5	6	48
	18-46	.17	.24			
	46-60	.32	.43			
148: Delano-----	0-18	.28	.28	5	7	38
	18-37	.24	.24			
	37-60	.24	.24			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
149: Delano-----	0-18	.28	.28	5	3	86
	18-37	.24	.24			
	37-60	.24	.24			
150: Pits. Dumps.						
152: Pleito-----	0-27	.20	.28	5	5	56
	27-38	.17	.24			
	38-60	.20	.28			
153: Chanac-----	0-18	.24	.32	5	6	48
	18-46	.32	.43			
	46-60	.32	.43			
154. Dam						
166: Delano-----	0-18	.28	.28	5	7	38
	18-37	.24	.24			
	37-60	.24	.24			
Urban land.						
174: Xeric Torriorthents, silty-----	0-15	.43	.43	5	4L	86
	15-20	.43	.43			
	20-50	.49	.49			
	50-60	.43	.43			
Calcic Haploxerepts-----	0-2	.43	.43	5	7	38
	2-12	.43	.43			
	12-23	.43	.43			
	23-60	.43	.43			
176: Elkhills, eroded-----	0-8	.10	.17	5	4	86
	8-17	.15	.20			
	17-34	.10	.20			
	34-42	.10	.24			
	42-60	.15	.28			
177: Chanac-----	0-7	.17	.24	5	5	56
	7-36	.17	.24			
	36-60	.20	.28			
Torriorthents, stratified-----	0-4	.20	.28	5	3	86
	4-54	.24	.32			
	54-60	.24	.28			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
178:						
Delano-----	0-8	.24	.24	5	7	38
	8-36	.24	.24			
	36-60	.43	.43			
Cuyama-----	0-10	.20	.32	5	3	86
	10-21	.24	.37			
	21-39	.10	.24			
	39-60	.20	.43			
Premier-----	0-12	.24	.24	5	6	48
	12-60	.24	.24			
179:						
Torriorthents, stratified, eroded-----	0-4	.20	.28	5	3	86
	4-54	.28	.37			
	54-60	.24	.28			
Elkhills-----	0-29	.20	.28	5	6	48
	29-49	.20	.28			
	49-65	.15	.28			
184:						
Cuyama-----	0-10	.20	.28	5	3	86
	10-21	.17	.24			
	21-32	.10	.20			
	32-44	.15	.24			
	44-54	.20	.32			
	54-60	.20	.32			
185:						
Brecken-----	0-3	.10	.24	5	4	86
	3-12	.10	.24			
	12-19	.05	.24			
	19-39	.05	.28			
	39-60	.05	.24			
Cuyama-----	0-4	.20	.28	5	3	86
	4-22	.20	.28			
	22-60	.15	.24			
Pleito-----	0-12	.24	.37	5	6	48
	12-24	.17	.24			
	24-60	.24	.37			
186:						
Cuyama-----	0-4	.28	.43	5	5	56
	4-28	.10	.24			
	28-36	.20	.28			
	36-60	.15	.28			
187:						
Trigo-----	0-2	.37	.37	2	3	86
	2-10	.32	.32			
	10-20	---	---			
Chanac-----	0-8	.20	.28	5	4	86
	8-36	.32	.43			
	36-60	.17	.24			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
188:						
Tweedy-----	0-11	.20	.28	3	3	86
	11-31	.17	.24			
	31-38	.20	.28			
	38-48	---	---			
Tollhouse-----	0-5	.20	.28	2	4	86
	5-14	.15	.28			
	14-24	---	---			
Locobill-----	0-3	.24	.32	3	3	86
	3-28	.20	.28			
	28-35	.15	.28			
	35-45	---	---			
189:						
Tweedy-----	0-7	.20	.28	3	3	86
	7-40	.17	.24			
	40-50	---	---			
Walong-----	0-13	.15	.28	3	4	86
	13-25	.15	.28			
	25-35	---	---			
192:						
Chanac-----	0-8	.20	.28	5	5	56
	8-22	.32	.43			
	22-31	.28	.37			
	31-42	.37	.37			
	42-52	.37	.37			
	52-60	.32	.32			
Pleito-----	0-21	.17	.24	5	5	56
	21-53	.17	.24			
	53-60	.20	.28			
193:						
Chanac-----	0-9	.17	.24	5	5	56
	9-50	.17	.24			
	50-63	.20	.28			
Pleito-----	0-25	.17	.24	5	5	56
	25-48	.17	.24			
	48-60	.10	.24			
194:						
Pleito-----	0-30	.20	.32	5	5	56
	30-48	.24	.37			
	48-60	.17	.24			
Delvar-----	0-17	.15	.20	5	5	56
	17-35	.17	.24			
	35-55	.17	.24			
	55-60	.17	.24			
195:						
Centerville-----	0-10	.20	.20	3	4	86
	10-39	.24	.24			
	39-56	.20	.28			
	56-60	.20	.28			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
195:						
Delvar-----	0-18	.20	.28	5	6	48
	18-48	.17	.24			
	48-60	.20	.28			
196:						
Exeter-----	0-4	.24	.32	2	3	86
	4-8	.24	.28			
	8-12	.28	.32			
	12-18	.28	.32			
	18-25	.24	.28			
	25-39	.64	.64			
	39-60	.28	.37			
197:						
Nord-----	0-9	.20	.24	5	3	86
	9-65	.17	.24			
198:						
Centerville-----	0-6	.20	.20	3	4	86
	6-26	.24	.24			
	26-48	.17	.24			
	48-60	.20	.28			
Delvar-----	0-21	.20	.28	5	6	48
	21-48	.17	.24			
	48-60	.20	.28			
199:						
Exeter-----	0-20	.28	.32	2	3	86
	20-38	.28	.32			
	38-42	---	---			
200:						
Urban land.						
Delano-----	0-18	.28	.28	5	7	38
	18-37	.24	.24			
	37-60	.24	.24			
201:						
Pleito-----	0-7	.17	.24	5	5	56
	7-53	.17	.24			
	53-66	.20	.28			
Chanac-----	0-17	.32	.43	5	5	56
	17-52	.32	.43			
	52-62	.37	.49			
Raggulch-----	0-4	.20	.28	1	3	86
	4-16	.20	.28			
	16-18	---	---			
	18-28	---	---			
205:						
Pleito-----	0-13	.20	.32	5	6	48
	13-42	.17	.24			
	42-60	.10	.24			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
205:						
Trigo-----	0-2	.37	.37	2	3	86
	2-9	.32	.32			
	9-19	---	---			
Chanac-----	0-8	.28	.37	5	5	56
	8-36	.32	.43			
	36-60	.17	.24			
207:						
Whitewolf-----	0-10	.17	.24	5	2	134
	10-60	.02	.05			
209:						
Whitewolf-----	0-15	.24	.24	5	2	134
	15-25	.20	.24			
	25-60	.02	.05			
210:						
Kernfork-----	0-6	.17	.20	5	3	86
	6-27	.17	.24			
	27-30	.15	.17			
	30-60	.17	.24			
212:						
Kernfork-----	0-10	.15	.20	5	3	86
	10-31	.15	.20			
	31-60	.17	.24			
213:						
Calicreek-----	0-7	.15	.20	5	2	134
	7-26	.05	.10			
	26-60	.05	.10			
215:						
Kelval-----	0-7	.10	.17	5	2	134
	7-43	.20	.28			
	43-60	.05	.10			
216:						
Inyo-----	0-14	.10	.15	5	3	86
	14-60	.10	.15			
Riverwash.						
217:						
Whitewolf-----	0-14	.10	.15	5	3	86
	14-60	.10	.15			
Riverwash.						
220:						
Aquents-----	0-7	.32	.32	5	3	86
	7-18	.24	.24			
	18-60	.49	.49			
Aquolls-----	0-3	.49	.49	5	4L	86
	3-12	.43	.43			
	12-60	.32	.32			
Riverwash.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
222: Kelval-----	0-13	.20	.28	5	4	86
	13-60	.05	.10			
223: Kelval-----	0-13	.10	.20	5	3	86
	13-60	.10	.17			
224: Inyo-----	0-12	.10	.15	5	3	86
	12-60	.10	.15			
238: Cinco-----	0-3	.15	.24	5	3	86
	3-60	.15	.24			
240: Dune land-----	0-6	.05	.05	5	1	220
	6-60	.05	.05			
241: Inyo-----	0-8	.10	.15	5	3	86
	8-60	.10	.15			
242: Inyo-----	0-6	.10	.15	5	3	86
	6-60	.10	.15			
243: Kernfork, saline-sodic, occasionally flooded-----	0-10	.32	.32	5	7	38
	10-60	.20	.20			
245: Chollawell-----	0-21	.05	.15	4	3	86
	21-46	.10	.20			
	46-60	.05	.10			
246: Chollawell-----	0-19	.05	.15	4	4	86
	19-54	.10	.20			
	54-60	.10	.17			
247: Inyo-----	0-8	.10	.15	5	3	86
	8-60	.10	.15			
Tips-----	0-5	.15	.24	2	3	86
	5-12	.15	.28			
	12-22	---	---			
Rock outcrop.						
249: Hoffman-----	0-11	.15	.24	3	3	86
	11-22	.15	.24			
	22-34	.15	.28			
	34-44	---	---			
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
250:						
Hoffman-----	0-11	.15	.24	3	3	86
	11-22	.15	.24			
	22-34	.15	.28			
	34-44	---	---			
Tips-----	0-5	.15	.24	2	3	86
	5-10	.15	.28			
	10-20	---	---			
Pilotwell-----	0-3	.10	.24	3	3	86
	3-38	.10	.24			
	38-48	---	---			
253:						
Sorrell-----	0-9	.10	.20	3	3	86
	9-23	.15	.28			
	23-33	---	---			
Martee-----	0-5	.05	.20	1	4	86
	5-11	.05	.20			
	11-12	---	---			
	12-22	---	---			
Rock outcrop.						
254:						
Martee-----	0-4	.10	.24	1	4	86
	4-12	.10	.24			
	12-15	---	---			
	15-25	---	---			
Rock outcrop.						
255:						
Kernfork, occasionally flooded-----	0-10	.32	.32	5	7	38
	10-60	.20	.20			
Kernfork, frequently flooded-----	0-8	.20	.20	5	3	86
	8-60	.17	.17			
257:						
Hoffman-----	0-11	.15	.24	3	3	86
	11-22	.15	.24			
	22-34	.15	.28			
	34-44	---	---			
Tips-----	0-5	.10	.24	2	3	86
	5-10	.15	.28			
	10-20	---	---			
Rock outcrop.						
259:						
Cowspring-----	0-3	.15	.24	3	3	86
	3-27	.15	.28			
	27-37	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
260:						
Cowspring-----	0-3	.15	.24	3	3	86
	3-27	.15	.28			
	27-37	---	---			
Tips-----	0-5	.10	.24	2	3	86
	5-12	.15	.28			
	12-22	---	---			
Rock outcrop.						
261:						
Blasingame-----	0-14	.20	.28	3	3	86
	14-21	.17	.24			
	21-31	.17	---			
Arujo-----	0-14	.17	.24	4	3	86
	14-45	.17	.24			
	45-58	.17	.24			
	58-68	---	---			
Cieneba-----	0-16	.24	.32	2	3	86
	16-26	---	---			
264:						
Arujo-----	0-14	.17	.24	4	3	86
	14-20	.17	.24			
	20-58	.15	.20			
	58-68	---	---			
Walong-----	0-13	.20	.28	3	4	86
	13-25	.17	.28			
	25-35	---	---			
Tunis-----	0-3	.20	.28	2	3	86
	3-16	.20	.28			
	16-26	---	---			
265:						
Arujo-----	0-14	.17	.24	4	3	86
	14-20	.17	.24			
	20-58	.15	.20			
	58-68	---	---			
266:						
Tunis-----	0-3	.20	.28	2	3	86
	3-16	.20	.28			
	16-26	---	---			
Rock outcrop.						
267:						
Cieneba-----	0-6	.20	.32	2	3	86
	6-16	.20	.32			
	16-26	---	---			
Vista-----	0-4	.24	.32	3	3	86
	4-12	.24	.32			
	12-27	.24	.32			
	27-37	---	---			
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
268:						
Tunis-----	0-5	.20	.28	2	3	86
	5-16	.20	.28			
	16-26	---	---			
Tollhouse-----	0-13	.17	.28	2	4	86
	13-23	---	---			
Sorrell-----	0-11	.17	.28	3	4	86
	11-36	.20	.28			
	36-46	---	---			
269:						
Tollhouse-----	0-11	.17	.32	2	4	86
	11-21	---	---			
Sorrell-----	0-2	.17	.28	3	4	86
	2-27	.15	.28			
	27-37	---	---			
Rock outcrop.						
270:						
Locobill-----	0-3	.28	.32	3	3	86
	3-13	.20	.28			
	13-28	.15	.28			
	28-35	.15	.28			
	35-45	---	---			
Backcanyon-----	0-3	.15	.32	1	4	86
	3-15	.17	.37			
	15-23	---	---			
	23-33	---	---			
Sesame-----	0-9	.24	.28	3	3	86
	9-24	.24	.28			
	24-33	.28	.32			
	33-43	---	---			
271:						
Walong-----	0-9	.28	.32	3	4	86
	9-30	.24	.32			
	30-40	---	---			
Tunis-----	0-18	.20	.28	2	3	86
	18-28	---	---			
Rock outcrop.						
272:						
Tollhouse-----	0-14	.20	.28	2	3	86
	14-24	---	---			
Edmundston-----	0-25	.17	.24	4	3	86
	25-57	.15	.28			
	57-67	---	---			
Sorrell-----	0-10	.17	.28	3	4	86
	10-39	.15	.28			
	39-49	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
274:						
Sesame-----	0-9	.24	.28	3	3	86
	9-19	.24	.28			
	19-24	.28	.32			
	24-34	---	---			
Tweedy-----	0-7	.20	.28	3	3	86
	7-24	.17	.24			
	24-34	---	---			
Rock outcrop.						
275:						
Strahle-----	0-4	.17	.28	1	4	86
	4-12	.17	.24			
	12-14	---	---			
	14-24	---	---			
Sesame-----	0-9	.24	.28	3	3	86
	9-24	.24	.28			
	24-34	---	---			
Tweedy-----	0-3	.20	.28	3	3	86
	3-25	.17	.24			
	25-35	---	---			
276:						
Tips-----	0-4	.10	.24	2	3	86
	4-7	.10	.24			
	7-11	.15	.28			
	11-21	---	---			
Hoffman-----	0-4	.15	.24	3	3	86
	4-10	.15	.24			
	10-39	.15	.28			
	39-49	---	---			
Cinco-----	0-9	.10	.20	5	3	86
	9-60	.10	.20			
277:						
Feethill-----	0-4	.24	.28	3	3	86
	4-18	.20	.24			
	18-24	.24	.28			
	24-30	.24	.28			
	30-40	---	---			
Vista-----	0-4	.24	.32	3	3	86
	4-21	.24	.32			
	21-31	---	---			
Walong-----	0-18	.24	.28	3	3	86
	18-28	.24	.28			
	28-38	---	---			
279:						
Strahle-----	0-6	.15	.28	1	4	86
	6-16	.15	.24			
	16-18	---	---			
	18-28	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
279:						
Rock outcrop.						
Sesame-----	0-9	.24	.28	3	3	86
	9-24	.24	.28			
	24-34	.28	.32			
	34-44	---	---			
280:						
Tollhouse-----	0-12	.20	.32	2	3	86
	12-22	---	---			
Martee-----	0-5	.10	.24	1	4	86
	5-11	.10	.24			
	11-12	---	---			
	12-22	---	---			
Edmundston-----	0-12	.20	.28	4	3	86
	12-44	.15	.28			
	44-54	---	---			
281:						
Havala-----	0-13	.17	.24	5	3	86
	13-29	.17	.24			
	29-60	.20	.28			
Walong-----	0-14	.17	.28	3	3	86
	14-29	.20	.32			
	29-39	---	---			
Kernfork-----	0-10	.15	.20	5	3	86
	10-26	.17	.24			
	26-60	.15	.20			
282:						
Tollhouse-----	0-10	.20	.32	2	4	86
	10-20	---	---			
Sesame-----	0-15	.24	.28	3	3	86
	15-26	.24	.28			
	26-36	---	---			
Friant-----	0-5	.20	.32	1	3	86
	5-15	.15	.32			
	15-25	---	---			
283:						
Tollhouse-----	0-12	.17	.32	2	4	86
	12-22	---	---			
Martee-----	0-5	.10	.24	1	4	86
	5-11	.10	.24			
	11-12	---	---			
	12-22	---	---			
Rock outcrop.						
284:						
Tollhouse-----	0-14	.20	.32	2	4	86
	14-24	---	---			
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
285:						
Inyo-----	0-12	.10	.15	5	3	86
	12-60	.10	.15			
Kelval-----	0-7	.10	.17	5	2	134
	7-60	.05	.10			
286:						
Tollhouse-----	0-12	.20	.32	2	3	86
	12-22	---	---			
Tweedy-----	0-11	.20	.28	3	3	86
	11-33	.17	.24			
	33-43	---	---			
Locobill-----	0-3	.24	.32	3	3	86
	3-28	.20	.28			
	28-35	.15	.28			
	35-45	---	---			
287:						
Tweedy-----	0-11	.20	.28	3	3	86
	11-31	.17	.24			
	31-38	.20	.28			
	38-48	---	---			
Strahle-----	0-5	.15	.28	1	4	86
	5-10	.15	.24			
	10-12	---	---			
	12-22	---	---			
288:						
Sorrell-----	0-9	.10	.20	3	3	86
	9-23	.15	.28			
	23-33	---	---			
Arujo-----	0-23	.17	.24	4	3	86
	23-41	.15	.20			
	41-48	.20	.28			
	48-58	---	---			
Rock outcrop.						
289:						
Erskine-----	0-8	.17	.24	2	2	134
	8-18	.20	.32			
	18-28	---	---			
Hyte-----	0-5	.15	.24	2	4	86
	5-14	.15	.28			
	14-24	---	---			
Rock outcrop.						
294:						
Edmundston-----	0-26	.20	.28	4	3	86
	26-50	.15	.28			
	50-60	---	---			
Tweedy-----	0-10	.20	.28	3	3	86
	10-32	.17	.24			
	32-42	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
294:						
Walong-----	0-13	.17	.28	3	3	86
	13-25	.20	.32			
	25-35	---	---			
295:						
Tweedy-----	0-10	.20	.28	3	3	86
	10-26	.17	.24			
	26-36	---	---			
Tunis-----	0-5	.20	.28	2	3	86
	5-14	.32	.49			
	14-24	---	---			
Rankor-----	0-5	.17	.24	4	3	86
	5-21	.17	.24			
	21-33	.17	.24			
	33-58	.20	.28			
	58-68	---	---			
296:						
Arujo-----	0-21	.17	.24	4	3	86
	21-52	.24	.32			
	52-62	---	---			
Walong-----	0-17	.10	.20	3	4	86
	17-39	.10	.20			
	39-49	---	---			
Tunis-----	0-7	.15	.20	2	3	86
	7-14	.24	.37			
	14-24	---	---			
297:						
Walong-----	0-11	.17	.28	3	3	86
	11-27	.20	.32			
	27-32	.17	.28			
	32-42	---	---			
Blasingame-----	0-3	.20	.28	3	3	86
	3-10	.20	.28			
	10-17	.20	.28			
	17-27	.17	.24			
	27-33	.20	.28			
	33-43	---	---			
Rock outcrop.						
298:						
Arujo-----	0-12	.17	.24	4	3	86
	12-24	.17	.24			
	24-56	.15	.20			
	56-66	---	---			
Feethill-----	0-4	.20	.28	2	3	86
	4-14	.17	.24			
	14-38	.20	.28			
	38-48	---	---			
Sesame-----	0-4	.24	.28	3	3	86
	4-28	.24	.28			
	28-38	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
299:						
Arujo-----	0-12	.17	.24	4	3	86
	12-24	.17	.24			
	24-56	.15	.20			
	56-66	---	---			
Feethill-----	0-4	.20	.28	3	3	86
	4-14	.17	.24			
	14-38	.20	.28			
	38-48	---	---			
Sesame-----	0-4	.24	.28	3	3	86
	4-28	.24	.28			
	28-38	---	---			
300:						
Stineway-----	0-4	.15	.32	1	5	56
	4-10	.17	.43			
	10-13	.17	.43			
	13-23	---	---			
Kiscove-----	0-3	.20	.43	2	6	48
	3-9	.20	.43			
	9-12	---	---			
	12-22	---	---			
301:						
Feethill-----	0-8	.20	.28	3	3	86
	8-14	.17	.24			
	14-22	.20	.28			
	22-32	---	---			
Vista-----	0-3	.24	.32	3	3	86
	3-24	.24	.32			
	24-34	---	---			
Rock outcrop.						
302:						
Feethill-----	0-3	.32	.43	3	5	56
	3-19	.17	.24			
	19-26	.20	.28			
	26-36	---	---			
Cibo-----	0-5	.28	.32	2	4	86
	5-9	.28	.32			
	9-23	.28	.32			
	23-33	---	---			
Cieneba-----	0-15	.24	.32	2	3	86
	15-25	---	---			
303:						
Steuber-----	0-12	.17	.24	5	3	86
	12-60	.20	.28			
304:						
Cibo-----	0-19	.24	.28	2	4	86
	19-35	.24	.28			
	35-45	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
305:						
Chanac-----	0-2	.28	.37	5	4	86
	2-47	.28	.37			
	47-60	.32	.43			
Pleito-----	0-24	.17	.24	5	5	56
	24-60	.24	.37			
Premier-----	0-7	.28	.28	5	3	86
	7-16	.24	.24			
	16-51	.24	.24			
	51-60	.20	.20			
306:						
Xerofluvents, occasionally flooded----	0-6	.32	.37	4	4L	86
	6-12	.24	.37			
	12-19	.24	.37			
	19-25	.17	.24			
	25-28	.17	.24			
	28-50	.10	.15			
	50-60	.10	.15			
Riverwash.						
307:						
Typic Xeropsamments-----	0-6	.20	.24	5	2	134
	6-20	.20	.24			
	20-60	.05	.05			
308:						
Rankor-----	0-4	.17	.24	4	3	86
	4-23	.17	.24			
	23-31	.17	.24			
	31-46	.20	.28			
	46-56	---	---			
Edmundston-----	0-23	.20	.28	4	3	86
	23-48	.15	.28			
	48-58	---	---			
Tweedy-----	0-4	.20	.28	3	3	86
	4-39	.17	.24			
	39-49	---	---			
309:						
Rankor-----	0-4	.17	.24	4	3	86
	4-23	.17	.24			
	23-31	.17	.24			
	31-46	.20	.28			
	46-56	---	---			
Edmundston-----	0-23	.20	.28	4	3	86
	23-48	.15	.28			
	48-58	---	---			
Tweedy-----	0-4	.20	.28	3	3	86
	4-39	.17	.24			
	39-49	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
310:						
Stineway-----	0-4	.15	.32	1	4	86
	4-14	.17	.43			
	14-24	---	---			
Kiscove-----	0-2	.15	.32	2	4	86
	2-9	.20	.43			
	9-12	---	---			
	12-22	---	---			
311:						
Xerorthents-----	0-5	.15	.28	2	6	48
	5-15	---	---			
Rock outcrop.						
312:						
Havala-----	0-24	.17	.24	5	5	56
	24-48	.20	.28			
	48-65	.20	.28			
313.						
Dumps						
314:						
Premier-----	0-14	.28	.28	5	3	86
	14-30	.28	.28			
	30-47	.28	.28			
	47-60	.28	.28			
Haplodurids-----	0-14	.37	.37	3	3	86
	14-25	.37	.37			
	25-38	.64	.64			
	38-50	.37	.37			
	50-60	.32	.32			
315:						
Premier-----	0-14	.28	.28	5	3	86
	14-30	.28	.28			
	30-47	.24	.24			
	47-60	.24	.24			
Haplodurids-----	0-14	.37	.37	3	3	86
	14-25	.37	.37			
	25-38	.64	.64			
	38-50	.37	.37			
	50-60	.32	.32			
316:						
Premier-----	0-12	.24	.24	5	3	86
	12-60	.28	.28			
317:						
Premier-----	0-12	.24	.24	5	3	86
	12-60	.28	.28			
320:						
Southlake-----	0-4	.15	.32	5	4	86
	4-19	.10	.28			
	19-42	.10	.24			
	42-60	.10	.28			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
325:						
Walong-----	0-14	.17	.28	3	3	86
	14-27	.20	.32			
	27-37	---	---			
326:						
Walong-----	0-14	.17	.28	3	3	86
	14-27	.17	.28			
	27-37	---	---			
330:						
Kernville-----	0-5	.05	.17	1	3	86
	5-16	.10	.24			
	16-19	---	---			
	19-29	---	---			
Faycreek-----	0-5	.10	.20	2	3	86
	5-12	.10	.20			
	12-22	---	---			
Rock outcrop.						
350:						
Southlake, stony-----	0-6	.20	.32	5	4	86
	6-60	.10	.24			
Goodale-----	0-3	.05	.15	5	4	86
	3-60	.05	.15			
352:						
Goodale-----	0-3	.05	.15	3	3	86
	3-60	.05	.15			
Riverwash.						
360:						
Kernville, bouldery-----	0-16	.10	.20	1	3	86
	16-20	---	---			
	20-30	---	---			
Hogeye-----	0-2	.17	.24	3	4	86
	2-29	.20	.32			
	29-40	---	---			
	40-50	---	---			
Southlake-----	0-6	.20	.32	5	4	86
	6-60	.10	.24			
380:						
Delvar-----	0-20	.20	.28	5	6	48
	20-51	.17	.24			
	51-60	.20	.28			
Pleito-----	0-30	.24	.37	5	6	48
	30-60	.24	.37			
407:						
Centerville-----	0-7	.20	.20	5	4	86
	7-48	.15	.15			
	48-60	.10	.20			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
410:						
Stineway-----	0-4	.15	.32	1	4	86
	4-14	.17	.43			
	14-24	---	---			
Kiscove-----	0-2	.15	.32	2	4	86
	2-9	.20	.43			
	9-12	---	---			
	12-22	---	---			
Urban land.						
411:						
Delvar-----	0-12	.20	.28	5	6	48
	12-19	.17	.24			
	19-28	.17	.24			
	28-42	.17	.24			
	42-60	.17	.24			
412:						
Chollawell-----	0-22	.15	.28	5	5	56
	22-40	.10	.20			
	40-60	.15	.24			
Urban land.						
417:						
Southlake-----	0-6	.20	.32	5	4	86
	6-15	.15	.32			
	15-40	.10	.24			
	40-60	.10	.28			
Southlake, gravelly-----	0-6	.15	.32	5	4	86
	6-19	.10	.28			
	19-42	.10	.20			
	42-60	.10	.24			
Goodale-----	0-8	.05	.15	5	4	86
	8-60	.05	.15			
Urban land.						
420:						
Southlake-----	0-4	.15	.32	5	4	86
	4-19	.10	.28			
	19-42	.10	.24			
	42-60	.10	.28			
Urban land.						
422:						
Kelval-----	0-13	.20	.28	5	4	86
	13-60	.05	.10			
Urban land.						
423:						
Auberry-----	0-16	.24	.28	4	3	86
	16-22	.37	.43			
	22-43	.20	.24			
	43-56	.24	.28			
	56-66	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
423:						
Crouch-----	0-22	.10	.15	5	3	86
	22-43	.17	.24			
	43-70	.15	.20			
	70-80	---	---			
Rock outcrop.						
424:						
Inyo-----	0-12	.10	.15	5	3	86
	12-60	.10	.15			
Urban land.						
430:						
Friant-----	0-5	.20	.32	1	3	86
	5-15	.15	.32			
	15-25	---	---			
Rock outcrop.						
432:						
Alberti, gravelly-----	0-1	.17	.37	2	7	38
	1-17	.15	.28			
	17-22	---	---			
	22-32	---	---			
Urban land.						
441:						
Inyo-----	0-8	.10	.15	5	3	86
	8-60	.10	.15			
Urban land.						
442:						
Inyo-----	0-6	.10	.15	5	3	86
	6-60	.10	.15			
Urban land.						
445:						
Chollawell-----	0-21	.05	.15	4	3	86
	21-46	.10	.20			
	46-60	.05	.10			
Urban land.						
450:						
Southlake, stony-----	0-6	.20	.32	5	4	86
	6-60	.10	.24			
Goodale-----	0-3	.05	.15	5	4	86
	3-60	.05	.15			
Urban land.						
460:						
Kernville, bouldery-----	0-16	.10	.20	1	3	86
	16-20	---	---			
	20-30	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
460:						
Hogeye-----	0-2	.17	.24	3	4	86
	2-29	.20	.32			
	29-40	---	---			
	40-50	---	---			
Southlake-----	0-6	.20	.32	5	4	86
	6-60	.10	.24			
Urban land.						
465:						
Arujo-----	0-14	.17	.24	4	3	86
	14-20	.17	.24			
	20-58	.15	.20			
	58-68	---	---			
Urban land.						
485:						
Inyo-----	0-12	.10	.15	5	3	86
	12-60	.10	.15			
Kelval-----	0-7	.10	.17	5	2	134
	7-60	.05	.10			
Urban land.						
488:						
Tweedy-----	0-11	.20	.28	3	3	86
	11-31	.17	.24			
	31-38	.20	.28			
	38-48	---	---			
Tollhouse-----	0-5	.20	.28	2	4	86
	5-14	.15	.28			
	14-24	---	---			
Locobill-----	0-3	.24	.32	3	3	86
	3-28	.20	.28			
	28-35	.15	.28			
	35-45	---	---			
Urban land.						
501:						
Hyte-----	0-4	.15	.24	2	4	86
	4-17	.15	.28			
	17-27	---	---			
Erskine-----	0-4	.20	.32	2	3	86
	4-13	.20	.32			
	13-23	---	---			
Sorrell-----	0-11	.17	.28	3	4	86
	11-36	.15	.28			
	36-46	---	---			
503:						
Tips-----	0-5	.15	.24	2	3	86
	5-14	.17	.28			
	14-24	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
503:						
Erskine-----	0-8	.20	.32	2	4	86
	8-18	.20	.28			
	18-28	---	---			
Rock outcrop.						
505:						
Chollawell-----	0-19	.05	.15	4	3	86
	19-54	.10	.20			
	54-60	.10	.17			
507:						
Xyno-----	0-2	.15	.24	2	3	86
	2-11	.15	.24			
	11-21	---	---			
Canebrake-----	0-7	.10	.24	2	3	86
	7-17	.10	.24			
	17-27	---	---			
Pilotwell-----	0-3	.10	.24	3	3	86
	3-38	.10	.24			
	38-48	---	---			
508:						
Pilotwell-----	0-5	.10	.20	3	3	86
	5-25	.10	.20			
	25-35	---	---			
Xyno-----	0-11	.15	.24	2	3	86
	11-21	---	---			
Rock outcrop.						
509:						
Xyno-----	0-11	.15	.24	2	3	86
	11-15	.15	.24			
	15-25	---	---			
Faycreek-----	0-2	.10	.20	2	3	86
	2-10	.10	.20			
	10-20	---	---			
Rock outcrop.						
510:						
Xyno-----	0-2	.15	.24	2	3	86
	2-11	.15	.24			
	11-21	---	---			
Canebrake-----	0-7	.10	.24	2	3	86
	7-17	.10	.24			
	17-27	---	---			
Pilotwell, bouldery-----	0-5	.10	.20	3	3	86
	5-25	.10	.20			
	25-35	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
512:						
Chollawell, cobbly substratum-----	0-22	.15	.28	5	5	56
	22-40	.10	.20			
	40-60	.15	.24			
Chollawell, gravelly-----	0-19	.05	.15	5	5	56
	19-54	.10	.20			
	54-60	.10	.17			
514:						
Chollawell-----	0-19	.05	.15	4	3	86
	19-54	.10	.20			
	54-60	.10	.17			
Inyo-----	0-1	.10	.15	5	2	134
	1-60	.10	.15			
515:						
Scodie-----	0-8	.10	.20	2	3	86
	8-18	---	---			
Canebrake-----	0-3	.10	.24	2	3	86
	3-13	.10	.24			
	13-23	---	---			
Xyno-----	0-2	.15	.24	2	3	86
	2-11	.15	.24			
	11-21	---	---			
516:						
Xyno-----	0-2	.15	.24	2	3	86
	2-11	.15	.24			
	11-21	---	---			
Rock outcrop.						
Canebrake-----	0-4	.10	.24	2	3	86
	4-12	.10	.24			
	12-22	---	---			
517:						
Southlake-----	0-6	.20	.32	5	4	86
	6-15	.15	.32			
	15-40	.10	.24			
	40-60	.10	.28			
Southlake, gravelly-----	0-6	.15	.32	5	4	86
	6-19	.10	.28			
	19-42	.10	.24			
	42-60	.10	.28			
Goodale-----	0-8	.05	.15	5	4	86
	8-60	.05	.15			
518:						
Backcanyon-----	0-2	.15	.28	1	4	86
	2-11	.15	.32			
	11-15	---	---			
	15-25	---	---			
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
520:						
Kernville-----	0-5	.05	.17	1	3	86
	5-16	.10	.24			
	16-19	---	---			
	19-29	---	---			
Hogeye-----	0-20	.17	.24	3	3	86
	20-29	.20	.32			
	29-40	---	---			
	40-50	---	---			
Rock outcrop.						
523:						
Kernville, bouldery-----	0-16	.10	.20	1	3	86
	16-20	---	---			
	20-30	---	---			
Faycreek-----	0-6	.10	.20	2	3	86
	6-12	.10	.20			
	12-22	---	---			
Rock outcrop.						
525:						
Hungrygulch-----	0-19	.24	.32	3	3	86
	19-26	.17	.32			
	26-36	---	---			
Kernville-----	0-5	.10	.20	1	3	86
	5-16	.10	.24			
	16-20	---	---			
	20-30	---	---			
Hogeye-----	0-2	.17	.24	3	3	86
	2-29	.20	.32			
	29-40	---	---			
	40-50	---	---			
530:						
Alberti, cobbly-----	0-4	.20	.37	2	7	38
	4-16	.15	.28			
	16-22	---	---			
	22-32	---	---			
Alberti, gravelly-----	0-5	.17	.37	2	7	38
	5-15	.15	.28			
	15-23	---	---			
	23-33	---	---			
531:						
Tweedy-----	0-11	.20	.28	3	3	86
	11-36	.17	.24			
	36-46	---	---			
Erskine-----	0-7	.20	.32	2	4	86
	7-19	.20	.28			
	19-29	---	---			
Alberti, gravelly-----	0-5	.17	.37	2	7	38
	5-17	.15	.28			
	17-20	---	---			
	20-30	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
532:						
Alberti, gravelly-----	0-1	.15	.32	2	7	38
	1-17	.15	.28			
	17-22	---	---			
	22-32	---	---			
540:						
Canebrake-----	0-10	.10	.24	2	3	86
	10-16	.10	.24			
	16-26	---	---			
Lachim-----	0-3	.10	.15	3	3	86
	3-13	.10	.15			
	13-26	.10	.15			
	26-36	---	---			
541:						
Canebrake-----	0-9	.10	.24	2	3	86
	9-12	.10	.24			
	12-22	---	---			
Lachim-----	0-6	.15	.15	3	2	134
	6-16	.15	.15			
	16-26	.10	.15			
	26-36	---	---			
Rock outcrop.						
543:						
Wortley-----	0-5	.17	.28	2	4	86
	5-10	.17	.28			
	10-20	---	---			
Indiano-----	0-6	.15	.28	3	4	86
	6-12	.10	.24			
	12-28	.10	.24			
	28-38	---	---			
Rock outcrop.						
544:						
Xeric Haplargids-----	0-24	.17	.37	2	3	86
	24-38	.15	.32			
	38-40	.15	.32			
	40-50	---	---			
Lithic Xeric Haplargids-----	0-9	.10	.28	1	3	86
	9-18	.05	.28			
	18-28	---	---			
545:						
Sacatar-----	0-10	.15	.20	3	2	134
	10-34	.20	.28			
	34-44	---	---			
Canebrake-----	0-4	.10	.24	2	3	86
	4-14	.10	.24			
	14-24	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
549:						
Tunawee-----	0-10	.10	.24	2	3	86
	10-12	.15	.24			
	12-22	---	---			
Rock outcrop.						
550:						
Kenypeak-----	0-8	.15	.32	1	5	56
	8-18	---	---			
Rubble land.						
Rock outcrop.						
551:						
Tunawee-----	0-11	.10	.20	2	3	86
	11-18	.15	.24			
	18-28	---	---			
552:						
Kenypeak-----	0-3	.15	.32	1	5	56
	3-12	.05	.32			
	12-22	---	---			
Torriorthentic Haploxerolls-----	0-10	.10	.28	2	5	56
	10-34	.10	.28			
	34-44	---	---			
553:						
Tibbcreek-----	0-8	.20	.43	2	6	48
	8-18	.15	.37			
	18-35	---	---			
	35-45	---	---			
554:						
Deerspring-----	0-11	.20	.28	5	3	86
	11-24	.24	.32			
	24-80	.32	.43			
555:						
Cumulic Endoaquolls, frigid-----	0-28	.17	.20	5	3	86
	28-52	.20	.24			
	52-65	.17	.20			
556:						
Toll-----	0-6	.10	.15	5	2	134
	6-24	.05	.10			
	24-60	.10	.15			
557:						
Scodie-----	0-3	.10	.20	2	3	86
	3-10	.15	.20			
	10-20	---	---			
Canebrake-----	0-3	.10	.17	2	2	134
	3-12	.10	.24			
	12-22	---	---			
Deadfoot-----	0-10	.10	.20	3	4	86
	10-29	.10	.24			
	29-39	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
558:						
Indiano-----	0-6	.15	.28	3	4	86
	6-12	.10	.24			
	12-28	.10	.24			
	28-38	---	---			
Wortley-----	0-2	.17	.28	2	4	86
	2-9	.17	.28			
	9-19	---	---			
560:						
Sacatar-----	0-2	.15	.20	3	2	134
	2-10	.24	.32			
	10-34	.20	.28			
	34-44	---	---			
Wortley-----	0-2	.20	.28	2	3	86
	2-8	.20	.28			
	8-18	---	---			
Calpine-----	0-10	.17	.24	5	3	86
	10-68	.17	.24			
561:						
Scodie-----	0-10	.10	.20	2	3	86
	10-20	---	---			
Sacatar-----	0-2	.15	.20	3	2	134
	2-34	.20	.28			
	34-44	---	---			
Canebrake-----	0-6	.15	.24	2	3	86
	6-16	.10	.24			
	16-26	---	---			
562:						
Deerspring, partially drained-----	0-21	.32	.43	5	4L	86
	21-60	.20	.28			
570:						
Deadfoot-----	0-10	.10	.20	3	4	86
	10-23	.10	.24			
	23-33	---	---			
Scodie-----	0-9	.10	.20	2	3	86
	9-19	---	---			
Rock outcrop.						
590:						
Xyno-----	0-11	.15	.24	2	3	86
	11-21	---	---			
Canebrake-----	0-7	.10	.24	2	3	86
	7-17	.10	.24			
	17-27	---	---			
Pilotwell-----	0-5	.10	.24	3	3	86
	5-26	.10	.24			
	26-36	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodibility group	Wind erodibility index
		Kw	Kf	T		
	In					
591:						
Xyno-----	0-11	.15	.24	2	3	86
	11-21	---	---			
Canebrake-----	0-6	.10	.24	2	3	86
	6-15	.10	.24			
	15-25	---	---			
Rock outcrop.						
599.						
Rock outcrop						
610:						
Hyte-----	0-5	.15	.24	2	4	86
	5-14	.15	.28			
	14-24	---	---			
Erskine-----	0-7	.20	.32	2	4	86
	7-19	.20	.28			
	19-29	---	---			
650:						
Stineway-----	0-3	.15	.43	1	5	56
	3-6	.10	.28			
	6-16	.15	.43			
	16-26	---	---			
Kiscove-----	0-2	.24	.43	2	6	48
	2-9	.17	.43			
	9-12	---	---			
	12-22	---	---			
Rock outcrop.						
3250:						
Jawbone-----	0-2	.24	.32	1	2	134
	2-6	.24	.28			
	6-59	---	---			
Jawbone, moderately deep-----	0-1	.15	.20	2	2	134
	1-7	.15	.20			
	7-34	.05	.10			
	34-44	---	---			
4432:						
Koehn, occasionally flooded-----	0-1	.15	.15	5	2	134
	1-63	.05	.05			
Koehn, frequently flooded-----	0-1	.15	.15	5	2	134
	1-63	.05	.05			
5201:						
Wingap-----	0-3	.15	.17	4	4	86
	3-14	.15	.17			
	14-41	.10	.15			
	41-54	.15	.24			
	54-64	---	---			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 18.--Erosion Properties of the Soils--Continued

Map symbol and component name	Depth	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
		Kw	Kf	T		
	In					
5201: Pinyonpeak-----	0-2	.17	.37	1	5	56
	2-6	.10	.37			
	6-8	---	---			
	8-16	---	---			
	16-26	---	---			
5210: Grandora-----	0-3	.10	.10	5	8	0
	3-60	.05	.10			
Grandora, warm-----	0-2	.10	.10	5	8	0
	2-60	.15	.24			
Pinyonpeak-----	0-2	.17	.37	1	5	56
	2-6	.10	.37			
	6-8	---	---			
	8-16	---	---			
	16-26	---	---			
6001: Goldpeak-----	0-2	.17	.24	5	3	86
	2-94	.15	.20			
Pinyonpeak-----	0-2	.17	.37	1	5	56
	2-6	.10	.37			
	6-8	---	---			
	8-16	---	---			
	16-26	---	---			
Wingap-----	0-3	.15	.17	4	4	86
	3-14	.15	.17			
	14-41	.10	.15			
	41-54	.15	.24			
	54-60	---	---			
W. Water						

Table 19.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and component name	Depth		Clay Pct	Cation- exchange capacity meq/100g	Soil reaction pH	Calcium carbonate Pct	Gypsum Pct	Salinity ds/m	Sodium adsorption ratio
	In	Pct							
115: Chanac-----	0-18	27-35		21-27	7.4-8.4	1-5	0	0	0
	18-46	20-35		14-23	7.4-8.4	5-10	0	0	0
	46-60	15-20		11-14	7.4-8.4	1-5	0	0.0-2.0	0
128: Pits.									
Delano-----	0-18	10-20		8.6-17	7.4-8.4	0	0	0.0-2.0	0-1
	18-37	20-35		15-25	7.9-8.4	0-3	0	0.0-2.0	0-4
	37-60	10-27		6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4
Oil waste land.									
136: Hesperia-----	0-20	8-18		6.2-15	6.1-8.4	0	0	0.0-2.0	0
	20-60	8-18		6.2-13	7.4-8.4	1-3	0	0.0-2.0	0-2
138: Hesperia-----	0-18	8-18		6.2-15	7.4-8.4	0	0	0.0-2.0	0
	18-34	8-18		6.2-13	7.4-8.4	0	0	0.0-2.0	0
	34-70	8-18		6.2-13	7.4-8.4	0	0	0.0-2.0	0
139. Riverwash									
143: Calicreek-----	0-7	4-10		3.1-7.6	6.1-8.4	0-1	0	0.0-2.0	0-2
	7-30	4-10		2.9-6.1	7.4-8.4	1-5	0	0.5-2.0	0-3
	30-60	2-5		1.5-3.3	7.4-8.4	0-2	0-1	0.5-2.0	0-3
144: Calicreek-----	0-5	9-15		6.5-11	7.4-8.4	0-1	0	0.0-2.0	0-2
	5-60	2-12		1.4-8.0	7.4-8.4	0-2	0-1	0.0-2.0	0-3
145: Delano-----	0-7	2-10		2.0-8.9	5.1-7.8	0	0	0.0-2.0	0
	7-20	8-18		6.2-15	5.1-7.8	0-1	0	0.0-2.0	0-2
	20-55	20-35		14-27	6.6-8.4	1-10	0	0.0-2.0	0-4
	55-60	5-15		4.1-12	7.9-8.4	1-10	0	0.0-2.0	0-4

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
146:								
Delano-----	0-18	10-20	8.6-17	7.4-8.4	0	0	0.0-2.0	0-1
	18-37	20-35	15-25	7.9-8.4	0-3	0	0.0-2.0	0-4
	37-60	10-27	6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4
147:								
Chanac-----	0-18	27-35	21-27	7.4-8.4	1-5	0	0	0
	18-46	20-35	14-23	7.4-8.4	5-10	0	0	0
	46-60	15-20	11-14	7.4-8.4	1-5	0	0.0-2.0	0
148:								
Delano-----	0-18	10-25	8.6-17	7.4-8.4	0	0	0.0-2.0	0-1
	18-37	20-35	15-25	7.9-8.4	0-3	0	0.0-2.0	0-4
	37-60	10-27	6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4
149:								
Delano-----	0-18	10-20	8.6-17	7.4-8.4	0	0	0.0-2.0	0-1
	18-37	20-35	15-25	7.9-8.4	0-3	0	0.0-2.0	0-4
	37-60	10-27	6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4
150:								
Pits.								
Dumps.								
152:								
Pleito-----	0-27	15-35	13-25	6.6-8.4	0-2	0	0.0-2.0	0
	27-38	20-35	13-17	7.9-8.4	5-15	0-1	0.0-2.0	0-4
	38-60	15-25	10-11	7.4-8.4	0-10	0-1	0.0-4.0	0-5
153:								
Chanac-----	0-18	27-35	21-27	7.4-8.4	1-5	0	0	0
	18-46	15-35	11-23	7.4-8.4	5-10	0	0	0
	46-60	15-20	11-14	7.4-8.4	1-5	0	0.0-2.0	0
154:								
Dam								
166:								
Delano-----	0-18	10-20	8.6-17	7.4-8.4	0	0	0.0-2.0	0-1
	18-37	20-35	15-25	7.9-8.4	0-3	0	0.0-2.0	0-4
	37-60	10-27	6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4
Urban land.								

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay Pct	Cation- exchange capacity meq/100g	Soil reaction pH	Calcium carbonate Pct	Gypsum Pct	Salinity ds/m	Sodium adsorption ratio
	In	Pct							
174:									
Xeric Torriorthents, silty-----	0-15	15-30	12-24	7.4-8.4	0-5	0-1	0.0-4.0	0-2	
	15-20	15-30	12-23	7.4-8.4	0-5	0-1	2.0-8.0	1-5	
	20-50	25-45	17-32	7.4-9.0	0-1	1-5	8.0-32.0	10-35	
	50-60	25-45	17-32	7.4-9.0	0-1	1-5	4.0-32.0	10-35	
Calcic Haploxerepts-----	0-2	27-35	21-28	7.9-8.4	0-1	0-1	0.0-4.0	0-2	
	2-12	20-27	16-22	7.9-8.4	0-2	0-2	0.0-4.0	0-8	
	12-23	15-25	12-20	7.9-8.4	1-5	0-4	2.0-4.0	1-10	
	23-60	15-25	11-19	7.9-9.0	0-2	0-5	4.0-16.0	10-20	
176:									
Elkhills, eroded-----	0-8	10-25	7.6-20	7.4-8.4	1-6	0-1	0.0-4.0	0-3	
	8-17	10-25	7.6-20	7.4-8.4	2-6	0-1	0.0-4.0	0-5	
	17-34	10-20	7.6-16	7.9-8.4	2-6	0-3	0.0-8.0	0-6	
	34-42	10-18	7.6-14	7.9-8.4	2-6	0-3	0.0-8.0	0-6	
	42-60	10-16	7.6-12	7.9-8.4	2-6	0-3	0.0-8.0	0-6	
177:									
Chanac-----	0-7	20-35	16-27	7.4-8.4	0-5	0-1	0.0-2.0	0-5	
	7-36	20-35	16-27	7.4-8.4	3-15	0-2	0.0-2.0	1-8	
	36-60	12-28	9.6-22	7.4-8.4	1-10	0-4	0.0-4.0	2-10	
Torriorthents, stratified-----	0-4	8-30	6.1-14	7.4-8.4	0-2	0-1	0.0-4.0	0-13	
	4-54	5-35	3.1-22	7.9-9.0	1-4	0-2	8.0-16.0	15-50	
	54-60	18-60	9.5-35	7.9-9.0	1-5	0-3	2.0-16.0	15-50	
178:									
Delano-----	0-8	20-27	16-22	7.4-8.4	0	0	0.0-2.0	0	
	8-36	20-35	16-27	7.9-8.4	1-10	0	0.0-2.0	0-4	
	36-60	10-27	8.1-21	7.9-8.4	1-10	0	0.0-2.0	0-4	
Cuyama-----	0-10	5-18	4.3-15	7.4-8.4	0-5	0	0.0-2.0	0-2	
	10-21	18-25	13-20	7.4-8.4	0-5	0	0.0-2.0	0-4	
	21-39	20-35	14-27	7.4-8.4	2-8	0	0.0-4.0	0-5	
	39-60	10-30	7.6-23	7.9-9.0	2-10	0-1	4.0-8.0	2-15	
Premier-----	0-12	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0-2	
	12-60	5-18	4.1-13	7.4-8.4	1-5	0-1	0.0-2.0	0-2	
179:									
Torriorthents, stratified, eroded-----	0-4	8-20	6.1-14	7.4-8.4	0-2	0-1	0.0-4.0	0-13	
	4-54	5-35	3.1-22	7.9-9.0	1-4	0-2	8.0-16.0	15-50	
	54-60	18-60	9.5-35	7.9-9.0	1-5	0-3	2.0-16.0	15-50	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
179:								
Elkhills-----	0-29	5-18	4.6-15	7.4-8.4	1-3	0	0.0-2.0	0
	29-49	5-18	4.1-13	7.4-8.4	1-5	0	0.0-4.0	0
	49-65	5-18	4.1-13	7.4-8.4	1-5	0	0.0-8.0	0
184:								
Cuyama-----	0-10	8-18	6.6-15	7.4-8.4	0-5	0	0.0-2.0	0-2
	10-21	18-30	14-23	7.4-8.4	0-5	0-2	0.0-2.0	0-5
	21-32	10-20	7.6-16	7.9-9.0	2-10	0-2	4.0-8.0	3-15
	32-44	10-20	7.6-16	7.9-9.0	2-10	0-2	4.0-8.0	3-15
	44-54	8-20	6.2-15	7.9-9.0	2-10	0-2	4.0-8.0	3-15
	54-60	8-20	6.2-15	7.9-9.0	2-10	0-2	4.0-8.0	3-15
185:								
Brecken-----	0-3	10-20	8.9-17	6.6-7.8	0	0	0.0-2.0	0
	3-12	18-25	15-21	7.4-8.4	0-1	0	0.0-2.0	0-2
	12-19	20-35	16-27	7.4-8.4	0-1	0-1	0.0-2.0	0-2
	19-39	18-30	13-23	7.4-8.4	0-1	0-1	0.0-2.0	0-2
	39-60	10-22	7.6-18	7.4-8.4	0-1	0-2	0.0-2.0	0-2
Cuyama-----	0-4	5-18	4.3-15	7.4-8.4	0-5	0	0.0-2.0	0-2
	4-22	18-25	13-20	7.4-8.4	0-5	0	0.0-2.0	0-4
	22-60	10-30	7.6-23	7.9-9.0	2-10	0-1	4.0-8.0	2-10
Pleito-----	0-12	20-35	17-28	6.6-8.4	0-2	0	0.0-2.0	0
	12-24	20-35	17-28	7.9-8.4	5-15	0	0.0-2.0	0-2
	24-60	20-35	16-28	7.9-8.4	5-15	0-1	0.0-2.0	0-5
186:								
Cuyama-----	0-4	10-20	8.1-16	7.4-8.4	0-5	0	0.0-2.0	0-2
	4-28	20-35	14-27	7.4-8.4	2-10	0	0.0-4.0	0-5
	28-36	18-25	13-20	7.4-8.4	0-5	0	0.0-2.0	0-5
	36-60	10-30	7.6-23	7.9-9.0	2-10	0-1	4.0-8.0	2-10
187:								
Trigo-----	0-2	8-15	7.1-13	6.1-7.3	0-1	0	0.0-2.0	0-2
	2-10	8-18	6.2-15	6.6-7.8	0-1	0-1	0.0-2.0	0-5
	10-20	---	---	---	---	---	---	---
Chanac-----	0-8	18-27	15-22	7.4-8.4	0-5	0	0.0-2.0	0-3
	8-36	15-35	12-27	7.9-8.4	3-15	0-1	0.0-2.0	0-4
	36-60	15-20	12-16	7.9-8.4	3-10	1-3	0.0-4.0	0-5

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation- exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
188:								
Tweedy-----	0-11	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0
	11-31	20-35	16-27	6.6-8.4	0-1	0	0.0-2.0	0-2
	31-38	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0-2
	38-48	---	---	---	---	---	---	---
Tollhouse-----	0-5	12-20	10-17	6.6-8.4	0	0	0.0-2.0	0
	5-14	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0
	14-24	---	---	---	---	---	---	---
Locobill-----	0-3	7-14	6.3-12	6.6-8.4	0	0	0.0-2.0	0
	3-28	10-18	8.6-15	6.6-8.4	0-1	0	0.0-2.0	0-2
	28-35	20-25	15-20	6.6-8.4	0-1	0	0.0-2.0	0-2
	35-45	---	---	---	---	---	---	---
189:								
Tweedy-----	0-7	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0
	7-40	20-35	16-27	6.6-7.8	0-1	0	0.0-2.0	0
	40-50	---	---	---	---	---	---	---
Walong-----	0-13	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0
	13-25	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0
	25-35	---	---	---	---	---	---	---
192:								
Chanac-----	0-8	18-28	15-22	7.4-8.4	0-5	0-1	0.0-2.0	0-2
	8-22	18-28	14-21	7.9-8.4	3-15	0-2	0.0-2.0	0-5
	22-31	18-28	14-21	7.9-8.4	1-10	0-2	0.0-4.0	1-8
	31-42	18-28	14-22	7.9-8.4	1-10	0-2	0.0-4.0	1-8
	42-52	18-28	13-22	7.9-8.4	1-10	0-2	0.0-4.0	1-8
	52-60	20-35	14-24	7.9-8.4	1-10	0-2	0.0-4.0	1-8
Pleito-----	0-21	20-35	17-28	6.6-8.4	0-2	0-1	0.0-2.0	0
	21-53	20-35	17-28	7.9-8.4	5-15	0-2	0.0-2.0	0-4
	53-60	15-20	12-16	7.4-8.4	3-10	0-2	0.0-2.0	0-5
193:								
Chanac-----	0-9	20-35	16-27	7.4-8.4	0-5	0-1	0.0-2.0	0-2
	9-50	20-35	16-27	7.4-8.4	3-15	0-2	0.0-2.0	0-4
	50-63	10-20	8.1-16	7.4-8.4	0-10	0-2	0.0-2.0	0-5
Pleito-----	0-25	20-35	17-28	6.6-8.4	0-2	0-1	0.0-2.0	0
	25-48	20-35	17-28	7.9-8.4	5-15	0-2	0.0-2.0	0-2
	48-60	18-35	14-27	7.9-8.4	5-15	0-2	0.0-2.0	0-5

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
194:									
Pleito-----	0-30	27-35	22-28	6.6-8.4	0-2	0-1	0.0-2.0	0	
	30-48	20-35	17-28	7.9-8.4	5-15	0-2	0.0-2.0	0-3	
	48-60	20-35	16-27	7.9-8.4	5-15	0-2	0.0-2.0	0-5	
Delvar-----	0-17	25-35	20-29	6.1-8.4	0-1	0	0.0-2.0	0-2	
	17-35	40-55	31-42	6.6-8.4	0-2	0-1	0.0-8.0	1-8	
	35-55	40-55	31-42	6.6-8.4	5-10	0-1	2.0-8.0	1-8	
	55-60	25-35	20-27	6.6-8.4	2-10	0-1	2.0-8.0	1-8	
195:									
Centerville-----	0-10	40-60	30-44	6.6-8.4	0	0	0.0-2.0	0-2	
	10-39	35-60	26-43	7.4-8.4	1-2	0	0.0-2.0	0-3	
	39-56	20-35	15-26	7.4-8.4	1-5	0-1	0.0-4.0	0-5	
	56-60	15-20	12-16	7.4-8.4	0-1	0-1	0.0-4.0	0-5	
Delvar-----	0-18	27-40	22-32	6.1-8.4	0-1	0	0.0-4.0	0-2	
	18-48	40-55	31-42	6.6-8.4	5-10	0-1	0.0-4.0	2-6	
	48-60	15-35	11-27	7.4-8.4	1-8	0-1	2.0-8.0	5-15	
196:									
Exeter-----	0-4	10-20	7.6-17	7.4-8.4	0	0	0.0-2.0	0-2	
	4-8	10-20	7.6-17	7.4-8.4	0	0	0.0-2.0	0-2	
	8-12	20-30	14-23	7.4-8.4	0	0	0.0-2.0	0-2	
	12-18	20-30	14-23	7.4-8.4	0	0	0.0-2.0	0-2	
	18-25	18-30	13-23	7.4-8.4	0-1	0-1	0.0-2.0	2-6	
	25-39	---	---	---	0	0	---	---	
	39-60	5-18	4.1-13	7.4-8.4	0	0	0.0-2.0	0-2	
197:									
Nord-----	0-9	10-18	8.9-16	6.6-7.8	0-4	0	0.0-2.0	0-2	
	9-65	10-18	7.6-15	7.4-8.4	0-4	0-1	0.0-2.0	0-4	
198:									
Centerville-----	0-6	40-60	30-44	7.4-8.4	0	0	0.0-2.0	0	
	6-26	35-60	26-43	7.4-8.4	0-1	0	0.0-2.0	0-4	
	26-48	20-35	16-27	7.4-8.4	1-5	0-1	0.0-2.0	0-5	
	48-60	20-35	15-26	7.4-8.4	1-2	0-1	0.0-4.0	0-5	
Delvar-----	0-21	27-40	22-32	6.6-8.4	0-1	0	0.0-2.0	0	
	21-48	40-55	31-42	7.4-8.4	5-10	0-1	1.0-4.0	1-7	
	48-60	15-35	11-27	7.9-8.4	1-8	0-1	1.0-8.0	5-10	

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
199:									
Exeter-----	0-20	10-20	7.6-17	7.4-8.4	0	0	0.0-2.0	0	
	20-38	18-30	13-23	7.4-8.4	0-1	0-1	0.0-2.0	0-4	
	38-42	---	---	---	---	---	---	---	
200:									
Urban land.									
Delano-----	0-18	10-20	8.6-17	7.4-8.4	0	0	0.0-2.0	0-1	
	18-37	20-35	15-25	7.9-8.4	0-3	0	0.0-2.0	0-4	
	37-60	10-27	6.9-19	7.9-8.4	1-10	0	0.0-2.0	0-4	
201:									
Pleito-----	0-7	20-35	17-28	6.6-8.4	0-2	0	0.0-2.0	0	
	7-53	20-35	17-28	7.9-8.4	5-15	0-1	0.0-2.0	0-4	
	53-66	15-20	12-16	7.4-8.4	3-10	0-2	0.0-2.0	0-4	
Chanac-----	0-17	15-35	12-27	7.4-8.4	0-5	0	0.0-2.0	0-2	
	17-52	15-35	12-27	7.4-8.4	3-15	0-2	0.0-2.0	0-2	
	52-62	10-20	8.1-16	7.4-8.4	0-10	0-3	0.0-4.0	1-4	
Raggulch-----	0-4	14-19	12-16	7.4-8.4	0-1	0	0.0-2.0	1-8	
	4-16	20-35	15-27	7.4-8.4	0-1	0-1	0.0-2.0	1-8	
	16-18	---	---	---	---	---	---	---	
	18-28	---	---	---	---	---	---	---	
205:									
Pleito-----	0-13	27-35	22-28	6.6-8.4	0-2	0	0.0-2.0	0	
	13-42	15-35	13-28	7.9-8.4	5-15	0-2	0.0-2.0	0-2	
	42-60	20-35	16-27	7.9-8.4	5-15	0-3	0.0-2.0	0-4	
Trigo-----	0-2	8-15	7.1-13	6.1-7.3	0	0-1	0.0-2.0	0	
	2-9	8-18	6.2-15	5.6-7.8	0-1	0-1	0.0-2.0	0-5	
	9-19	---	---	---	---	---	---	---	
Chanac-----	0-8	18-27	15-22	7.4-8.4	0-5	0	0.0-2.0	0-3	
	8-36	15-35	12-27	7.9-8.4	3-15	0-1	0.0-2.0	0-4	
	36-60	15-20	12-16	7.9-8.4	3-10	1-3	0.0-4.0	0-5	
207:									
Whitewolf-----	0-10	0-7	0.0-5.7	6.1-8.4	0	0	0.0-2.0	0	
	10-60	0-5	0.0-4.0	6.6-8.4	0	0	0.0-2.0	0	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation- exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
209:									
Whitewolf-----	0-15	0-7	0.0-5.7	6.1-8.4	0	0	0.0-2.0	0	
	15-25	0-7	0.0-5.6	6.1-8.4	0	0	0.0-2.0	0	
	25-60	0-5	0.0-3.8	6.1-8.4	0	0	0.0-2.0	0	
210:									
Kernfork-----	0-6	8-18	7.3-16	6.6-8.4	0-1	0	0.0-4.0	0-2	
	6-27	8-18	7.3-16	6.6-8.4	0-1	0	0.0-4.0	0-10	
	27-30	3-10	2.9-9.1	7.3-8.4	1-5	0	0.0-4.0	0-10	
	30-60	8-18	7.1-15	7.3-8.4	1-3	0-1	0.0-4.0	0-10	
212:									
Kernfork-----	0-10	8-18	7.3-16	6.6-8.4	0-1	0	0.0-4.0	0-5	
	10-31	8-18	7.3-16	7.3-8.4	0-3	0	0.0-4.0	0-10	
	31-60	8-18	7.1-15	7.3-8.4	1-5	0-1	0.0-4.0	0-15	
213:									
Calicreek-----	0-7	4-10	3.1-7.6	6.1-8.4	0-1	0	0.0-4.0	1-3	
	7-26	4-10	2.5-6.1	7.4-8.4	1-5	0	0.0-2.0	0-4	
	26-60	1-5	0.8-3.3	7.4-8.4	0-2	0-1	0.0-2.0	0-2	
215:									
Kelval-----	0-7	4-10	4.5-10.0	6.6-7.8	0-2	0	0.0-2.0	0	
	7-43	4-10	4.2-9.2	7.4-8.4	0-2	0	0.0-2.0	0-4	
	43-60	3-15	3.3-13	7.4-8.4	0-4	0-1	0.0-2.0	0-4	
216:									
Inyo-----	0-14	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	14-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
Riverwash.									
217:									
Whitewolf-----	0-14	2-8	1.4-4.7	6.1-8.4	0-1	0	0.0-2.0	0	
	14-60	2-8	1.4-4.7	7.4-8.4	0-1	0	0.0-2.0	0-2	
Riverwash.									
220:									
Aquents-----	0-7	2-11	1.8-8.5	7.9-9.0	1-3	0-1	0.0-2.0	0-15	
	7-18	10-18	6.5-13	7.9-9.0	1-4	0-1	1.0-4.0	10-15	
	18-60	1-12	0.8-8.0	7.4-8.4	0-4	0-1	0.5-4.0	0-10	

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation- exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
220:								
Aquolls-----	0-3	5-30	5.4-25	7.9-9.0	1-3	0-1	1.0-5.0	2-20
	3-12	5-18	5.4-17	7.4-8.4	1-3	0-1	0.0-4.0	0-15
	12-60	5-18	3.8-12	6.6-7.8	1-3	0-1	0.0-4.0	0-15
Riverwash.								
222:								
Kelval-----	0-13	9-14	8.5-13	6.6-7.8	0-2	0	0.0-2.0	0
	13-60	4-8	4.2-9.2	7.4-8.4	0-2	0-1	0.0-2.0	0-4
223:								
Kelval-----	0-13	7-12	7.0-12	6.6-7.8	0	0	0.0-2.0	0
	13-60	4-11	4.2-10.0	6.6-7.8	0-1	0	0.0-2.0	0-2
224:								
Inyo-----	0-12	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0
	12-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0
238:								
Cinco-----	0-3	1-5	1.0-2.7	6.6-8.4	0-3	0	0.0-2.0	0
	3-60	1-5	0.8-3.3	6.6-8.4	0-3	0	0.0-2.0	0
240:								
Dune land-----	0-6	0-1	2.0-10	7.4-8.4	0	0	0.0-2.0	0
	6-60	0-1	2.0-10	7.4-8.4	0	0	0.0-2.0	0
241:								
Inyo-----	0-8	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0
	8-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0
242:								
Inyo-----	0-6	2-8	1.6-6.1	6.6-7.8	0	0-1	0.0-2.0	0
	6-60	2-8	1.4-6.1	6.6-8.4	0	0-1	0.0-2.0	0
243:								
Kernfork, saline-sodic, occasionally flooded	0-10	8-20	7.3-18	7.4-9.0	0-2	0	4.0-16.0	10-20
	10-60	8-18	7.3-16	7.4-9.0	0-3	0-1	2.0-8.0	8-18
245:								
Chollawell-----	0-21	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0
	21-46	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0
	46-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
246:								
Chollawell-----	0-19	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0
	19-54	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0
	54-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0
247:								
Inyo-----	0-8	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0
	8-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0
Tips-----	0-5	5-10	4.3-8.9	6.1-7.8	0	0	0.0-2.0	0
	5-12	12-18	8.9-15	6.6-8.4	0-1	0	0.0-2.0	0-2
	12-22	---	---	---	---	---	---	---
Rock outcrop.								
249:								
Hoffman-----	0-11	4-10	3.8-8.9	6.6-8.4	0	0	0.0-2.0	0
	11-22	8-10	6.6-8.6	6.6-8.4	0	0	0.0-2.0	0
	22-34	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0
	34-44	---	---	---	---	---	---	---
Rock outcrop.								
250:								
Hoffman-----	0-11	4-10	3.8-8.9	6.6-8.4	0	0	0.0-2.0	0
	11-22	8-10	6.6-8.6	6.6-8.4	0	0	0.0-2.0	0
	22-34	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0
	34-44	---	---	---	---	---	---	---
Tips-----	0-5	5-10	4.3-8.9	6.1-7.8	0	0	0.0-2.0	0
	5-10	12-18	8.9-15	6.6-8.4	0-1	0	0.0-2.0	0-2
	10-20	---	---	---	---	---	---	---
Pilotwell-----	0-3	5-10	4.0-7.8	6.1-7.8	0	0	0.0-2.0	0
	3-38	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	38-48	---	---	---	---	---	---	---
253:								
Sorrell-----	0-9	5-10	4.8-9.3	5.1-7.3	0	0	0.0-2.0	0
	9-23	10-18	8.6-15	6.1-7.8	0	0	0.0-2.0	0
	23-33	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
253:								
Martee-----	0-5	4-10	4.9-11	6.1-7.8	0	0	0.0-2.0	0
	5-11	4-10	4.5-11	6.1-7.8	0	0	0.0-2.0	0
	11-12	---	---	---	---	---	---	---
	12-22	---	---	---	---	---	---	---
Rock outcrop.								
254:								
Martee-----	0-4	4-10	4.9-11	6.1-7.8	0	0	0.0-2.0	0
	4-12	4-10	4.5-11	6.1-7.8	0	0	0.0-2.0	0
	12-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Rock outcrop.								
255:								
Kernfork, occasionally flooded-----	0-10	8-20	7.3-18	7.4-8.4	0-2	0	0.0-4.0	0-8
	10-60	8-18	7.3-16	7.4-8.4	0-2	0	0.0-4.0	0-8
Kernfork, frequently flooded-----	0-8	8-19	7.3-17	7.4-8.4	0-2	0	0.0-2.0	0-2
	8-60	8-18	7.3-16	7.4-8.4	0-2	0	0.0-2.0	0-6
257:								
Hoffman-----	0-11	4-10	3.8-8.9	6.6-8.4	0	0	0.0-2.0	0
	11-22	8-10	6.6-8.6	6.6-8.4	0	0	0.0-2.0	0
	22-34	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0
	34-44	---	---	---	---	---	---	---
Tips-----	0-5	5-10	4.3-8.9	6.1-7.8	0	0	0.0-2.0	0
	5-10	12-18	8.9-15	6.6-8.4	0-1	0	0.0-2.0	0
	10-20	---	---	---	---	---	---	---
Rock outcrop.								
259:								
Cowspring-----	0-3	3-10	2.7-8.6	6.6-8.4	0	0	0.0-2.0	0
	3-27	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0
	27-37	---	---	---	---	---	---	---
260:								
Cowspring-----	0-3	3-10	2.7-8.6	6.6-8.4	0	0	0.0-2.0	0
	3-27	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0-2
	27-37	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
260:									
Tips-----	0-5	5-10	4.3-8.9	6.1-7.8	0	0	0.0-2.0	0	
	5-12	12-18	8.9-15	6.6-8.4	0-1	0	0.0-2.0	0	
	12-22	---	---	---	---	---	---	---	
Rock outcrop.									
261:									
Blasingame-----	0-14	12-20	10-17	6.1-7.3	0	0	0.0-2.0	0	
	14-21	20-30	15-24	6.1-7.8	0	0	0.0-2.0	0	
	21-31	---	---	---	---	---	---	---	
Arujo-----	0-14	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0-2	
	14-45	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0-2	
	45-58	15-25	11-20	6.1-7.8	0	0	0.0-2.0	0-2	
	58-68	---	---	---	---	---	---	---	
Cieneba-----	0-16	7-18	6.3-15	5.6-7.3	0	0	0.0-2.0	0	
	16-26	---	---	---	---	---	---	---	
264:									
Arujo-----	0-14	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0	
	14-20	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0	
	20-58	25-35	19-27	6.1-7.8	0	0	0.0-2.0	0	
	58-68	---	---	---	---	---	---	---	
Walong-----	0-13	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0	
	13-25	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0	
	25-35	---	---	---	---	---	---	---	
Tunis-----	0-3	8-18	7.3-16	6.1-7.8	0	0	0.0-2.0	0	
	3-16	8-18	7.2-15	6.1-7.8	0	0	0.0-2.0	0	
	16-26	---	---	---	---	---	---	---	
265:									
Arujo-----	0-14	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0	
	14-20	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0	
	20-58	25-35	19-27	6.1-7.8	0	0	0.0-2.0	0	
	58-68	---	---	---	---	---	---	---	
266:									
Tunis-----	0-3	8-18	7.3-16	6.1-7.8	0	0	0.0-2.0	0	
	3-16	8-18	7.2-15	6.1-7.8	0	0	0.0-2.0	0	
	16-26	---	---	---	---	---	---	---	
Rock outcrop.									

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
267:								
Cieneba-----	0-6	7-18	6.3-15	6.1-7.3	0	0	0.0-2.0	0
	6-16	7-18	5.9-15	6.1-7.3	0	0	0.0-2.0	0
	16-26	---	---	---	---	---	---	---
Vista-----	0-4	7-15	6.3-13	6.1-7.3	0	0	0.0-2.0	0
	4-12	7-15	5.9-13	6.1-7.3	0	0	0.0-2.0	0
	12-27	7-15	5.9-13	6.1-7.3	0	0	0.0-2.0	0
	27-37	---	---	---	---	---	---	---
Rock outcrop.								
268:								
Tunis-----	0-5	8-18	7.3-16	6.1-7.8	0	0	0.0-2.0	0
	5-16	8-18	7.2-15	6.1-7.8	0	0	0.0-2.0	0
	16-26	---	---	---	---	---	---	---
Tollhouse-----	0-13	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0
	13-23	---	---	---	---	---	---	---
Sorrell-----	0-11	8-14	7.3-13	6.1-7.8	0	0	0.0-2.0	0
	11-36	10-18	8.6-15	6.1-7.8	0	0	0.0-2.0	0
	36-46	---	---	---	---	---	---	---
269:								
Tollhouse-----	0-11	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0
	11-21	---	---	---	---	---	---	---
Sorrell-----	0-2	8-14	7.3-13	6.1-7.8	0	0	0.0-2.0	0
	2-27	10-18	8.8-15	6.1-7.8	0	0	0.0-2.0	0
	27-37	---	---	---	---	---	---	---
Rock outcrop.								
270:								
Locobill-----	0-3	7-14	6.3-12	6.6-8.4	0-1	0	0.0-2.0	0
	3-13	10-18	8.6-15	6.6-8.4	0-1	0	0.0-2.0	0
	13-28	12-18	9.6-15	6.6-8.4	0-1	0	0.0-2.0	0
	28-35	20-25	15-20	6.6-8.4	0-2	0	0.0-2.0	0-2
	35-45	---	---	---	---	---	---	---
Backcanyon-----	0-3	8-18	7.2-16	7.4-8.4	5-20	0	0.0-3.0	0-2
	3-15	8-30	6.6-24	7.9-8.4	5-30	0	0.0-2.0	0-2
	15-23	---	---	---	---	---	---	---
	23-33	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
270:									
Sesame-----	0-9	10-20	8.6-17	6.1-7.3	0	0	0.0-2.0	0	
	9-24	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	24-33	10-20	7.6-16	6.1-7.3	0	0	0.0-2.0	0	
	33-43	---	---	---	---	---	---	---	
271:									
Walong-----	0-9	7-16	6.4-14	6.6-7.8	0	0	0.0-2.0	0	
	9-30	8-18	7.0-15	6.6-7.8	0	0	0.0-2.0	0	
	30-40	---	---	---	---	---	---	---	
Tunis-----	0-18	8-18	7.3-16	6.1-7.8	0	0	0.0-2.0	0	
	18-28	---	---	---	---	---	---	---	
Rock outcrop.									
272:									
Tollhouse-----	0-14	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	
Edmundston-----	0-25	8-18	7.3-16	6.1-7.3	0	0	0.0-2.0	0	
	25-57	8-18	7.1-15	6.1-7.3	0	0	0.0-2.0	0	
	57-67	---	---	---	---	---	---	---	
Sorrell-----	0-10	8-14	7.3-13	6.1-7.8	0	0	0.0-2.0	0	
	10-39	10-18	8.6-15	6.1-7.8	0	0	0.0-2.0	0	
	39-49	---	---	---	---	---	---	---	
274:									
Sesame-----	0-9	10-20	8.6-17	6.1-7.3	0	0	0.0-2.0	0	
	9-19	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	19-24	10-20	7.6-16	6.1-7.3	0	0	0.0-2.0	0	
	24-34	---	---	---	---	---	---	---	
Tweedy-----	0-7	12-20	10-17	6.6-8.4	0	0	0.0-2.0	0	
	7-24	20-35	16-27	7.3-8.4	0-1	0	0.0-2.0	0	
	24-34	---	---	---	---	---	---	---	
Rock outcrop.									
275:									
Strahle-----	0-4	12-20	10-17	6.6-7.8	0	0	0.0-2.0	0	
	4-12	25-35	19-27	6.6-7.8	0	0	0.0-2.0	0	
	12-14	---	---	---	---	---	---	---	
	14-24	---	---	---	---	---	---	---	

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
275:									
Sesame-----	0-9	10-20	8.6-17	6.1-7.3	0	0	0.0-2.0	0	
	9-24	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	24-34	---	---	---	---	---	---	---	
Tweedy-----	0-3	12-20	10-17	6.6-8.4	0	0	0.0-2.0	0	
	3-25	20-35	16-27	7.3-7.8	0	0	0.0-2.0	0	
	25-35	---	---	---	---	---	---	---	
276:									
Tips-----	0-4	5-10	4.3-8.9	6.1-7.8	0	0	0.0-2.0	0	
	4-7	7-10	5.9-8.9	6.6-7.8	0-1	0	0.0-2.0	0	
	7-11	12-18	8.9-15	6.6-8.4	0-1	0	0.0-2.0	0-2	
	11-21	---	---	---	---	---	---	---	
Hoffman-----	0-4	4-10	3.8-8.9	6.6-8.4	0	0	0.0-2.0	0	
	4-10	8-10	6.6-8.6	6.6-8.4	0	0	0.0-2.0	0	
	10-39	12-18	8.9-15	6.6-8.4	0	0	0.0-2.0	0	
	39-49	---	---	---	---	---	---	---	
Cinco-----	0-9	0-5	0.0-4.2	6.6-8.4	0-3	0	0.0-2.0	0	
	9-60	0-5	0.0-4.0	6.6-8.4	0-3	0	0.0-2.0	0	
277:									
Feethill-----	0-4	8-18	7.3-16	6.6-7.8	0	0	0.0-2.0	0	
	4-18	15-30	13-25	6.6-7.8	0	0	0.0-2.0	0	
	18-24	15-30	12-23	6.6-7.8	0	0	0.0-2.0	0	
	24-30	15-30	12-23	6.6-7.8	0	0	0.0-2.0	0	
	30-40	---	---	---	---	---	---	---	
Vista-----	0-4	7-15	6.3-13	6.6-7.3	0	0	0.0-2.0	0	
	4-21	7-15	5.9-13	6.6-7.3	0	0	0.0-2.0	0	
	21-31	---	---	---	---	---	---	---	
Walong-----	0-18	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0	
	18-28	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0	
	28-38	---	---	---	---	---	---	---	
279:									
Strahle-----	0-6	12-20	10-17	6.6-7.8	0	0	0.0-2.0	0	
	6-16	25-35	19-27	6.6-7.8	0	0	0.0-2.0	0	
	16-18	---	---	---	---	---	---	---	
	18-28	---	---	---	---	---	---	---	
Rock outcrop.									

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
279:									
Sesame-----	0-9	10-20	8.6-17	5.6-7.3	0	0	0	0	
	9-24	18-27	14-22	6.1-7.3	0	0	0	0	
	24-34	10-20	7.6-16	6.1-7.3	0	0	0	0	
	34-44	---	---	---	---	---	---	---	
280:									
Tollhouse-----	0-12	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	12-22	---	---	---	---	---	---	---	
Martee-----	0-5	4-10	4.9-11	6.1-7.8	0	0	0.0-2.0	0	
	5-11	4-10	4.5-11	6.1-7.8	0	0	0.0-2.0	0	
	11-12	---	---	---	---	---	---	---	
	12-22	---	---	---	---	---	---	---	
Edmundston-----	0-12	8-18	7.3-16	6.1-7.3	0	0	0.0-2.0	0	
	12-44	8-18	7.1-15	6.1-7.3	0	0	0.0-2.0	0	
	44-54	---	---	---	---	---	---	---	
281:									
Havala-----	0-13	12-18	10-16	6.6-8.4	0	0	0.0-2.0	0	
	13-29	20-35	15-27	6.6-8.4	0	0	0.0-2.0	0	
	29-60	12-20	8.9-16	6.6-8.4	0	0	0.0-2.0	0	
Walong-----	0-14	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0	
	14-29	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0	
	29-39	---	---	---	---	---	---	---	
Kernfork-----	0-10	8-18	7.3-16	6.6-8.4	0-1	0	0.0-4.0	0-4	
	10-26	8-18	6.9-15	6.6-8.4	0-1	0	0.0-2.0	0-4	
	26-60	8-18	6.2-14	6.6-8.4	0-1	0	0.0-2.0	0-2	
282:									
Tollhouse-----	0-10	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	10-20	---	---	---	---	---	---	---	
Sesame-----	0-15	10-20	8.6-17	5.6-7.3	0	0	0.0-2.0	0	
	15-26	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	26-36	---	---	---	---	---	---	---	
Friant-----	0-5	10-18	8.9-16	5.6-7.3	0	0	0.0-2.0	0	
	5-15	10-18	8.1-15	5.6-7.3	0	0	0.0-2.0	0	
	15-25	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
283:									
Tollhouse-----	0-12	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	12-22	---	---	---	---	---	---	---	
Martee-----	0-5	4-10	4.9-11	6.1-7.8	0	0	0.0-2.0	0	
	5-11	4-10	4.5-11	6.1-7.8	0	0	0.0-2.0	0	
	11-12	---	---	---	---	---	---	---	
	12-22	---	---	---	---	---	---	---	
Rock outcrop.									
284:									
Tollhouse-----	0-14	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	
Rock outcrop.									
285:									
Inyo-----	0-12	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	12-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
Kelval-----	0-7	4-10	4.5-10.0	6.6-7.8	0-2	0	0.0-2.0	0-4	
	7-60	4-8	4.2-9.2	7.4-8.4	0-2	0	0.0-2.0	0-4	
286:									
Tollhouse-----	0-12	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0	
	12-22	---	---	---	---	---	---	---	
Tweedy-----	0-11	12-20	10-17	6.6-8.4	0	0	0.0-2.0	0	
	11-33	20-35	16-27	7.3-8.4	0-1	0	0.0-2.0	0	
	33-43	---	---	---	---	---	---	---	
Locobill-----	0-3	7-14	6.3-12	6.6-8.4	0-1	0	0.0-2.0	0	
	3-28	10-18	8.6-15	6.6-8.4	0-1	0	0.0-2.0	0	
	28-35	20-25	15-20	6.6-8.4	0-2	0	0.0-2.0	0-2	
	35-45	---	---	---	---	---	---	---	
287:									
Tweedy-----	0-11	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0	
	11-31	20-35	16-27	6.1-7.8	0	0	0.0-2.0	0	
	31-38	12-20	10-17	6.6-7.8	0-1	0	0.0-2.0	0-2	
	38-48	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation- exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct		meq/100g	pH	Pct	Pct	dS/m	
287:									
Strahle-----	0-5	12-20		10-17	6.6-7.8	0	0	0.0-2.0	0
	5-10	25-35		19-27	6.6-7.8	0	0	0.0-2.0	0
	10-12	---		---	---	---	---	---	---
	12-22	---		---	---	---	---	---	---
288:									
Sorrell-----	0-9	5-10		4.8-9.3	6.1-7.8	0	0	0.0-2.0	0
	9-23	10-18		8.6-15	6.1-7.8	0	0	0.0-2.0	0
	23-33	---		---	---	---	---	---	---
Arujo-----	0-23	10-20		8.9-17	5.6-7.8	0	0	0.0-2.0	0
	23-41	25-35		19-27	5.6-7.8	0	0	0.0-2.0	0
	41-48	15-25		11-20	5.6-7.8	0	0	0.0-2.0	0
	48-58	---		---	---	---	---	---	---
Rock outcrop.									
289:									
Erskine-----	0-8	3-10		2.9-8.9	6.1-7.8	0	0	0.0-2.0	0
	8-18	8-18		6.8-15	6.1-7.8	0	0	0.0-2.0	0
	18-28	---		---	---	---	---	---	---
Hyte-----	0-5	7-15		6.4-13	6.6-7.8	0	0	0.0-2.0	0
	5-14	10-18		8.3-15	6.6-7.8	0	0	0.0-2.0	0
	14-24	---		---	---	---	---	---	---
Rock outcrop.									
294:									
Edmundston-----	0-26	8-18		7.3-16	6.1-7.3	0	0	0.0-2.0	0
	26-50	8-18		7.1-15	6.1-7.3	0	0	0.0-2.0	0
	50-60	---		---	---	---	---	---	---
Tweedy-----	0-10	12-20		10-17	6.6-8.4	0	0	0.0-2.0	0
	10-32	20-35		16-27	6.6-7.8	0-1	0	0.0-2.0	0
	32-42	---		---	---	---	---	---	---
Walong-----	0-13	7-18		6.4-16	6.6-7.8	0	0	0.0-2.0	0
	13-25	7-18		6.1-15	6.1-7.3	0	0	0.0-2.0	0
	25-35	---		---	---	---	---	---	---
295:									
Tweedy-----	0-10	12-20		10-17	6.6-8.4	0-1	0	0.0-2.0	0
	10-26	20-35		16-28	6.6-7.8	0	0	0.0-2.0	0
	26-36	---		---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
295:									
Tunis-----	0-5	8-18	7.3-16	6.1-7.8	0	0	0.0-2.0	0	
	5-14	8-18	7.2-15	6.1-7.8	0	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	
Rankor-----	0-5	10-20	8.9-17	6.6-7.8	0	0	0.0-2.0	0	
	5-21	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0	
	21-33	20-35	16-28	6.6-7.8	0	0	0.0-2.0	0	
	33-58	10-30	8.1-24	6.1-7.3	0	0	0.0-2.0	0	
	58-68	---	---	---	---	---	---	---	
296:									
Arujo-----	0-21	10-20	8.9-17	5.6-7.8	0	0	0	0	
	21-52	25-35	19-27	5.6-7.8	0	0	0	0	
	52-62	---	---	---	---	---	---	---	
Walong-----	0-17	7-18	6.4-16	6.6-7.8	0	0	0	0	
	17-39	7-18	6.1-15	6.1-7.3	0	0	0	0	
	39-49	---	---	---	---	---	---	---	
Tunis-----	0-7	8-18	7.3-16	6.1-7.8	0	0	0	0	
	7-14	8-18	7.2-15	6.1-7.8	0	0	0	0	
	14-24	---	---	---	---	---	---	---	
297:									
Walong-----	0-11	---	---	6.6-7.8	0	0	0.0-2.0	0	
	11-27	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0	
	27-32	7-18	6.1-15	6.1-7.3	0	0	0.0-2.0	0	
	32-42	---	---	---	---	---	---	---	
Blasingame-----	0-3	8-20	7.1-17	6.1-7.3	0	0	0.0-2.0	0	
	3-10	8-18	6.6-15	6.1-7.3	0	0	0.0-2.0	0	
	10-17	18-30	14-23	6.1-7.8	0	0	0.0-2.0	0	
	17-27	18-30	14-23	6.6-7.8	0	0	0.0-2.0	0	
	27-33	18-30	13-22	6.6-7.8	0	0	0.0-2.0	0	
	33-43	---	---	---	---	---	---	---	
Rock outcrop.									
298:									
Arujo-----	0-12	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0	
	12-24	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0	
	24-56	25-35	19-27	6.1-7.8	0	0	0.0-2.0	0	
	56-66	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
298:									
Feethill-----	0-4	8-18	7.3-16	6.6-7.8	0	0	0.0-2.0	0	
	4-14	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0	
	14-38	20-30	16-23	6.6-7.8	0	0	0.0-2.0	0	
	38-48	---	---	---	---	---	---	---	
Sesame-----	0-4	10-20	8.6-17	6.1-7.3	0	0	0.0-2.0	0	
	4-28	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	28-38	---	---	---	---	---	---	---	
299:									
Arujo-----	0-12	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0	
	12-24	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0	
	24-56	25-35	19-27	6.1-7.8	0	0	0.0-2.0	0	
	56-66	---	---	---	---	---	---	---	
Feethill-----	0-4	8-18	7.3-16	6.6-7.8	0	0	0.0-2.0	0	
	4-14	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0	
	14-38	20-30	16-23	6.6-7.8	0	0	0.0-2.0	0	
	38-48	---	---	---	---	---	---	---	
Sesame-----	0-4	10-20	8.6-17	6.1-7.3	0	0	0.0-2.0	0	
	4-28	18-27	14-22	6.1-7.3	0	0	0.0-2.0	0	
	28-38	---	---	---	---	---	---	---	
300:									
Stineway-----	0-4	8-20	7.3-17	6.6-8.4	0	0	0.0-2.0	0	
	4-10	15-20	12-17	6.6-8.4	0	0	0.0-2.0	0	
	10-13	15-25	12-20	6.6-8.4	0	0	0.0-2.0	0	
	13-23	---	---	---	---	---	---	---	
Kiscove-----	0-3	15-25	11-21	6.1-7.8	0	0	0.0-2.0	0	
	3-9	20-35	14-27	6.1-7.8	0	0	0.0-2.0	0	
	9-12	---	---	---	---	---	---	---	
	12-22	---	---	---	---	---	---	---	
301:									
Feethill-----	0-8	8-18	7.3-16	6.6-7.8	0	0	0.0-2.0	0	
	8-14	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0	
	14-22	20-30	16-23	6.6-7.8	0	0	0.0-2.0	0	
	22-32	---	---	---	---	---	---	---	
Vista-----	0-3	7-15	6.3-13	6.1-7.3	0	0	0.0-2.0	0	
	3-24	7-15	5.9-13	6.1-7.3	0	0	0.0-2.0	0	
	24-34	---	---	---	---	---	---	---	

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
301: Rock outcrop.									
302: Feethill-----	0-3	10-20	8.9-17	6.6-7.8	0	0	0.0-2.0	0	
	3-19	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0	
	19-26	20-30	16-23	6.6-7.8	0	0	0.0-2.0	0	
	26-36	---	---	---	---	---	---	---	
Cibo-----	0-5	35-40	27-31	6.1-8.4	0	0	0.0-2.0	0	
	5-9	35-50	26-36	6.1-8.4	0	0	0.0-2.0	0	
	9-23	35-50	26-36	6.1-8.4	0	0	0.0-2.0	0	
	23-33	---	---	---	---	---	---	---	
Cieneba-----	0-15	7-18	6.3-15	6.1-7.3	0	0	0.0-2.0	0	
	15-25	---	---	---	---	---	---	---	
303: Steuber-----	0-12	8-18	7.1-15	6.6-8.4	0	0	0.0-2.0	0	
	12-60	5-20	4.1-16	6.6-8.4	0	0	0.0-2.0	0	
304: Cibo-----	0-19	40-50	30-37	6.1-8.4	0	0	0.0-2.0	0	
	19-35	35-50	27-37	6.1-8.4	0	0	0.0-2.0	0	
	35-45	---	---	---	---	---	---	---	
305: Chanac-----	0-2	18-27	15-22	7.4-8.4	0-5	0-1	0.0-2.0	0-5	
	2-47	20-35	16-27	7.4-8.4	3-15	0-2	0.0-2.0	0-5	
	47-60	10-20	8.1-16	7.4-8.4	0-10	0-3	0.0-4.0	0-10	
Pleito-----	0-24	20-35	17-28	6.6-8.4	0-2	0	0.0-2.0	0-2	
	24-60	20-35	16-28	7.9-8.4	5-15	0-1	0.0-4.0	0-2	
Premier-----	0-7	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0	
	7-16	5-18	4.3-15	7.4-8.4	1-5	0	0.0-2.0	0	
	16-51	5-18	4.1-13	7.4-8.4	1-5	0	0.0-2.0	0-2	
	51-60	5-18	4.1-13	7.4-8.4	1-5	0-1	0.0-2.0	0-2	

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
306:								
Xerofluvents, occasionally flooded-----	0-6	5-40	4.6-32	6.6-8.4	0-1	0	0.0-2.0	0-2
	6-12	2-40	2.0-31	6.6-8.4	0-1	0-1	0.0-2.0	0-2
	12-19	2-40	1.8-29	6.6-8.4	0-1	0-1	0.0-2.0	0-2
	19-25	2-40	1.8-29	6.6-8.4	0-1	0-1	0.0-2.0	0-2
	25-28	2-40	1.8-29	6.6-8.4	0-1	0-1	0.0-2.0	0-2
	28-50	2-40	1.8-29	6.6-8.4	0-1	0-1	0.0-2.0	0-2
	50-60	2-40	1.8-29	6.6-8.4	0-1	0-1	0.0-2.0	0-2
Riverwash.								
307:								
Typic Xeropsamments-----	0-6	0-5	0.0-4.2	6.1-7.3	0	0	0.0-2.0	0
	6-20	0-5	0.0-4.2	6.1-7.8	0	0	0.0-2.0	0
	20-60	0-5	0.0-4.2	6.1-7.8	0	0	0.0-2.0	0
308:								
Rankor-----	0-4	10-20	8.9-17	6.6-7.8	0	0	0.0-2.0	0
	4-23	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0
	23-31	20-35	16-28	6.6-7.8	0	0	0.0-2.0	0
	31-46	10-30	8.1-24	6.1-7.3	0	0	0.0-2.0	0
	46-56	---	---	---	---	---	---	---
Edmundston-----	0-23	8-18	7.3-16	6.1-7.3	0	0	0.0-2.0	0
	23-48	8-18	7.1-15	6.1-7.3	0	0	0.0-2.0	0
	48-58	---	---	---	---	---	---	---
Tweedy-----	0-4	12-20	10-17	6.6-7.8	0	0	0.0-2.0	0
	4-39	20-35	16-27	6.6-7.8	0	0	0.0-2.0	0
	39-49	---	---	---	---	---	---	---
309:								
Rankor-----	0-4	10-20	8.9-17	6.6-7.8	0	0	0.0-2.0	0
	4-23	20-30	17-25	6.6-7.8	0	0	0.0-2.0	0
	23-31	20-35	16-28	6.6-7.8	0	0	0.0-2.0	0
	31-46	10-30	8.1-24	6.1-7.3	0	0	0.0-2.0	0
	46-56	---	---	---	---	---	---	---
Edmundston-----	0-23	8-18	7.3-16	6.1-7.3	0	0	0.0-2.0	0
	23-48	8-18	7.1-15	6.1-7.3	0	0	0.0-2.0	0
	48-58	---	---	---	---	---	---	---
Tweedy-----	0-4	12-20	10-17	6.6-7.8	0	0	0.0-2.0	0
	4-39	20-35	16-27	6.6-7.8	0	0	0.0-2.0	0
	39-49	---	---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
310:									
Stineway-----	0-4	8-20	7.3-17	6.6-8.4	0	0	0.0-2.0	0	
	4-14	15-20	12-17	6.6-8.4	0-1	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	
Kiscove-----	0-2	8-18	6.2-15	6.1-7.8	0	0	0.0-2.0	0	
	2-9	20-35	14-27	6.1-7.8	0	0	0.0-2.0	0	
	9-12	---	---	---	---	---	---	---	
	12-22	---	---	---	---	---	---	---	
311:									
Xerorthents-----	0-5	5-25	3.1-17	6.6-7.3	0	0	0	0	
	5-15	---	---	---	---	---	---	---	
Rock outcrop.									
312:									
Havala-----	0-24	12-18	10-16	6.6-8.4	0	0	0.0-2.0	0	
	24-48	16-30	12-23	6.6-8.4	0	0	0.0-2.0	0	
	48-65	12-20	8.9-14	6.6-8.4	0	0	0.0-2.0	0	
313.									
Dumps									
314:									
Premier-----	0-14	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0	
	14-30	5-18	4.3-15	7.4-8.4	1-5	0	0.0-2.0	0	
	30-47	5-18	4.1-13	7.4-8.4	1-5	0	0.0-2.0	0-2	
	47-60	5-18	4.1-13	7.4-8.4	1-5	0	0.0-2.0	0-2	
Haplodurids-----	0-14	10-18	8.3-15	7.2-8.4	0-2	0	0.0-2.0	0	
	14-25	10-18	8.3-15	7.2-8.4	2-4	0-1	0.0-2.0	0-2	
	25-38	---	---	---	---	---	---	---	
	38-50	5-18	4.1-13	7.4-8.4	5-10	0-1	0.0-2.0	0-4	
	50-60	5-18	4.1-13	7.4-8.4	5-10	0-1	0.0-2.0	0-4	
315:									
Premier-----	0-14	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0	
	14-30	5-18	4.3-15	7.4-8.4	1-5	0	0.0-2.0	0	
	30-47	5-18	4.1-13	7.4-8.4	1-5	0	0.0-2.0	0-2	
	47-60	5-18	4.1-13	7.4-8.4	1-5	0	0.0-2.0	0-2	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
315:								
Haplodurids-----	0-14	10-18	8.3-15	7.2-8.4	0-2	0	0.0-2.0	0
	14-25	10-18	8.3-15	7.2-8.4	2-4	0-1	0.0-2.0	0-2
	25-38	---	---	---	---	---	---	---
	38-50	5-18	4.1-13	7.4-8.4	5-10	0-1	0.0-2.0	0-4
	50-60	5-18	4.1-13	7.4-8.4	5-10	0-1	0.0-2.0	0-4
316:								
Premier-----	0-12	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0
	12-60	5-18	4.1-13	7.4-8.4	1-5	0-1	0.0-2.0	0-4
317:								
Premier-----	0-12	5-18	4.6-15	6.6-8.4	0-5	0	0.0-2.0	0
	12-60	5-18	4.1-13	7.4-8.4	1-5	0-1	0.0-2.0	0-4
320:								
Southlake-----	0-4	5-15	4.1-13	6.6-7.8	0	0	0.0-2.0	0
	4-19	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0
	19-42	18-35	14-27	6.6-7.8	0	0	0.0-2.0	0-5
	42-60	10-18	8.1-15	6.6-7.8	0	0	0.0-2.0	0-2
325:								
Walong-----	0-14	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0
	14-27	7-18	6.3-15	6.6-7.8	0	0	0.0-2.0	0
	27-37	---	---	---	---	---	---	---
326:								
Walong-----	0-14	7-18	6.4-16	6.6-7.8	0	0	0.0-2.0	0
	14-27	7-18	6.3-15	6.6-7.8	0	0	0.0-2.0	0
	27-37	---	---	---	---	---	---	---
330:								
Kernville-----	0-5	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	5-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-19	---	---	---	---	---	---	---
	19-29	---	---	---	---	---	---	---
Faycreek-----	0-5	4-10	4.5-10	6.1-7.3	0	0	0.0-2.0	0
	5-12	4-10	4.5-10.0	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
Rock outcrop.								

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
350:									
Southlake, stony-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0	
	6-60	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2	
Goodale-----	0-3	5-10	4.0-7.8	6.6-7.8	0	0	0.0-2.0	0	
	3-60	5-10	3.1-7.4	6.6-7.8	0	0	0.0-2.0	0	
352:									
Goodale-----	0-3	5-10	4.0-7.8	6.6-7.8	0	0	0.0-2.0	0	
	3-60	5-10	3.1-7.4	6.6-7.8	0	0	0.0-2.0	0	
Riverwash.									
360:									
Kernville, bouldery-----	0-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0	
	16-20	---	---	---	---	---	---	---	
	20-30	---	---	---	---	---	---	---	
Hogeye-----	0-2	10-18	8.6-15	6.6-7.3	0	0	0.0-2.0	0	
	2-29	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0	
	29-40	---	---	---	---	---	---	---	
	40-50	---	---	---	---	---	---	---	
Southlake-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0	
	6-60	18-35	14-27	6.6-7.8	0-1	0-1	0.0-2.0	0-4	
380:									
Delvar-----	0-20	27-40	22-32	6.1-8.4	0-1	0-1	0.0-2.0	0	
	20-51	40-55	31-42	6.6-8.4	5-10	0-1	2.0-4.0	2-6	
	51-60	15-35	11-27	7.4-8.4	1-8	0-1	2.0-4.0	2-8	
Pleito-----	0-30	20-35	17-28	6.6-8.4	0-2	0	0.0-2.0	0	
	30-60	20-35	16-28	7.9-8.4	5-15	0-2	0.0-2.0	0-2	
407:									
Centerville-----	0-7	40-60	30-44	6.6-8.4	0-3	0	0.0-8.0	13-40	
	7-48	35-60	26-43	7.4-8.4	1-5	0	0.0-8.0	13-40	
	48-60	27-50	20-36	7.4-8.4	0-5	0	0.0-8.0	13-40	
410:									
Stineway-----	0-4	8-20	7.3-17	6.6-8.4	0	0	0.0-2.0	0	
	4-14	15-20	12-17	6.6-8.4	0-1	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
410:									
Kiscove-----	0-2	8-18	6.2-15	6.1-7.8	0	0	0.0-2.0	0	
	2-9	20-35	14-27	6.1-7.8	0	0	0.0-2.0	0	
	9-12	---	---	---	---	---	---	---	
	12-22	---	---	---	---	---	---	---	
Urban land.									
411:									
Delvar-----	0-12	27-40	22-32	6.1-8.4	0-1	0-1	0.0-4.0	1-8	
	12-19	40-55	31-42	6.6-8.4	0-2	0-1	1.0-8.0	2-13	
	19-28	40-55	31-42	6.6-8.4	5-10	0-1	1.0-8.0	2-13	
	28-42	40-55	30-41	6.6-8.4	2-10	0-1	1.0-8.0	2-13	
	42-60	15-35	11-27	7.4-8.4	1-8	0-1	1.0-8.0	13-20	
412:									
Chollawell-----	0-22	7-12	6.3-10	6.6-7.8	0	0	0.0-2.0	0	
	22-40	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0	
	40-60	3-5	2.6-4.6	6.6-7.8	0	0	0.0-2.0	0	
Urban land.									
417:									
Southlake-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0	
	6-15	5-15	4.6-13	6.6-7.3	0-1	0	0.0-2.0	0	
	15-40	18-35	14-27	7.3-7.8	0-1	0	0.0-2.0	0-2	
	40-60	15-25	12-20	7.3-7.8	0	0	0.0-2.0	0-2	
Southlake, gravelly-----	0-6	5-15	4.1-13	6.6-7.8	0	0	0.0-2.0	0	
	6-19	10-18	7.6-15	6.6-7.8	0-1	0	0.0-2.0	0	
	19-42	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2	
	42-60	10-18	8.1-15	6.6-7.8	0-1	0	0.0-2.0	0-2	
Goodale-----	0-8	5-10	4.0-7.8	6.6-7.8	0	0	0.0-2.0	0	
	8-60	5-10	3.1-7.4	6.6-7.8	0	0	0.0-2.0	0	
Urban land.									
420:									
Southlake-----	0-4	5-15	4.1-13	6.6-7.8	0	0	0.0-2.0	0	
	4-19	10-18	7.6-15	6.6-7.8	0-1	0	0.0-2.0	0	
	19-42	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2	
	42-60	10-26	8.1-20	6.6-7.8	0-1	0	0.0-2.0	0-2	
Urban land.									

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
422:									
Kelval-----	0-13	9-14	8.5-13	6.6-7.8	0-2	0	0.0-2.0	0	
	13-60	4-10	4.2-9.2	7.4-8.4	0-2	0-1	0.0-2.0	0-2	
Urban land.									
423:									
Auberry-----	0-16	8-15	3.0-5.5	5.1-6.5	0	0	0.0-2.0	0-0	
	16-22	10-20	3.6-7.2	5.1-6.5	0	0	0.0-2.0	0-0	
	22-43	20-30	7.1-11	5.1-6.5	0	0	0.0-2.0	0-0	
	43-56	10-18	3.4-6.4	5.1-7.3	0	0	0.0-2.0	0-0	
	56-66	---	---	---	---	---	---	---	
Crouch-----	0-22	7-12	6.4-11	5.6-6.5	0	0	0.0-2.0	0-0	
	22-43	7-15	6.3-13	5.6-6.5	0	0	0.0-2.0	0-0	
	43-70	1-7	1.0-6.4	5.6-6.5	0	0	0.0-2.0	0-0	
	70-80	---	---	---	---	---	---	---	
Rock outcrop.									
424:									
Inyo-----	0-12	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	12-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
Urban land.									
430:									
Friant-----	0-5	10-18	8.9-16	5.6-7.3	0	0	0.0-2.0	0	
	5-15	10-18	8.1-15	5.6-7.3	0	0	0.0-2.0	0	
	15-25	---	---	---	---	---	---	---	
Rock outcrop.									
432:									
Alberti, gravelly-----	0-1	22-27	18-22	6.6-7.8	0	0	0.0-2.0	0	
	1-17	35-60	25-43	6.6-7.8	0	0	0.0-2.0	0	
	17-22	---	---	---	---	---	---	---	
	22-32	---	---	---	---	---	---	---	
Urban land.									
441:									
Inyo-----	0-8	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	8-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
Urban land.									

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
442:									
Inyo-----	0-6	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	6-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
Urban land.									
445:									
Chollawell-----	0-21	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0	
	21-46	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0	
	46-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0	
Urban land.									
450:									
Southlake, stony-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0	
	6-60	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2	
Goodale-----	0-3	5-10	4.0-7.8	6.6-7.8	0	0	0.0-2.0	0	
	3-60	5-10	3.1-7.4	6.6-7.8	0	0	0.0-2.0	0	
Urban land.									
460:									
Kernville, bouldery-----	0-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0	
	16-20	---	---	---	---	---	---	---	
	20-30	---	---	---	---	---	---	---	
Hogeye-----	0-2	10-18	8.6-15	6.6-7.3	0	0	0.0-2.0	0	
	2-29	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0	
	29-40	---	---	---	---	---	---	---	
	40-50	---	---	---	---	---	---	---	
Southlake-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0	
	6-60	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2	
Urban land.									
465:									
Arujo-----	0-14	10-20	8.9-17	6.1-7.8	0	0	0.0-2.0	0	
	14-20	12-25	10-21	6.1-7.8	0	0	0.0-2.0	0	
	20-58	25-35	19-27	6.1-7.8	0	0	0.0-2.0	0	
	58-68	---	---	---	---	---	---	---	
Urban land.									

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
485:								
Inyo-----	0-12	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0
	12-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0
Kelval-----	0-7	4-10	4.5-10.0	6.6-7.8	0-2	0	0.0-2.0	0
	7-60	4-10	4.2-9.2	7.4-8.4	0-2	0	0.0-2.0	0-2
Urban land.								
488:								
Tweedy-----	0-11	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0
	11-31	20-35	16-27	6.6-7.8	0	0	0.0-2.0	0
	31-38	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0
	38-48	---	---	---	---	---	---	---
Tollhouse-----	0-5	12-20	10-17	6.6-8.4	0	0	0.0-2.0	0
	5-14	5-18	4.8-16	6.1-7.3	0	0	0.0-2.0	0
	14-24	---	---	---	---	---	---	---
Locobill-----	0-3	7-14	6.3-12	6.6-8.4	0-1	0	0.0-2.0	0
	3-28	10-18	8.6-15	6.6-8.4	0-1	0	0.0-2.0	0
	28-35	20-25	15-20	6.6-8.4	0-2	0	0.0-2.0	0
	35-45	---	---	---	---	---	---	---
Urban land.								
501:								
Hyte-----	0-4	7-15	6.4-13	6.6-7.8	0	0	0.0-2.0	0
	4-17	10-18	8.3-15	6.6-7.8	0	0	0.0-2.0	0
	17-27	---	---	---	---	---	---	---
Erskine-----	0-4	8-15	7.1-13	6.1-7.8	0	0	0.0-2.0	0
	4-13	8-18	6.8-15	6.1-7.8	0	0	0.0-2.0	0
	13-23	---	---	---	---	---	---	---
Sorrell-----	0-11	8-14	7.3-13	6.1-7.8	0	0	0.0-2.0	0
	11-36	10-18	8.6-15	6.1-7.8	0	0	0.0-2.0	0
	36-46	---	---	---	---	---	---	---
503:								
Tips-----	0-5	4-10	3.6-8.9	6.1-7.3	0	0	0.0-2.0	0
	5-14	12-18	8.9-15	6.6-7.8	0-1	0	0.0-2.0	0
	14-24	---	---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
503:								
Erskine-----	0-8	8-14	7.1-12	6.1-7.8	0	0	0.0-2.0	0
	8-18	11-18	9.1-15	6.1-7.8	0	0	0.0-2.0	0
	18-28	---	---	---	---	---	---	---
Rock outcrop.								
505:								
Chollawell-----	0-19	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0
	19-54	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0
	54-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0
507:								
Xyno-----	0-2	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0
	2-11	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	11-21	---	---	---	---	---	---	---
Canebrake-----	0-7	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	7-17	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	17-27	---	---	---	---	---	---	---
Pilotwell-----	0-3	5-10	4.0-7.8	6.1-7.8	0	0	0.0-2.0	0
	3-38	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	38-48	---	---	---	---	---	---	---
508:								
Pilotwell-----	0-5	5-10	4.0-7.8	6.1-7.8	0	0	0.0-2.0	0
	5-25	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	25-35	---	---	---	---	---	---	---
Xyno-----	0-11	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0
	11-21	---	---	---	---	---	---	---
Rock outcrop.								
509:								
Xyno-----	0-11	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	11-15	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0
	15-25	---	---	---	---	---	---	---
Faycreek-----	0-2	4-10	4.5-10	6.1-7.3	0	0	0.0-2.0	0
	2-10	4-10	4.5-10.0	6.1-7.3	0	0	0.0-2.0	0
	10-20	---	---	---	---	---	---	---
Rock outcrop.								

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
510:									
Xyno-----	0-2	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0	
	2-11	4-10	2.9-7.4	6.1-7.8	0	0	0.0-2.0	0	
	11-21	---	---	---	---	---	---	---	
Canebrake-----	0-7	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0	
	7-17	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0	
	17-27	---	---	---	---	---	---	---	
Pilotwell, bouldery-----	0-5	5-10	4.0-7.8	6.1-7.8	0	0	0.0-2.0	0	
	5-25	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0	
	25-35	---	---	---	---	---	---	---	
512:									
Chollawell, cobbly substratum-----	0-22	7-12	6.3-10	6.6-7.8	0	0	0.0-2.0	0	
	22-40	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0	
	40-60	3-5	2.6-4.6	6.6-7.8	0	0	0.0-2.0	0	
Chollawell, gravelly-----	0-19	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0	
	19-54	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0	
	54-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0	
514:									
Chollawell-----	0-19	4-10	3.8-8.9	6.6-7.8	0	0	0.0-2.0	0	
	19-54	10-18	7.6-15	6.6-7.8	0	0	0.0-2.0	0	
	54-60	1-10	1.0-8.6	6.6-7.8	0	0	0.0-2.0	0	
Inyo-----	0-1	2-8	1.6-6.1	6.6-7.8	0	0	0.0-2.0	0	
	1-60	2-8	1.4-6.1	6.6-8.4	0	0	0.0-2.0	0	
515:									
Scodie-----	0-8	3-10	3.6-10	6.1-7.3	0	0	0.0-2.0	0	
	8-18	---	---	---	---	---	---	---	
Canebrake-----	0-3	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0	
	3-13	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0	
	13-23	---	---	---	---	---	---	---	
Xyno-----	0-2	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0	
	2-11	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0	
	11-21	---	---	---	---	---	---	---	
516:									
Xyno-----	0-2	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0	
	2-11	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0	
	11-21	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
516: Rock outcrop.								
Canebrake-----	0-4	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	4-12	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
517: Southlake-----	0-6	5-15	4.6-13	6.6-7.3	0	0	0.0-2.0	0
	6-15	5-15	4.6-13	6.6-7.3	0-1	0	0.0-2.0	0
	15-40	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2
	40-60	15-25	12-20	6.6-7.8	0-1	0	0.0-2.0	0-2
Southlake, gravelly-----	0-6	5-15	4.1-13	6.6-7.8	0	0	0.0-2.0	0
	6-19	10-18	7.6-15	6.6-7.8	0-1	0	0.0-2.0	0
	19-42	18-35	14-27	6.6-7.8	0-1	0	0.0-2.0	0-2
	42-60	10-18	8.1-15	6.6-7.8	0-1	0	0.0-2.0	0-2
Goodale-----	0-8	5-10	4.0-7.8	6.6-7.8	0	0	0.0-2.0	0
	8-60	5-10	3.1-7.4	6.6-7.8	0	0	0.0-2.0	0
518: Backcanyon-----	0-2	8-18	7.2-16	7.4-8.4	0-15	0-1	0.0-2.0	0-3
	2-11	8-18	6.6-15	7.9-8.4	3-20	0-1	0.0-2.0	0-3
	11-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Rock outcrop.								
520: Kernville-----	0-5	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	5-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-19	---	---	---	---	---	---	---
	19-29	---	---	---	---	---	---	---
Hogeye-----	0-20	10-18	8.6-15	6.6-7.3	0	0	0.0-2.0	0
	20-29	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0
	29-40	---	---	---	---	---	---	---
	40-50	---	---	---	---	---	---	---
Rock outcrop.								

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	ds/m	
523:								
Kernville, bouldery-----	0-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-20	---	---	---	---	---	---	---
	20-30	---	---	---	---	---	---	---
Faycreek-----	0-6	4-10	4.5-10	6.1-7.3	0	0	0.0-2.0	0
	6-12	4-10	4.5-10.0	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
Rock outcrop.								
525:								
Hungrygulch-----	0-19	8-15	7.1-13	6.6-7.3	0	0	0.0-2.0	0
	19-26	8-15	6.8-13	6.6-7.3	0	0	0.0-2.0	0
	26-36	---	---	---	---	---	---	---
Kernville-----	0-5	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	5-16	4-10	3.3-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-20	---	---	---	---	---	---	---
	20-30	---	---	---	---	---	---	---
Hogeye-----	0-2	10-18	8.6-15	6.6-7.3	0	0	0.0-2.0	0
	2-29	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0
	29-40	---	---	---	---	---	---	---
	40-50	---	---	---	---	---	---	---
530:								
Alberti, cobbly-----	0-4	28-35	22-27	6.6-7.8	0	0	0.0-2.0	0
	4-16	35-60	25-43	6.6-7.8	0	0	0.0-2.0	0
	16-22	---	---	---	---	---	---	---
	22-32	---	---	---	---	---	---	---
Alberti, gravelly-----	0-5	28-35	22-27	6.6-7.8	0	0	0.0-2.0	0
	5-15	35-60	25-43	6.6-7.8	0	0	0.0-2.0	0
	15-23	---	---	---	---	---	---	---
	23-33	---	---	---	---	---	---	---
531:								
Tweedy-----	0-11	12-20	10-17	6.6-8.4	0-1	0	0.0-2.0	0
	11-36	20-35	16-27	6.6-7.8	0	0	0.0-2.0	0
	36-46	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
531:								
Erskine-----	0-7	8-14	7.1-12	6.1-7.8	0	0	0.0-2.0	0
	7-19	11-18	9.1-15	6.1-7.8	0	0	0.0-2.0	0
	19-29	---	---	---	---	---	---	---
Alberti, gravelly-----	0-5	28-35	22-27	6.6-7.8	0	0	0.0-2.0	0
	5-17	35-60	25-43	6.6-7.8	0	0	0.0-2.0	0
	17-20	---	---	---	---	---	---	---
	20-30	---	---	---	---	---	---	---
532:								
Alberti, gravelly-----	0-1	23-27	19-22	6.6-7.8	0	0	0.0-2.0	0
	1-17	35-60	25-43	6.6-7.8	0	0	0.0-2.0	0
	17-22	---	---	---	---	---	---	---
	22-32	---	---	---	---	---	---	---
540:								
Canebrake-----	0-10	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	10-16	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-26	---	---	---	---	---	---	---
Lachim-----	0-3	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	3-13	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	13-26	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	26-36	---	---	---	---	---	---	---
541:								
Canebrake-----	0-9	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	9-12	3-10	2.3-7.4	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
Lachim-----	0-6	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	6-16	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	16-26	3-10	2.6-7.8	6.6-7.3	0	0	0.0-2.0	0
	26-36	---	---	---	---	---	---	---
Rock outcrop.								
543:								
Wortley-----	0-5	7-12	6.4-11	6.1-7.3	0	0	0.0-2.0	0
	5-10	7-12	6.4-11	6.1-7.3	0	0	0.0-2.0	0
	10-20	---	---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
543:									
Indiano-----	0-6	10-20	8.9-17	6.1-7.3	0	0	0.0-2.0	0	
	6-12	20-35	17-29	6.1-7.3	0	0	0.0-2.0	0	
	12-28	20-35	15-27	6.1-7.3	0	0	0.0-2.0	0	
	28-38	---	---	---	---	---	---	---	
Rock outcrop.									
544:									
Xeric Haplargids-----	0-24	5-15	4.3-11	6.6-7.3	0	0	0.0-2.0	0	
	24-38	10-20	7.6-14	6.6-7.3	0	0	0.0-2.0	0	
	38-40	18-25	11-17	6.6-7.8	0-1	0	0.0-2.0	0	
	40-50	---	---	---	---	---	---	---	
Lithic Xeric Haplargids-----	0-9	5-10	4.3-8.3	6.6-7.3	0	0	0.0-2.0	0	
	9-18	8-12	6.3-9.7	6.6-7.3	0	0	0.0-2.0	0	
	18-28	---	---	---	---	---	---	---	
545:									
Sacatar-----	0-10	5-10	4.8-9.1	6.6-7.3	0	0	0.0-2.0	0	
	10-34	10-18	8.6-15	6.6-7.3	0	0	0.0-2.0	0	
	34-44	---	---	---	---	---	---	---	
Canebrake-----	0-4	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0	
	4-14	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0	
	14-24	---	---	---	---	---	---	---	
549:									
Tunawee-----	0-10	5-9	5.4-8.9	6.6-7.3	0	0	0.0-2.0	0	
	10-12	5-9	4.7-8.5	6.6-7.3	0	0	0.0-2.0	0	
	12-22	---	---	---	---	---	---	---	
Rock outcrop.									
550:									
Kenypeak-----	0-8	5-15	4.8-13	6.1-7.3	0	0	0.0-2.0	0	
	8-18	---	---	---	---	---	---	---	
Rubble land.									
Rock outcrop.									
551:									
Tunawee-----	0-11	5-10	5.4-10.0	6.6-7.3	0	0	0.0-2.0	0	
	11-18	5-10	4.7-9.2	6.6-7.3	0	0	0.0-2.0	0	
	18-28	---	---	---	---	---	---	---	

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
552:								
Kenypeak-----	0-3	5-15	4.8-13	6.1-7.3	0	0	0.0-2.0	0
	3-12	5-15	4.8-13	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
Torriorthentic Haploxerolls-----	0-10	5-15	4.8-13	6.1-7.3	0	0	0.0-2.0	0
	10-34	5-15	4.8-13	6.1-7.3	0	0	0.0-2.0	0
	34-44	---	---	---	---	---	---	---
553:								
Tibbcreek-----	0-8	10-22	8.9-19	6.1-7.3	0	0	0.0-2.0	0
	8-18	18-36	14-28	6.1-7.3	0	0	0.0-2.0	0
	18-35	---	---	---	---	---	---	---
	35-45	---	---	---	---	---	---	---
554:								
Deerspring-----	0-11	8-15	7.3-14	7.4-8.4	0-2	0	0.0-4.0	1-8
	11-24	6-15	5.6-13	7.4-8.4	0-2	0	0.0-2.0	1-8
	24-80	5-18	4.6-16	7.4-8.4	0-2	0	0.0-2.0	1-8
555:								
Cumulic Endoaquolls, frigid-----	0-28	7-18	6.6-16	7.4-8.4	1-4	0	0.0-4.0	0-3
	28-52	7-18	6.4-16	7.4-7.8	0-1	0	0.0-2.0	0-2
	52-65	7-18	6.3-16	7.4-7.8	0-1	0	0.0-2.0	0-2
556:								
Toll-----	0-6	2-8	1.8-6.4	6.6-7.3	0	0	0.0-2.0	0
	6-24	0-5	0.0-4.2	6.6-7.3	0	0	0.0-2.0	0
	24-60	2-8	1.6-6.4	6.6-7.3	0	0	0.0-2.0	0
557:								
Scodie-----	0-3	3-10	3.6-10	6.1-7.3	0	0	0.0-2.0	0
	3-10	3-10	3.6-10.0	6.1-7.3	0	0	0.0-2.0	0
	10-20	---	---	---	---	---	---	---
Canebrake-----	0-3	3-8	2.6-6.4	6.1-7.3	0	0	0.0-2.0	0
	3-12	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
Deadfoot-----	0-10	3-10	3.6-10.0	6.6-7.3	0	0	0.0-2.0	0
	10-29	3-10	3.3-9.2	6.6-7.3	0	0	0.0-2.0	0
	29-39	---	---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation- exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct		meq/100g	pH	Pct	Pct	dS/m	
558:									
Indiano-----	0-6	10-20		8.9-17	6.1-7.3	0	0	0.0-2.0	0
	6-12	20-35		17-29	6.1-7.3	0	0	0.0-2.0	0
	12-28	20-35		15-27	6.1-7.3	0	0	0.0-2.0	0
	28-38	---		---	---	---	---	---	---
Wortley-----	0-2	7-12		6.4-11	6.1-7.3	0	0	0.0-2.0	0
	2-9	7-12		6.4-11	6.1-7.3	0	0	0.0-2.0	0
	9-19	---		---	---	---	---	---	---
560:									
Sacatar-----	0-2	5-10		4.8-9.1	6.6-7.3	0	0	0.0-2.0	0
	2-10	5-10		4.8-9.1	6.6-7.3	0	0	0.0-2.0	0
	10-34	10-18		8.6-15	6.6-7.3	0	0	0.0-2.0	0
	34-44	---		---	---	---	---	---	---
Wortley-----	0-2	7-12		6.4-11	6.1-7.3	0	0	0.0-2.0	0
	2-8	7-12		6.4-11	6.1-7.3	0	0	0.0-2.0	0
	8-18	---		---	---	---	---	---	---
Calpine-----	0-10	6-10		5.6-9.4	6.1-7.3	0	0	0.0-2.0	0
	10-68	7-12		6.3-10	6.6-7.3	0	0	0.0-2.0	0
561:									
Scodie-----	0-10	3-10		3.6-10	6.1-7.3	0	0	0.0-2.0	0
	10-20	---		---	---	---	---	---	---
Sacatar-----	0-2	5-10		4.8-9.1	6.6-7.3	0	0	0.0-2.0	0
	2-34	10-18		8.6-15	6.6-7.3	0	0	0.0-2.0	0
	34-44	---		---	---	---	---	---	---
Canebrake-----	0-6	3-10		2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	6-16	3-10		2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	16-26	---		---	---	---	---	---	---
562:									
Deerspring, partially drained-----	0-21	8-18		7.3-16	7.9-8.4	4-6	0-1	0.0-4.0	1-12
	21-60	8-18		7.1-15	7.9-8.4	2-4	0-1	0.0-4.0	0-8
570:									
Deadfoot-----	0-10	3-10		3.6-10.0	6.6-7.3	0	0	0.0-2.0	0
	10-23	3-10		3.3-9.2	6.6-7.3	0	0	0.0-2.0	0
	23-33	---		---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
570:								
Scodie-----	0-9	3-10	3.6-10	6.1-7.3	0	0	0.0-2.0	0
	9-19	---	---	---	---	---	---	---
Rock outcrop.								
590:								
Xyno-----	0-11	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0
	11-21	---	---	---	---	---	---	---
Canebrake-----	0-7	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	7-17	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	17-27	---	---	---	---	---	---	---
Pilotwell-----	0-5	5-10	4.0-7.8	6.1-7.8	0	0	0.0-2.0	0
	5-26	4-10	2.5-7.4	6.1-7.8	0	0	0.0-2.0	0
	26-36	---	---	---	---	---	---	---
591:								
Xyno-----	0-11	4-10	2.9-7.8	6.1-7.8	0	0	0.0-2.0	0
	11-21	---	---	---	---	---	---	---
Canebrake-----	0-6	3-10	2.6-7.8	6.1-7.3	0	0	0.0-2.0	0
	6-15	3-10	2.4-7.8	6.1-7.3	0	0	0.0-2.0	0
	15-25	---	---	---	---	---	---	---
Rock outcrop.								
599.								
Rock outcrop								
610:								
Hyte-----	0-5	7-15	6.4-13	6.6-7.8	0	0	0.0-2.0	0
	5-14	10-18	8.3-15	6.6-7.8	0	0	0.0-2.0	0
	14-24	---	---	---	---	---	---	---
Erskine-----	0-7	8-14	7.1-12	6.1-7.8	0	0	0.0-2.0	0
	7-19	11-18	9.1-15	6.1-7.8	0	0	0.0-2.0	0
	19-29	---	---	---	---	---	---	---
650:								
Stineway-----	0-3	8-20	7.3-17	6.6-8.4	0	0	0.0-2.0	0
	3-6	15-20	12-17	6.6-8.4	0	0	0.0-2.0	0
	6-16	15-25	12-20	6.6-8.4	0-1	0	0.0-2.0	0
	16-26	---	---	---	---	---	---	---

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth	Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m	
650:								
Kiscove-----	0-2	15-25	11-21	6.1-7.8	0	0	0.0-2.0	0
	2-9	20-35	14-27	6.1-7.8	0	0	0.0-2.0	0
	9-12	---	---	---	---	---	---	---
	12-22	---	---	---	---	---	---	---
Rock outcrop.								
3250:								
Jawbone-----	0-2	3-6	2.0-4.5	7.2-8.0	0-1	0	0.0-2.0	0-5
	2-6	3-7	2.0-5.4	7.2-8.0	0-1	0	0.0-2.0	0-5
	6-59	---	---	---	---	---	---	---
Jawbone, moderately deep-----	0-1	3-6	2.0-4.5	7.2-8.0	0-1	0	0.0-2.0	0-5
	1-7	3-7	2.0-5.4	7.2-8.0	0-1	0	0.0-2.0	0-5
	7-34	3-4	---	7.8-8.2	0-1	0	0.0-2.0	0-5
	34-44	---	---	---	---	---	---	---
4432:								
Koehn, occasionally flooded-----	0-1	3-7	3.1-5.4	6.6-7.8	0-1	0	0.0-2.0	0-5
	1-63	2-10	1.4-5.7	6.6-7.8	0-1	0	0.0-2.0	0-5
Koehn, frequently flooded-----	0-1	3-7	3.1-5.4	6.6-7.8	0-1	0	0.0-2.0	0-5
	1-63	2-10	1.4-5.7	6.6-7.8	0-1	0	0.0-2.0	0-5
5201:								
Wingap-----	0-3	4-10	3.7-8.7	6.6-7.3	0	0	0.0-2.0	0-5
	3-14	4-10	3.3-8.6	6.6-7.3	0	0	0.0-2.0	0-5
	14-41	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0-5
	41-54	4-10	3.3-8.6	6.6-7.3	0	0	0.0-2.0	0-5
	54-64	---	---	---	---	---	---	---
Pinyonpeak-----	0-2	5-12	5.3-10	6.6-7.8	0	0	0.0-2.0	0-5
	2-6	10-18	7.6-16	6.6-7.8	0	0	0.0-2.0	0-5
	6-8	---	---	---	---	---	---	---
	8-16	---	---	---	---	---	---	---
	16-26	---	---	---	---	---	---	---
5210:								
Grandora-----	0-3	2-6	1.8-5.0	6.6-7.3	0	0	0.0-2.0	0
	3-60	2-6	1.7-4.9	6.6-7.8	0	0	0.0-2.0	0
Grandora, warm-----	0-2	2-6	1.8-5.0	6.6-7.3	0	0	0.0-2.0	0
	2-60	2-6	1.7-4.9	6.6-7.8	0	0	0.0-2.0	0

Table 19.--Chemical Properties of the Soils--Continued

Map symbol and component name	Depth		Clay	Cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	Pct	meq/100g	pH	Pct	Pct	dS/m		
5210:									
Pinyonpeak-----	0-2	5-12	5.3-10	6.6-7.8	0	0	0.0-2.0	0-5	
	2-6	10-18	7.6-16	6.6-7.8	0	0	0.0-2.0	0-5	
	6-8	---	---	---	---	---	---	---	
	8-16	---	---	---	---	---	---	---	
	16-26	---	---	---	---	---	---	---	
6001:									
Goldpeak-----	0-2	3-9	2.8-7.9	6.1-7.4	0	0	0.0-2.0	0-5	
	2-94	10-18	7.6-15	6.6-7.4	0	0	0.0-2.0	0-5	
Pinyonpeak-----	0-2	5-12	5.3-10	6.6-7.8	0	0	0.0-2.0	0-5	
	2-6	10-18	7.6-16	6.6-7.8	0	0	0.0-2.0	0-5	
	6-8	---	---	---	---	---	---	---	
	8-16	---	---	---	---	---	---	---	
	16-26	---	---	---	---	---	---	---	
Wingap-----	0-3	4-10	3.7-8.7	6.6-7.3	0	0	0.0-2.0	0-5	
	3-14	4-10	3.3-8.6	6.6-7.3	0	0	0.0-2.0	0-5	
	14-41	10-18	7.6-15	6.6-7.3	0	0	0.0-2.0	0-5	
	41-54	4-10	3.3-8.6	6.6-7.3	0	0	0.0-2.0	0-5	
	54-60	---	---	---	---	---	---	---	
W. Water									

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features

(See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
115: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
128: Pits.										
Delano-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Oil waste land.										
136: Hesperia-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
138: Hesperia-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
139: Riverwash-----	C	Jan-May	0.0-2.0	>6.0	Apparent	---	---	None	Very long	Frequent
		Jun-Oct	0.0-2.0	>6.0	Apparent	---	---	None	---	---
		Nov-Dec	0.0-2.0	>6.0	Apparent	---	---	None	Very long	Frequent
143: Calicreek-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
144: Calicreek-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		May-Nov	>6.0	>6.0	---	---	---	None	---	---
		Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
145: Delano-----	C	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
146: Delano-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
147: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
148: Delano-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
149: Delano-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
150: Pits.										
Dumps-----	C	---	---	---	---	---	---	---	---	---
152: Pleito-----	C	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
153: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
154: Dam										
166: Delano-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
174: Xeric Torriorthents, silty-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Calcic Haploxerepts---	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
176: Elkhills, eroded-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
177: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Torriorthents, stratified-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
178: Delano-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cuyama-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
179: Torriorthents, stratified, eroded---	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Elkhills-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
184: Cuyama-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
185: Brecken-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cuyama-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
186: Cuyama-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
187: Trigo-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
188: Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Locobill-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
189: Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
192: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
193: Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
194: Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Delvar-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
195: Centerville-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Delvar-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
196: Exeter-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
197: Nord-----	B	Jan-May Jun-Sep Oct-Dec	>6.0 >6.0 >6.0	>6.0 >6.0 >6.0	---	---	---	None None None	Very brief --- Very brief	Rare --- Rare
198: Centerville-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Delvar-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
199: Exeter-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
200: Urban land-----	D	---	---	---	---	---	---	---	---	---
Delano-----	B	Jan-May Jun-Sep Oct-Dec	>6.0 >6.0 >6.0	>6.0 >6.0 >6.0	---	---	---	None None None	Very brief --- Very brief	Rare --- Rare

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
201:										
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Raggulch-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
205:										
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Trigo-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
207:										
Whitewolf-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
209:										
Whitewolf-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
210:										
Kernfork-----	D	Jan-Apr	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Occasional
		May-Nov	>6.0	>6.0	---	---	---	None	---	---
		Dec	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Occasional
212:										
Kernfork-----	D	Jan-Mar	3.0-6.0	>6.0	Apparent	0.0-0.3	Very brief	Rare	Long	Frequent
		Apr-May	3.0-6.0	>6.0	Apparent	---	---	None	---	None
		Jun-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov	>6.0	>6.0	---	0.0-0.3	Very brief	Rare	---	None
		Dec	3.0-6.0	>6.0	Apparent	0.0-0.3	Very brief	Rare	Brief	Frequent
213:										
Calicreek-----	B	Jan-Feb	>6.0	>6.0	---	---	---	None	Brief	Occasional
		Mar-Nov	>6.0	>6.0	---	---	---	None	---	---
		Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
215:										
Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
216:										
Inyo-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Frequent
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Frequent
Riverwash-----	A	Jan-Mar	1.0-3.0	>6.0	Apparent	---	---	None	Long	Frequent
		Apr	1.0-3.0	>6.0	Apparent	---	---	None	---	None
		May-Nov	>6.0	>6.0	---	---	---	None	---	None
		Dec	1.0-3.0	>6.0	Apparent	---	---	None	Long	Frequent
217:										
Whitewolf-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Frequent
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Frequent

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
217: Riverwash-----	A	Jan-Mar	1.0-3.0	>6.0	Apparent	---	---	None	Long	Frequent
		Apr	1.0-3.0	>6.0	Apparent	---	---	None	---	---
		May-Nov	>6.0	>6.0	---	---	---	None	---	---
		Dec	1.0-3.0	>6.0	Apparent	---	---	None	Long	Frequent
220: Aquents-----	B	Jan	0.0-2.0	>6.0	Apparent	---	---	---	Very long	Frequent
		Feb-Mar	0.0-2.0	>6.0	Apparent	0.0-1.3	Long	Frequent	Very long	Frequent
		Apr	1.0-3.0	>6.0	Apparent	0.0-0.8	Long	Frequent	---	---
		May	1.0-3.0	>6.0	Apparent	---	---	---	---	---
		Jun-Nov	3.5-6.0	>6.0	Apparent	---	---	---	---	---
		Dec	1.0-3.0	>6.0	Apparent	---	---	---	Very long	Frequent
Aquolls-----	C	Jan	0.0-2.0	>6.0	Apparent	0.0-0.8	Long	Frequent	Very long	Frequent
		Feb	0.0-2.0	>6.0	Apparent	0.0-1.3	Long	Frequent	Very long	Frequent
		Mar	0.0-2.0	>6.0	Apparent	0.0-1.3	Long	Frequent	---	---
		Apr-May	1.0-3.0	>6.0	Apparent	---	---	---	---	---
		Jun-Nov	3.5-6.0	>6.0	Apparent	---	---	---	---	---
		Dec	1.0-3.0	>6.0	Apparent	---	---	---	Very long	Frequent
Riverwash-----	A	Jan-Feb	0.0-1.0	>6.0	Apparent	0.0-1.0	Long	Occasional	Very long	Frequent
		Mar-Apr	0.0-1.0	>6.0	Apparent	0.0-1.0	Long	Occasional	---	---
		May	1.0-3.0	>6.0	Apparent	---	Long	Occasional	---	---
		Jun-Nov	>6.0	>6.0	---	---	---	---	---	---
		Dec	1.0-3.0	>6.0	Apparent	---	---	---	---	---
222: Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
223: Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
224: Inyo-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
238: Cinco-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
240: Dune land-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
241: Inyo-----	A	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	None
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
242: Inyo-----	A	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
243: Kernfork, saline-sodic, occasionally flooded-----	C	Jan-Mar	0.0-1.0	>6.0	Apparent	0.0-1.6	Long	Occasional	Long	Occasional
		Apr	0.0-1.0	>6.0	Apparent	---	---	---	---	---
		May	0.5-2.0	>6.0	Apparent	---	---	---	---	---
		Jun-Nov	3.0-4.0	>6.0	Apparent	---	---	---	---	---
		Dec	0.5-2.0	>6.0	Apparent	0.0-1.6	Long	Occasional	Long	Occasional
245: Chollawell-----	B	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
246: Chollawell-----	B	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
247: Inyo-----	A	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
249: Hoffman-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
250: Hoffman-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pilotwell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
253: Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Martee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
254: Martee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
255: Kernfork, occasionally flooded-----	D	Jan-Mar	3.0-4.0	>6.0	Apparent	0.0-1.6	Brief	Rare	Long	Occasional
		Apr	3.0-4.0	>6.0	Apparent	0.0-0.8	Brief	Rare	---	---
		May-Nov	3.0-4.0	>6.0	Apparent	---	---	---	---	---
		Dec	3.0-4.0	>6.0	Apparent	0.0-1.6	Brief	Rare	Long	Occasional

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
255: Kernfork, frequently flooded-----	C	Jan	0.0-0.5	>6.0	Apparent	0.0-1.6	Brief	Rare	Long	Frequent
		Feb-Mar	0.0-0.5	>6.0	Apparent	0.0-1.6	Brief	Occasional	Long	Frequent
		Apr	0.5-2.0	>6.0	Apparent	0.0-0.8	Brief	Occasional	---	---
		May	1.0-3.0	>6.0	Apparent	---	---	---	---	---
		Jun-Nov	3.0-4.0	>6.0	Apparent	---	---	---	---	---
		Dec	1.0-3.0	>6.0	Apparent	0.0-1.6	Brief	Rare	Long	Frequent
257: Hoffman-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
259: Cowspring-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
260: Cowspring-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
261: Blasingame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cieneba-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
264: Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
265: Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
266: Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
267: Cieneba-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Vista-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
268: Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
269:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
270:										
Locobill-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Backcanyon-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
271:										
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
272:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Edmundston-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
274:										
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
275:										
Strahle-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
276:										
Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hoffman-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cinco-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
277:										
Feethill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Vista-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
279:										
Strahle-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit Ft	Lower limit Ft	Kind of water table	Surface water depth Ft	Duration	Frequency	Duration	Frequency
280:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Martee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Edmundston-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
281:										
Havala-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kernfork-----	D	Jan-Apr	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov	>6.0	>6.0	---	---	---	None	Brief	Occasional
		Dec	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Occasional
282:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Friant-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
283:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Martee-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
284:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
285:										
Inyo-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
286:										
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Locobill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
287:										
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Strahle-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
288:										
Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
289:										
Erskine-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hyte-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
294:										
Edmundston-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
295:										
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rankor-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
296:										
Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tunis-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
297:										
Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Blasingame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
298:										
Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Feethill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
299:										
Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Feethill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sesame-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
300:										
Stineway-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kiscove-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
301:										
Feethill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Vista-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
302:										
Feethill-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cibo-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Cieneba-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
303:										
Steuber-----	B	Jan-Mar	>6.0	>6.0	---	---	---	None	Brief	Occasional
		Apr-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
304:										
Cibo-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
305:										
Chanac-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
306:										
Xerofluvents, occasionally flooded	C	Jan-Apr	2.0-6.0	>6.0	Apparent	---	---	None	Brief	Occasional
		May	2.0-6.0	>6.0	Apparent	---	---	None	---	---
		Jun	3.0-6.0	>6.0	Apparent	---	---	None	---	---
		Jul	4.0-6.0	>6.0	Apparent	---	---	None	---	---
		Aug-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov	4.0-6.0	>6.0	Apparent	---	---	None	Brief	Occasional
		Dec	3.0-6.0	>6.0	Apparent	---	---	None	Brief	Occasional
Riverwash-----	D	Jan-Jun	0.0-2.0	>6.0	Apparent	---	---	None	Very long	Frequent
		Jul-Oct	1.0-3.0	>6.0	Apparent	---	---	None	---	---
		Nov-Dec	0.0-2.0	>6.0	Apparent	---	---	None	Very long	Frequent
307:										
Typic Xeropsammets---	A	Jan-Mar	>6.0	>6.0	---	---	---	None	Brief	Occasional
		Apr-Nov	>6.0	>6.0	---	---	---	None	---	---
		Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
308:										
Rankor-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Edmundston-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
309:										
Rankor-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Edmundston-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
310: Stineway-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kiscove-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
311: Xerorthents-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
312: Havala-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
313: Dumps-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
314: Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Haplodurids-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
315: Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Haplodurids-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
316: Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
317: Premier-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
320: Southlake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
325: Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
326: Walong-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
330: Kernville-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Faycreek-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
350: Southlake, stony-----	B	Jan-May Jun-Sep Oct-Dec	>6.0 >6.0 >6.0	>6.0 >6.0 >6.0	---	---	---	None None None	Very brief --- Very brief	Rare --- Rare
Goodale-----	A	Jan-Apr May-Oct Nov-Dec	>6.0 >6.0 >6.0	>6.0 >6.0 >6.0	---	---	---	None None None	Very brief --- Very brief	Occasional --- Occasional
352: Goodale-----	A	Jan-Apr May-Oct Nov-Dec	>6.0 >6.0 >6.0	>6.0 >6.0 >6.0	---	---	---	None None None	Very brief --- Very brief	Occasional --- Occasional

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
352: Riverwash-----	A	Jan-Mar	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Apr	1.0-3.0	>6.0	Apparent	---	---	None	---	---
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov	>6.0	>6.0	---	---	---	None	Brief	Frequent
		Dec	1.0-3.0	>6.0	Apparent	---	---	None	Brief	Frequent
360: Kernville, bouldery---	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogeye-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Southlake-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
380: Delvar-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pleito-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
407: Centerville-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Brief	Very rare
410: Stineway-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kiscove-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Urban land-----	D	---	---	---	---	---	---	---	---	---
411: Delvar-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	Brief	Very rare
412: Chollawell-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
417: Southlake-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Southlake, gravelly---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Goodale-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Urban land-----	D	---	---	---	---	---	---	---	---	---
420: Southlake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
422: Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
Urban land-----	D	---	---	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
423:										
Auberry-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Crouch-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
424:										
Inyo-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
Urban land-----	D	---	---	---	---	---	---	---	---	---
430:										
Friant-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
432:										
Alberti, gravelly----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Urban land-----	D	---	---	---	---	---	---	---	---	---
441:										
Inyo-----	A	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
442:										
Inyo-----	A	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
445:										
Chollawell-----	B	Jan-Jun	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jul-Aug	>6.0	>6.0	---	---	---	None	---	---
		Sep-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
450:										
Southlake, stony-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Goodale-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Urban land-----	D	---	---	---	---	---	---	---	---	---
460:										
Kernville, bouldery---	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogeye-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
460: Southlake-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Urban land-----	D	---	---	---	---	---	---	---	---	---
465: Arujo-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Urban land-----	D	---	---	---	---	---	---	---	---	---
485: Inyo-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Kelval-----	B	Jan-Apr	>6.0	>6.0	---	---	---	None	Brief	Occasional
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Brief	Occasional
Urban land-----	D	---	---	---	---	---	---	---	---	---
488: Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Tollhouse-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Locobill-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Urban land-----	D	---	---	---	---	---	---	---	---	---
501: Hyte-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Erskine-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sorrell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
503: Tips-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Erskine-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
505: Chollawell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
507: Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pilotwell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
508: Pilotwell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
509:										
Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Faycreek-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
510:										
Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pilotwell, bouldery---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
512:										
Chollawell, cobbly substratum-----	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Chollawell, gravelly--	B	Jan-May	>6.0	>6.0	---	---	---	None	Very brief	Rare
		Jun-Sep	>6.0	>6.0	---	---	---	None	---	---
		Oct-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
514:										
Chollawell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Inyo-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
515:										
Scodie-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
516:										
Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
517:										
Southlake-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Southlake, gravelly---	B	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Goodale-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
518:										
Backcanyon-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
520:										
Kernville-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogeye-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
523:										
Kernville, bouldery---	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Faycreek-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
525:										
Hungrygulch-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kernville-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Hogeye-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
530:										
Alberti, cobbly-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Alberti, gravelly-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
531:										
Tweedy-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Erskine-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Alberti, gravelly-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
532:										
Alberti, gravelly-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
540:										
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Lachim-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
541:										
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Lachim-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
543:										
Wortley-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Indiano-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
544:										
Xeric Haplargids-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
Lithic Xeric Haplargids-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
545:										
Sacatar-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding			Flooding	
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
549: Tunawee-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
550: Kenypeak-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rubble land-----	---	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
551: Tunawee-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
552: Kenypeak-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Torriorthetic Haploxerolls-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
553: Tibbcreek-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
554: Deerspring-----	C	Jan-May	3.0-5.0	>6.0	Apparent	---	---	None	Very brief	Occasional
		Jun-Jul	5.0-6.0	>6.0	Apparent	---	---	None	---	---
		Aug-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov	5.0-6.0	>6.0	Apparent	---	---	None	Very brief	Occasional
		Dec	3.0-5.0	>6.0	Apparent	---	---	None	Very brief	Occasional
555: Cumulic Endoaquolls, frigid-----	C	Jan	1.0-2.0	>6.0	Apparent	---	---	None	---	---
		Feb	1.0-2.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Mar-May	0.0-2.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jun	2.0-4.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul-Oct	2.0-4.0	>6.0	Apparent	---	---	None	---	---
		Nov-Dec	1.0-2.0	>6.0	Apparent	---	---	None	---	---
556: Toll-----	A	Jan-Apr	>6.0	>6.0	---	---	---	None	Very brief	Rare
		May-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Rare
557: Scodie-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Deadfoot-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
558: Indiano-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Wortley-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
560: Sacatar-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
560: Wortley-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Calpine-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
561: Scodie-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Sacatar-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
562: Deerspring, partially drained-----	C	Jan-Jun	5.0-6.0	>6.0	Apparent	---	---	None	Brief	Frequent
		Jul-Oct	>6.0	>6.0	---	---	---	None	---	---
		Nov	>6.0	>6.0	---	---	---	None	Brief	Frequent
		Dec	5.0-6.0	>6.0	Apparent	---	---	None	Brief	Frequent
570: Deadfoot-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Scodie-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
590: Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pilotwell-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
591: Xyno-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Canebrake-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
599: Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
610: Hyte-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Erskine-----	C	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
650: Stineway-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Kiscove-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Rock outcrop-----	D	---	---	---	---	---	---	---	---	---
3250: Jawbone-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Jawbone, moderately deep-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 20.--Water Features--Continued

Map symbol and component name	Hydro-logic group	Months	Water table			Ponding		Flooding		
			Upper limit	Lower limit	Kind of water table	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft		Ft				
4432: Koehn, occasionally flooded-----	A	Jan-Feb	>6.0	>6.0	---	---	---	None	Very brief	Occasional
		Mar-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Occasional
Koehn, frequently flooded-----	A	Jan-Mar	>6.0	>6.0	---	---	---	None	Very brief	Frequent
		Apr-Oct	>6.0	>6.0	---	---	---	None	---	None
		Nov-Dec	>6.0	>6.0	---	---	---	None	Very brief	Frequent
5201: Wingap-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pinyonpeak-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
5210: Grandora-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Grandora, warm-----	A	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pinyonpeak-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
6001: Goldpeak-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Pinyonpeak-----	D	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
Wingap-----	B	Jan-Dec	>6.0	>6.0	---	---	---	None	---	None
W. Water										

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
115: Chanac-----	---	---	---	None	High	Low
128: Pits.						
Delano-----	---	---	---	None	High	Low
Oil waste land.						
136: Hesperia-----	---	---	---	None	High	Low
138: Hesperia-----	---	---	---	---	High	Low
139: Riverwash						
143: Calicreek-----	---	---	---	None	High	Low
144: Calicreek-----	---	---	---	None	High	Low
145: Delano-----	---	---	---	None	Moderate	High
146: Delano-----	---	---	---	None	High	Low
147: Chanac-----	---	---	---	None	High	Low
148: Delano-----	---	---	---	None	High	Low
149: Delano-----	---	---	---	None	High	Low
150: Pits.						
Dumps.						
152: Pleito-----	---	---	---	None	High	Low
153: Chanac-----	---	---	---	None	High	Low
154: Dam						
166: Delano-----	---	---	---	None	High	Low
Urban land.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
174: Xeric Torriorthents, silty-----	---	---	---	None	High	High
Calcic Haploxerepts-----	---	---	---	None	High	Moderate
176: Elkhills, eroded-----	---	---	---	Low	High	Low
177: Chanac-----	---	---	---	None	High	Low
Torriorthents, stratified-----	---	---	---	Low	High	Moderate
178: Delano-----	---	---	---	None	High	Low
Cuyama-----	---	---	---	None	High	Low
Premier-----	---	---	---	None	High	Low
179: Torriorthents, stratified, eroded---	---	---	---	None	High	Moderate
Elkhills-----	---	---	---	None	High	Low
184: Cuyama-----	---	---	---	None	High	Low
185: Brecken-----	---	---	---	None	Low	Moderate
Cuyama-----	---	---	---	None	High	Low
Pleito-----	---	---	---	None	High	Low
186: Cuyama-----	---	---	---	None	High	Low
187: Trigo-----	Paralithic bedrock	10-20	Weakly cemented	None	Moderate	Moderate
Chanac-----	---	---	---	None	High	Low
188: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
Locobill-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
189: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
192: Chanac-----	---	---	---	None	High	Low
Pleito-----	---	---	---	None	High	Low
193: Chanac-----	---	---	---	None	High	Low
Pleito-----	---	---	---	None	High	Low
194: Pleito-----	---	---	---	None	High	Low
Delvar-----	---	---	---	Low	High	Low
195: Centerville-----	Dense material	30-59	Moderately cemented	None	High	Low
Delvar-----	---	---	---	Low	High	Low
196: Exeter-----	Duripan	20-40	Indurated	---	High	Low
197: Nord-----	---	---	---	Low	High	Low
198: Centerville-----	---	---	---	None	High	Low
Delvar-----	---	---	---	Low	High	Low
199: Exeter-----	Duripan	20-40	Indurated	---	High	Low
200: Urban land.						
Delano-----	---	---	---	None	High	Low
201: Pleito-----	---	---	---	None	High	Low
Chanac-----	---	---	---	None	High	Low
Raggulch-----	Paralithic bedrock	10-20	Moderately cemented	None	Low	Moderate
	Lithic bedrock	15-40	Very strongly cemented			
205: Pleito-----	---	---	---	None	High	Low
Trigo-----	Paralithic bedrock	6-20	Weakly cemented	None	Moderate	Moderate
Chanac-----	---	---	---	None	High	Low
207: Whitewolf-----	---	---	---	None	High	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
209: Whitewolf-----	---	---	---	None	High	Low
210: Kernfork-----	---	---	---	None	High	Low
212: Kernfork-----	---	---	---	None	High	Low
213: Calicreek-----	---	---	---	None	High	Low
215: Kelval-----	---	---	---	None	High	Low
216: Inyo----- Riverwash.	---	---	---	None	Moderate	Low
217: Whitewolf----- Riverwash.	---	---	---	None	High	Low
220: Aquents----- Aquolls----- Riverwash.	---	---	---	None	High	Low
222: Kelval-----	---	---	---	None	High	Low
223: Kelval-----	---	---	---	Low	Moderate	Low
224: Inyo-----	---	---	---	None	Moderate	Low
238: Cinco-----	---	---	---	None	Moderate	Low
240: Dune land-----	---	---	---	None	Low	Low
241: Inyo-----	---	---	---	None	Moderate	Low
242: Inyo-----	---	---	---	None	Moderate	Low
243: Kernfork, saline-sodic, occasionally flooded-----	---	---	---	None	High	Low
245: Chollawell-----	---	---	---	None	High	Low
246: Chollawell-----	---	---	---	None	High	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
247:		In				
Inyo-----	---	---	---	None	Moderate	Low
Tips-----	Paralithic bedrock	8-20	Moderately cemented	Low	Moderate	Low
Rock outcrop.						
249:						
Hoffman-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Rock outcrop.						
250:						
Hoffman-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tips-----	Paralithic bedrock	8-20	Moderately cemented	Low	Moderate	Low
Pilotwell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
253:						
Sorrell-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
Martee-----	Paralithic bedrock Lithic bedrock	10-18 12-20	Moderately cemented Indurated	Low	Moderate	Low
Rock outcrop.						
254:						
Martee-----	Paralithic bedrock Lithic bedrock	10-18 12-20	Moderately cemented Indurated	Low	Moderate	Low
Rock outcrop.						
255:						
Kernfork, occasionally flooded-----	---	---	---	None	High	Low
Kernfork, frequently flooded-----	---	---	---	None	High	Low
257:						
Hoffman-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tips-----	Paralithic bedrock	8-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
259:						
Cowspring-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
260:						
Cowspring-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
260:		In				
Tips----- Rock outcrop.	Paralithic bedrock	8-20	Moderately cemented	None	Moderate	Low
261:						
Blasingame----- Arujo----- Cieneba-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
264:						
Arujo----- Walong----- Tunis-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
265:						
Arujo-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
266:						
Tunis----- Rock outcrop.	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
267:						
Cieneba----- Vista----- Rock outcrop.	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
268:						
Tunis----- Tollhouse----- Sorrell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
269:						
Tollhouse----- Sorrell----- Rock outcrop.	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
270: Locobill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Backcanyon-----	Paralithic bedrock	10-20	Moderately cemented	None	High	Low
	Lithic bedrock	11-24	Very strongly cemented			
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
271: Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tunis-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
272: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
Edmundston-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Sorrell-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
274: Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Rock outcrop.						
275: Strahle-----	Paralithic bedrock	10-14	Moderately cemented	None	Moderate	Low
	Lithic bedrock	12-20	Indurated			
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
276: Tips-----	Paralithic bedrock	8-20	Moderately cemented	Low	Moderate	Low
Hoffman-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Cinco-----	---	---	---	None	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
277: Feethill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Vista-----	Paralithic bedrock	21-24	Moderately cemented	None	Moderate	Low
Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
279: Strahle-----	Paralithic bedrock	10-18	Moderately cemented	None	Moderate	Low
	Lithic bedrock	12-20	Indurated			
Rock outcrop.						
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
280: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
Martee-----	Paralithic bedrock	10-18	Moderately cemented	Low	Moderate	Low
	Lithic bedrock	12-20	Indurated			
Edmundston-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
281: Havala-----	---	---	---	None	High	Low
Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Kernfork-----	---	---	---	None	High	Low
282: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Friant-----	Lithic bedrock	6-20	Indurated	None	Moderate	Moderate
283: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
Martee-----	Paralithic bedrock	10-18	Moderately cemented	Low	Moderate	Low
	Lithic bedrock	12-20	Indurated			
Rock outcrop.						
284: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
285: Inyo-----	---	---	---	None	Moderate	Low
Kelval-----	---	---	---	None	High	Low
286: Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Locobill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
287: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Strahle-----	Paralithic bedrock	10-12	Moderately cemented	None	Moderate	Low
	Lithic bedrock	12-20	Indurated			
288: Sorrell-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
Arujo-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Rock outcrop.						
289: Erskine-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Hyte-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
294: Edmundston-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
295: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Tunis-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rankor-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
296: Arujo-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Tunis-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
297: Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Blasingame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Rock outcrop.						
298: Arujo-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Feethill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
299: Arujo-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Feethill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Sesame-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
300: Stineway-----	Lithic bedrock	10-20	Indurated	None	Moderate	Moderate
Kiscove-----	Paralithic bedrock	5-19	Moderately cemented	None	Moderate	Low
	Lithic bedrock	9-20	Very strongly cemented			
301: Feethill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Vista-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Rock outcrop.						
302: Feethill-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
302: Cibo-----	Lithic bedrock	20-40	Moderately cemented	None	High	Low
Cieneba-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
303: Steuber-----	---	---	---	None	High	Low
304: Cibo-----	Lithic bedrock	20-40	Indurated	None	High	Low
305: Chanac-----	---	---	---	None	High	Low
Fleito-----	---	---	---	None	High	Low
Premier-----	---	---	---	None	High	Low
306: Xerofluvents, occasionally flooded-- Riverwash.	---	---	---	None	High	Moderate
307: Typic Xeropsamments-----	---	---	---	None	Moderate	Low
308: Rankor-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Low
Edmundston-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
309: Rankor-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Low
Edmundston-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
310: Stineway-----	Lithic bedrock	10-20	Indurated	None	Moderate	Moderate
Kiscove-----	Paralithic bedrock	5-19	Moderately cemented	None	Moderate	Low
	Lithic bedrock	9-20	Very strongly cemented			
311: Xerorthents-----	Paralithic bedrock	5-20	Moderately cemented	---	---	---
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
312: Havala-----	---	---	---	---	High	Low
313: Dumps-----	---	---	---	None	High	Moderate
314: Premier-----	---	---	---	None	High	Low
Haplodurids-----	Duripan	20-40	Indurated	None	High	Low
315: Premier-----	---	---	---	None	High	Low
Haplodurids-----	Duripan	20-40	Moderately cemented	None	High	Low
316: Premier-----	---	---	---	None	High	Low
317: Premier-----	---	---	---	None	High	Low
320: Southlake-----	---	---	---	None	High	Low
325: Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
326: Walong-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
330: Kernville-----	Paralithic bedrock	7-19	Moderately cemented	None	Moderate	Moderate
	Lithic bedrock	10-20	Indurated			
Faycreek-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
350: Southlake, stony-----	---	---	---	None	High	Low
Goodale-----	---	---	---	Low	Moderate	Low
352: Goodale-----	---	---	---	Low	Moderate	Low
Riverwash.						
360: Kernville, bouldery-----	Paralithic bedrock	7-19	Moderately cemented	None	Moderate	Moderate
	Lithic bedrock	10-20	Very strongly cemented			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
360:		In				
Hogeye-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
	Lithic bedrock	40-60	Very strongly cemented			
Southlake-----	---	---	---	None	High	Low
380:						
Delvar-----	---	---	---	None	High	Low
Pleito-----	---	---	---	None	High	Low
407:						
Centerville-----	Dense material	48-60	Moderately cemented	Low	High	Low
410:						
Stineway-----	Lithic bedrock	10-20	Indurated	None	Moderate	Moderate
Kiscove-----	Paralithic bedrock	5-19	Moderately cemented	None	Moderate	Low
	Lithic bedrock	9-20	Very strongly cemented			
Urban land.						
411:						
Delvar-----	---	---	---	None	High	Low
412:						
Chollawell-----	---	---	---	None	High	Low
Urban land.						
417:						
Southlake-----	---	---	---	None	High	Low
Southlake, gravelly-----	---	---	---	None	High	Low
Goodale-----	---	---	---	None	Moderate	Low
Urban land.						
420:						
Southlake-----	---	---	---	None	High	Low
Urban land.						
422:						
Kelval-----	---	---	---	None	High	Low
Urban land.						
423:						
Auberry-----	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate
Crouch-----	Paralithic bedrock	60-70	Moderately cemented	Low	Moderate	Moderate
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
424: Inyo----- Urban land.	---	In ---	---	None	High	Low
430: Friant----- Rock outcrop.	Lithic bedrock	6-20	Indurated	None	Moderate	Moderate
432: Alberti, gravelly----- Urban land.	Paralithic bedrock Lithic bedrock	10-20 20-26	Moderately cemented Indurated	None	Moderate	Low
441: Inyo----- Urban land.	---	---	---	None	Moderate	Low
442: Inyo----- Urban land.	---	---	---	None	Moderate	Low
445: Chollawell----- Urban land.	---	---	---	None	High	Low
450: Southlake, stony----- Goodale----- Urban land.	---	---	---	None Low	High Moderate	Low Low
460: Kernville, bouldery----- Hogeye----- Southlake----- Urban land.	Paralithic bedrock Lithic bedrock Paralithic bedrock Lithic bedrock ---	7-19 10-20 20-40 40-60 ---	Moderately cemented Very strongly cemented Moderately cemented Very strongly cemented ---	None None None	Moderate Moderate High	Moderate Low Low
465: Arujo----- Urban land.	Paralithic bedrock	40-60	Moderately cemented	None	Moderate	Moderate

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
485: Inyo-----	---	---	---	None	Moderate	Low
Kelval-----	---	---	---	None	High	Low
Urban land.						
488: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Moderate
Tollhouse-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Moderate
Locobill-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
Urban land.						
501: Hyte-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Erskine-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Sorrell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
503: Tips-----	Paralithic bedrock	8-20	Moderately cemented	Low	Moderate	Low
Erskine-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
Rock outcrop.						
505: Chollawell-----	---	---	---	None	High	Low
507: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Pilotwell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
508: Pilotwell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Xyno-----	Lithic bedrock	8-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
509: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Faycreek-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
510: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Pilotwell, bouldery-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
512: Chollawell, cobbly substratum-----	---	---	---	None	Low	Low
Chollawell, gravelly-----	---	---	---	None	Low	Low
514: Chollawell-----	---	---	---	None	High	Low
Inyo-----	---	---	---	None	Moderate	Low
515: Scodie-----	Paralithic bedrock	5-10	Moderately cemented	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Xyno-----	Lithic bedrock	8-20	Moderately cemented	None	Moderate	Low
516: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Rock outcrop.						
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
517: Southlake-----	---	---	---	None	High	Low
Southlake, gravelly-----	---	---	---	None	High	Low
Goodale-----	---	---	---	None	Moderate	Low
518: Backcanyon-----	Paralithic bedrock	10-20	Moderately cemented	None	High	Low
	Lithic bedrock	11-20	Very strongly cemented			
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
520: Kernville-----	Paralithic bedrock	7-19	Moderately cemented	None	Moderate	Low
	Lithic bedrock	10-20	Indurated			
Hogeye-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
	Lithic bedrock	40-60	Very strongly cemented			
Rock outcrop.						
523: Kernville, bouldery-----	Paralithic bedrock	7-19	Moderately cemented	None	Moderate	Moderate
	Lithic bedrock	10-20	Very strongly cemented			
Faycreek-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
525: Hungrygulch-----	Paralithic bedrock	20-60	Moderately cemented	None	Moderate	Low
Kernville-----	Paralithic bedrock	7-19	Moderately cemented	None	Moderate	Moderate
	Lithic bedrock	10-20	Very strongly cemented			
Hogeye-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
	Lithic bedrock	40-60	Very strongly cemented			
530: Alberti, cobbly-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
	Lithic bedrock	20-26	Indurated			
Alberti, gravelly-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
	Lithic bedrock	20-26	Very strongly cemented			
531: Tweedy-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Moderate
Erskine-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
Alberti, gravelly-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
	Lithic bedrock	20-26	Indurated			
532: Alberti, gravelly-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
	Lithic bedrock	20-26	Indurated			

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
540: Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
Lachim-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
541: Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Lachim-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Rock outcrop.						
543: Wortley-----	Paralithic bedrock	8-20	Moderately cemented	None	Moderate	Low
Indiano-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Rock outcrop.						
544: Xeric Haplargids-----	Lithic bedrock	20-40	Moderately cemented	Low	High	Low
Lithic Xeric Haplargids-----	Lithic bedrock	10-20	Indurated	Low	High	Low
545: Sacatar-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
549: Tunawee-----	Paralithic bedrock	10-20	Moderately cemented	Moderate	Moderate	Low
Rock outcrop.						
550: Kenypeak-----	Lithic bedrock	5-10	Indurated	Low	Moderate	Low
Rubble land.						
Rock outcrop.						
551: Tunawee-----	Paralithic bedrock	10-20	Moderately cemented	Moderate	Moderate	Low
552: Kenypeak-----	Lithic bedrock	5-20	Indurated	Low	Moderate	Low
Torriorthentic Haploxerolls-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
553:		In				
Tibbcreek-----	Paralithic bedrock	10-20	Moderately cemented	Moderate	Moderate	Low
	Lithic bedrock	20-40	Very strongly cemented			
554:						
Deerspring-----	---	---	---	Low	High	Low
555:						
Cumulic Endoaquolls, frigid-----	---	---	---	High	High	Low
556:						
Toll-----	---	---	---	Low	Moderate	Low
557:						
Scodie-----	Paralithic bedrock	5-10	Moderately cemented	Moderate	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
Deadfoot-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
558:						
Indiano-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Wortley-----	Paralithic bedrock	8-20	Moderately cemented	None	Moderate	Low
560:						
Sacatar-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Wortley-----	Paralithic bedrock	8-20	Moderately cemented	None	Moderate	Low
Calpine-----	---	---	---	None	Moderate	Moderate
561:						
Scodie-----	Paralithic bedrock	5-10	Moderately cemented	None	Moderate	Low
Sacatar-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
562:						
Deerspring, partially drained-----	---	---	---	None	High	Low
570:						
Deadfoot-----	Paralithic bedrock	20-40	Moderately cemented	Low	Moderate	Low
Scodie-----	Paralithic bedrock	5-10	Moderately cemented	Moderate	Moderate	Low
Rock outcrop.						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
590: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Pilotwell-----	Paralithic bedrock	20-40	Moderately cemented	None	Moderate	Low
591: Xyno-----	Lithic bedrock	8-20	Indurated	None	Moderate	Low
Canebrake-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Rock outcrop.						
599. Rock outcrop						
610: Hyte-----	Paralithic bedrock	10-20	Moderately cemented	None	Moderate	Low
Erskine-----	Paralithic bedrock	10-20	Moderately cemented	Low	Moderate	Low
650: Stineway-----	Lithic bedrock	10-20	Indurated	Low	Moderate	Moderate
Kiscove-----	Paralithic bedrock	5-19	Moderately cemented	None	Moderate	Low
	Lithic bedrock	9-20	Very strongly cemented			
Rock outcrop.						
3250: Jawbone-----	Paralithic bedrock	4-12	Weakly cemented	Low	Moderate	Low
Jawbone, moderately deep-----	Lithic bedrock	30-39	Very strongly cemented	Low	Moderate	Low
4432: Koehn, occasionally flooded-----	---	---	---	Low	Moderate	Low
Koehn, frequently flooded-----	---	---	---	Low	Moderate	Low
5201: Wingap-----	Paralithic bedrock	39-59	Moderately cemented	Moderate	Low	Low
Pinyonpeak-----	Paralithic bedrock	6-14	Weakly cemented	Moderate	Moderate	Low
	Lithic bedrock	12-20	Indurated			
5210: Grandora-----	---	---	---	Low	Moderate	Low
Grandora, warm-----	---	---	---	Low	Moderate	Low

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 21.--Soil Features--Continued

Map symbol and component name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
5210: Pinyonpeak-----	Paralithic bedrock	In	Weakly cemented	Moderate	Moderate	Low
	Lithic bedrock	6-14	Indurated			
6001: Goldpeak-----	---	---	---	Moderate	Moderate	Low
Pinyonpeak-----	Paralithic bedrock	6-14	Weakly cemented	Moderate	Moderate	Low
	Lithic bedrock	12-20	Indurated			
Wingap-----	Paralithic bedrock	39-59	Moderately cemented	Moderate	Low	Low
W. Water						

Kern County, Northeastern Part, and Southeastern Part of Tulare County, California

Table 22.--Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series)

Soil name	Family or higher taxonomic class
Alberti-----	Clayey, smectitic, thermic, shallow Vertic Rhodoxeralfs
Aquents-----	Aquents
Aquolls-----	Aquolls
Arujo-----	Fine-loamy, mixed, superactive, thermic Pachic Argixerolls
Auberry-----	Fine-loamy, mixed, semiactive, thermic Ultic Haploxeralfs
Backcanyon-----	Loamy, mixed, superactive, thermic, shallow Calcic Haploxerepts
Blasingame-----	Fine-loamy, mixed, superactive, thermic Typic Haploxeralfs
Brecken-----	Loamy-skeletal, mixed, superactive, thermic Typic Argixerolls
Calcic Haploxerepts-----	Fine-silty, mixed, superactive, thermic Calcic Haploxerepts
Calicreek-----	Sandy, mixed, thermic Xeric Torrifluvents
Calpine-----	Coarse-loamy, mixed, superactive, mesic Aridic Haploxerolls
Canebrake-----	Mixed, mesic, shallow Xeric Torripsamments
Centerville-----	Fine, smectitic, thermic Aridic Calcixererts
Chanac-----	Fine-loamy, mixed, superactive, thermic Calcic Haploxerepts
Chollawell-----	Coarse-loamy, mixed, superactive, thermic Xeric Haplargids
Cibo-----	Fine, smectitic, thermic Aridic Haploxererts
Cieneba-----	Loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents
Cinco-----	Mixed, thermic Xeric Torripsamments
Cowspring-----	Coarse-loamy, mixed, superactive, thermic Xeric Haplargids
Crouch-----	Coarse-loamy, mixed, superactive, mesic Ultic Haploxerolls
Cumulic Endoaquolls-----	Coarse-loamy, mixed, superactive, frigid Cumulic Endoaquolls
Cuyama-----	Fine-loamy, mixed, superactive, thermic Xeric Haplargids
Deadfoot-----	Sandy-skeletal, mixed, mesic Torriorthentic Haploxerolls
Deerspring-----	Coarse-loamy, mixed, superactive, mesic Cumulic Haploxerolls
Delano-----	Fine-loamy, mixed, superactive, thermic Xeric Haplargids
Delvar-----	Fine, smectitic, thermic Calcic Pachic Argixerolls
Edmundston-----	Coarse-loamy, mixed, superactive, mesic Pachic Haploxerolls
Elkhills-----	Coarse-loamy, mixed, superactive, calcareous, thermic Typic Torriorthents
Erskine-----	Loamy, mixed, superactive, mesic, shallow Mollic Haploxeralfs
Exeter-----	Fine-loamy, mixed, superactive, thermic Typic Durixeralfs
Faycreek-----	Mixed, mesic, shallow Psammentic Haploxerolls
Feethill-----	Fine-loamy, mixed, superactive, thermic Typic Argixerolls
Friant-----	Loamy, mixed, superactive, thermic Lithic Haploxerolls
Goldpeak-----	Coarse-loamy, mixed, superactive, thermic Typic Haplargids
Goodale-----	Sandy-skeletal, mixed, thermic Xeric Torriorthents
Grandora-----	Mixed, mesic Xeric Torripsamments
Haplodurids-----	Mixed Haplodurids
Havala-----	Fine-loamy, mixed, superactive, thermic Pachic Argixerolls
Hesperia-----	Coarse-loamy, mixed, superactive, nonacid, thermic Xeric Torriorthents
Hoffman-----	Coarse-loamy, mixed, superactive, thermic Typic Haploxeralfs
Hogeye-----	Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents
Hungrygulch-----	Coarse-loamy, mixed, superactive, nonacid, mesic Typic Xerorthents
Hyte-----	Loamy, mixed, superactive, thermic, shallow Mollic Haploxeralfs
Indiano-----	Fine-loamy, mixed, superactive, mesic Aridic Argixerolls
Inyo-----	Mixed, thermic Xeric Torripsamments
Jawbone-----	Mixed, thermic, shallow Typic Torripsamments
*Jawbone-----	Mixed, thermic Typic Torripsamments
Kelval-----	Sandy, mixed, thermic Torrifluventic Haploxerolls
Kenypeak-----	Loamy-skeletal, mixed, superactive, frigid Lithic Haploxerolls
Kernfork-----	Coarse-loamy, mixed, superactive, thermic Cumulic Endoaquolls
Kernville-----	Mixed, thermic, shallow Typic Xeropsamments
Kiscove-----	Loamy, mixed, superactive, mesic, shallow Typic Haploxeralfs
Koehn-----	Mixed, thermic Typic Torripsamments
Lachim-----	Mixed, mesic Xeric Torripsamments
Lithic Xeric Haplargids--	Mixed, mesic Lithic Xeric Haplargids
Locobill-----	Coarse-loamy, mixed, superactive, mesic Typic Haploxeralfs
Martee-----	Sandy-skeletal, mixed, mesic, shallow Ultic Haploxerolls
Nord-----	Coarse-loamy, mixed, superactive, thermic Cumulic Haploxerolls
Pilotwell-----	Mixed, thermic Xeric Torripsamments

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Table 22.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Pinyonpeak-----	Loamy, mixed, superactive, thermic, shallow Typic Haplargids
Pleito-----	Fine-loamy, mixed, superactive, thermic Calcic Pachic Haploxerolls
Premier-----	Coarse-loamy, mixed, superactive, calcareous, thermic Xeric Torriorthents
Raggulch-----	Loamy, mixed, superactive, thermic, shallow Mollic Haploxeralfs
Rankor-----	Fine-loamy, mixed, superactive, mesic Pachic Argixerolls
Sacatar-----	Coarse-loamy, mixed, superactive, mesic Aridic Argixerolls
Scodie-----	Mixed, mesic, shallow Torripsammentic Haploxerolls
Sesame-----	Fine-loamy, mixed, superactive, thermic Typic Haploxeralfs
Sorrell-----	Coarse-loamy, mixed, superactive, mesic Typic Argixerolls
Southlake-----	Loamy-skeletal, mixed, superactive, thermic Xeric Haplargids
Steuber-----	Coarse-loamy, mixed, superactive, nonacid, thermic Mollic Xerofluvents
Stineway-----	Loamy-skeletal, mixed, superactive, thermic Lithic Mollic Haploxeralfs
Strahle-----	Loamy, mixed, superactive, thermic, shallow Mollic Haploxeralfs
Tibbcreek-----	Loamy, mixed, superactive, frigid, shallow Aridic Argixerolls
Tips-----	Loamy, mixed, superactive, thermic, shallow Xeric Haplargids
Toll-----	Mixed, mesic Xeric Torripsamments
Tollhouse-----	Loamy, mixed, superactive, mesic, shallow Entic Haploxerolls
Torriorthentic Haploxerolls-----	Loamy-skeletal, mixed, superactive, thermic Torriorthentic Haploxerolls
Torriorthents-----	Torriorthents
Trigo-----	Loamy, mixed, superactive, nonacid, thermic, shallow Typic Xerorthents
Tunawee-----	Mixed, frigid, shallow Torripsammentic Haploxerolls
Tunis-----	Loamy, mixed, superactive, thermic, shallow Typic Haploxerolls
Tweedy-----	Fine-loamy, mixed, superactive, mesic Typic Argixerolls
Typic Xeropsamments-----	Mixed Typic Xeropsamments
Vista-----	Coarse-loamy, mixed, superactive, thermic Typic Haploxerepts
Walong-----	Coarse-loamy, mixed, superactive, thermic Typic Haploxerolls
Whitewolf-----	Mixed, thermic Xeric Torripsamments
Wingap-----	Coarse-loamy, mixed, superactive, thermic Typic Haplargids
Wortley-----	Loamy, mixed, superactive, mesic, shallow Torriorthentic Haploxerolls
Xeric Haplargids-----	Coarse-loamy, mixed, superactive, mesic Xeric Haplargids
Xeric Torriorthents-----	Fine-silty, mixed, superactive, nonacid, thermic Xeric Torriorthents
Xerofluvents-----	Xerofluvents
Xerorthents-----	Xerorthents
Xyno-----	Mixed, thermic, shallow Xeric Torripsamments

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