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Agriculture



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Natural
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Service

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Alaska Soil and Water
Conservation District; CIRI;
Homer Soil and Water
Conservation District; Kenai
Natives Association, Inc.;
Kenai Peninsula Borough;
Kenai Soil and Water
Conservation District;
Ninilchik Native Association,
Inc.; Salamatof Native
Association, Inc.; The Nature
Conservancy; and the
University of Alaska
Fairbanks, Agriculture and
Forestry Experiment Station

Soil Survey of Western Kenai Peninsula Area, Alaska



How To Use This Soil Survey

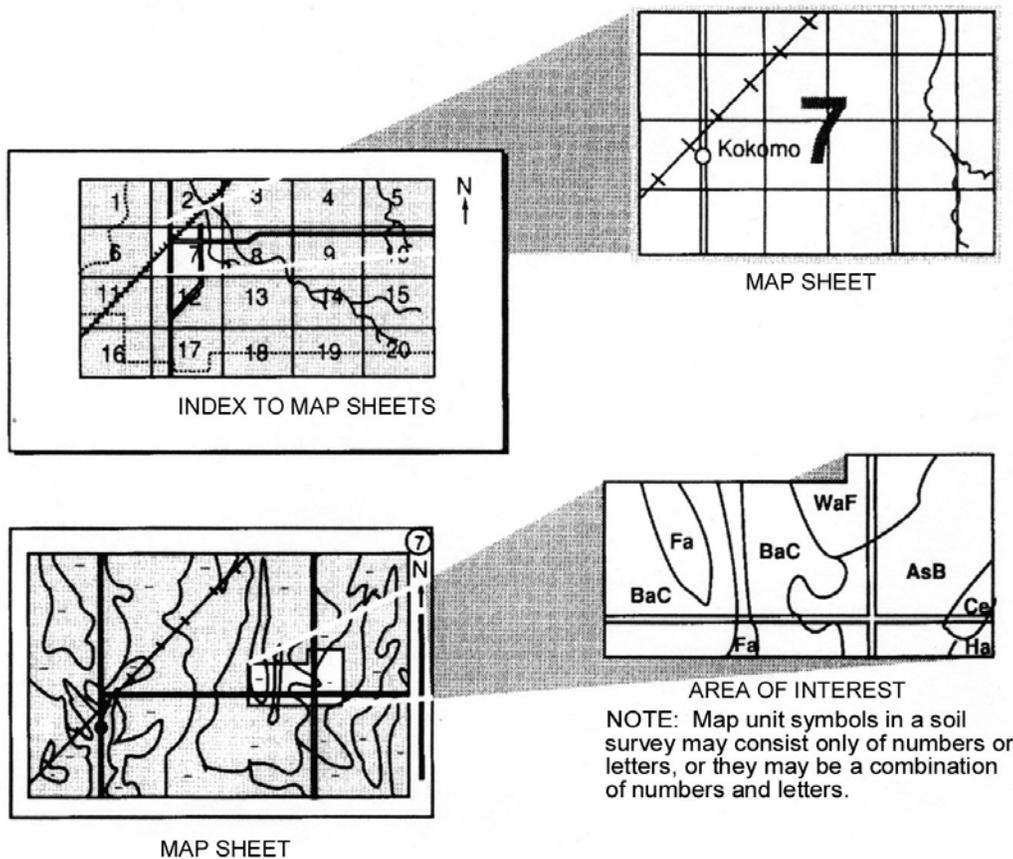
Detailed Soil Maps

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.



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 and Forestry Experiment Station, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 2003. Soil names and descriptions were approved in 2004. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2004. This survey was made cooperatively by the Natural Resources Conservation Service and the Alaska Soil and Water Conservation District; CIRI; Homer Soil and Water Conservation District; Kenai Natives Association, Inc.; Kenai Peninsula Borough; Kenai Soil and Water Conservation District; Ninilchik Native Association, Inc.; Salamatof Native Association, Inc.; The Nature Conservancy; and the University of Alaska Fairbanks, Agriculture and Forestry Experiment Station. This survey is part of the technical assistance furnished through the Homer Soil and Water Conservation District and the Kenai Soil and Water Conservation District.

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Cover: Kenai River at Soldotna. The Kenai River is incised in gravelly alluvial deposits that comprise Soldotna soils. The Kenai Mountain range is in the background.

Additional information about the nation's natural resources is available on the Natural Resources Conservation Service home page on the World Wide Web. The address is <http://www.nrcs.usda.gov>.

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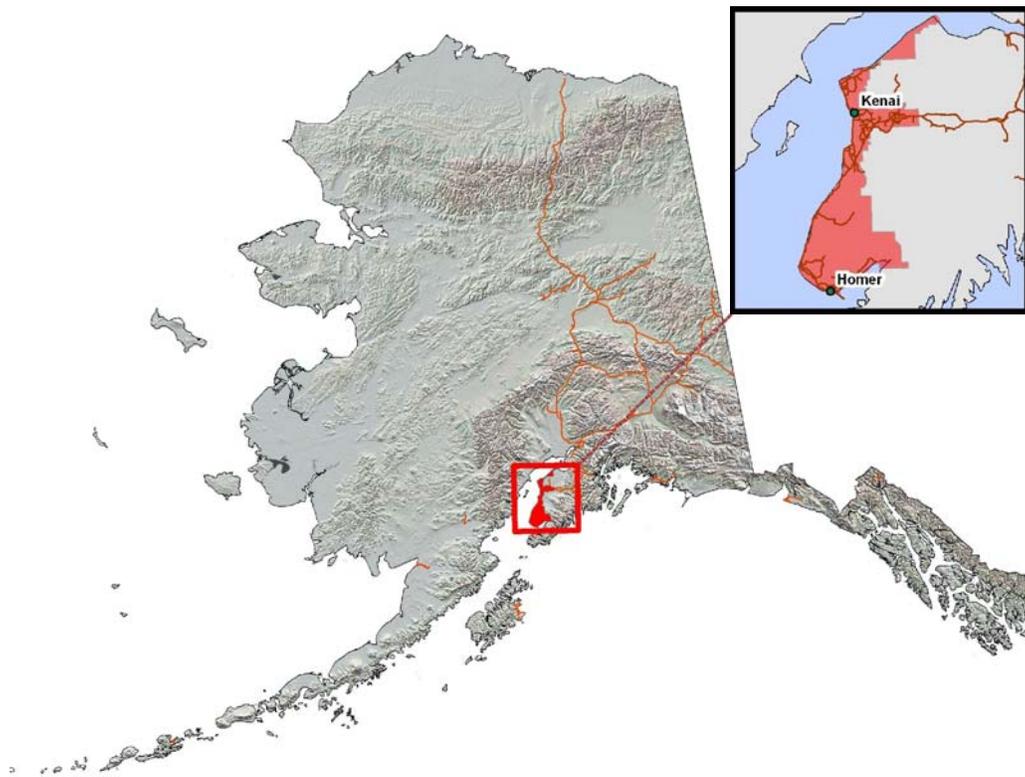


Figure 1. Location of the Western Kenai Peninsula Area in Alaska.

Foreword

This soil survey contains information that can be used in land-planning programs in the Western Kenai Peninsula Area, Alaska. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, 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. Government agencies, community officials, Alaska Native tribes, 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. Wet soils are poorly suited to use for waste treatment systems. A high water table makes a soil poorly suited to basements or underground installations.

Many soil properties that affect land use are described in this soil survey. 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 Homer and Kenai offices of the Natural Resources Conservation Service or at Alaska Cooperative Extension.

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Soil Survey of Western Kenai Peninsula Area, Alaska

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United States Department of Agriculture, Natural Resources Conservation Service in cooperation with the Alaska Soil and Water Conservation District; CIRI; Homer Soil and Water Conservation District; Kenai Natives Association, Inc.; Kenai Peninsula Borough; Kenai Soil and Water Conservation District; Ninilchik Native Association, Inc.; Salamatof Native Association, Inc.; The Nature Conservancy; and the University of Alaska Fairbanks, Agriculture and Forestry Experiment Station

Introduction

The Soil Survey of the Western Kenai Peninsula Area, Alaska is an update of the *Soil Survey of the Kenai-Kasilof Area, Alaska* (Soil Survey Division Staff 1958) and the *Soil Survey of the Homer-Ninilchik Area, Alaska* (Soil Survey Division Staff 1971). A number of published and unpublished soils investigations have been incorporated into this updated survey, including: *Soil Survey of Homer, Alaska* (Soil Survey Division Staff 1969), *Soil Survey of North Kenai Area* (Soil Survey Division Staff 1982), *Soils of the Deep Creek Area, Alaska* (Soil Survey Division Staff 1984), *Soils of the Fox River Valley Area, Alaska* (Soil Survey Division Staff 1985), *Kenai River Cooperative River Basin Study* (Soil Survey Division Staff 1994). In addition, areas previously not surveyed have been included.

The primary purpose of the original surveys was to provide soils information for agricultural land uses. Soil material differences below 30 inches, which normally do not influence agronomic interpretations, were not clearly separated. Since publication of those surveys, the western Kenai Peninsula area experienced significant population growth and localized urbanization. In the 1990's, a major epidemic of Spruce bark beetle (*Dendroctonus rufipennis*) destroyed hundreds of thousands of acres of spruce forest. As a result, the need for additional soils information and non-agricultural interpretations has increased proportionately.

A major purpose of this updated survey is to provide interpretations for urban land uses that take into account characteristics and properties of subsoil materials. Soils were examined to a depth of 60 inches and separated based on subsoil differences. Each soil was correlated to an ecological site to provide data and interpretations on vegetation succession, forestry, livestock grazing, and wildlife habitat. Map unit descriptions, interpretation tables, and soil maps at a scale of 1:25,000 are provided for the entire survey area.

The Western Kenai Peninsula Area is 894,793 acres of lowlands, hills, and mountains in the Kenai Lowlands and Kenai Mountains of Southcentral Alaska (Figure 1). The survey area is bounded on the east by the Kenai National Wildlife

Refuge, on the south by Kachemak Bay, on the west by Cook Inlet, and on the north by Turnagain Arm of Cook Inlet. Elevation ranges from sea level to 3,350 feet in the Kenai Mountains.

The survey area lies entirely within the Kenai Peninsula Borough and the soil and water conservation districts of Homer and Kenai. Principal centers of population include Anchor Point, Homer, Kenai, Nikiski, Nikolaevsk, Ninilchik, Soldotna, and Sterling.

General Nature of the Survey Area

Climate

The climate of the Western Kenai Peninsula is transitional maritime-continental, characterized by long cool winters and short warm summers. Long-term climatic data for two stations in the area, Homer and Kenai, are provided in tables 1 through 6. At Homer on Kachemak Bay, maritime influences are more evident and winter temperatures are relatively moderate. At Kenai, approximately 65 miles to the north, continental influences are stronger and winter temperatures are more extreme.

The Kenai Mountains and Aleutian Range have substantial influence on the climate of the survey area. The Kenai Mountains form a partial barrier against moist oceanic air moving in from the Gulf of Alaska and Prince William Sound. Most of the precipitation carried by weather systems originating in the Gulf falls on the windward slopes of the Kenai Mountains. The area is directly exposed to moist oceanic air moving up Cook Inlet from the southwest. The southern end of the Peninsula and higher elevations receive the highest amount of precipitation. The Aleutian Range to the west provides a partial barrier to cold air from interior Alaska.

Average monthly temperatures during the summer are similar for Homer and Kenai (Tables 1 and 2). For July, the average is 54.1°F (12.3 °C) at the Homer airport and 54.9 °F (12.7 °C) at the Kenai airport. Daily high temperatures in summer rarely exceed 80 °F (26.7 °C) at either location. Daily minimum temperatures in summer are generally between 43 and 47 °F (6.1 and 8.3 °C) at both locations.

Average monthly temperatures during winter are significantly higher in Homer compared to Kenai. For January, the Homer average is 23.4 °F (-4.8 °C) and the Kenai average is 13 °F (-10.6 °C). Persistent high pressure may dominate the region for several days or weeks during winter, bringing relatively cold temperatures to the area. Low temperatures of -20 °F (-28.9 °C) or less occur in Kenai during most winters.

Frost-free season data are given in table 3 for Homer and table 4 for Kenai. The number of continuous days during which the temperature does not drop below specified thresholds is given in tables 5 and 6. The threshold temperatures are 32 °F (0 °C), 28 °F (-2.2 °C) and 24 °F (-4.4 °C). The data in these tables are based on records from 1971 through 2000 for both the Homer and Kenai recording stations.

Geological deposits of commercial value.

Large deposits of gravel and sand, suitable for road fill or concrete mix, occur throughout most of the survey area north of Anchor Point. Large peat deposits are common in bogs and fens (Plate 7), but these have not been utilized on a commercial scale. There are commercial quantities of diatomaceous earth in small deposits north of Kenai but they have never been used commercially. (Plafker 1956)

Water Resources

Water resources of the Western Kenai Peninsula Area include an intricate and extensive network of glacial rivers and non-glacial streams; numerous lakes, ponds,

and other wetlands; and underground aquifers. The Kenai, Kasilof, and Anchor Rivers are the principal rivers in the area. The Kenai and Kasilof Rivers originate from large glaciers in the Kenai Mountains. Many non-glacial streams, such as Funny River, Ninilchik River, and Deep Creek drain the surrounding uplands. Lakes are numerous throughout the northern half of the survey area. Extensive bogs, fens, and other wetlands are found throughout the survey area. Large meltwater channels once flowed from the terminus of glaciers and are now occupied by small underfit streams and organic soils.

Most of the water used on the peninsula is obtained from unconsolidated aquifers made up of complexly interlayered deposits of glacial, outwash, fluvial, lacustrine, and eolian origins. The composition and hydrologic properties of these deposits differ greatly over short horizontal and vertical distances. Thus, the depth, yields, water levels, and water quality of closely spaced wells vary.

Native Vegetation

Native vegetation across most of the Western Kenai Peninsula is needleleaf, broadleaf, and mixed forests. South of Tustumena Lake, the forest is dominated by Lutz spruce (*Picea ×lutzii*), a naturally occurring hybrid between coastal Sitka spruce (*P. sitchensis*) and inland white spruce (*P. glauca*). North of Tustumena Lake, the forest is dominated by differing combinations of Lutz spruce, white spruce, paper birch (*Betula papyrifera*), and quaking aspen (*Populus tremuloides*). In the north, black spruce (*Picea mariana*) is common in areas burned by wildfire. Balsam poplar (*Populus balsamifera* ssp. *balsamifera* and *P. b.* ssp. *trichocarpa*) is common, as is alder (*Alnus* spp.) and willow (*Salix* spp.) scrub, on floodplains and stream terraces throughout the survey area. The forest understory in the south is dominated largely by species characteristic of the coastal temperate forests. To the north, these species are gradually replaced by species characteristic of the inland forests of the Susitna Basin.

Since the mid-1970s, Lutz spruce, white spruce, and mixed spruce-broadleaf forest have been ravaged by spruce bark beetles (*Dendroctonus rufipennis*). The infestation has killed the vast majority of medium- and large-diameter spruce trees across the Kenai Peninsula. Extensive areas have been clear-cut and selectively logged to salvage trees, reduce potential build up of fuels and fire danger, minimize danger to structures and people from falling trees, and promote forest regeneration. Spruce bark beetles are a naturally occurring forest insect.

Within increasing elevation in the Caribou Hills, Bald Mountain, and Ninilchik Dome in the southern part of the survey area, forest vegetation is gradually replaced by a mosaic of white spruce woodland and open forest, subalpine grasslands, and alder and willow scrub. Alpine dwarf scrub and lichen dominated communities are of limited extent at the highest elevations in the Caribou Hills. Throughout the forested and subalpine zones are extensive poorly drained peatlands dominated by stunted black spruce, willow, ericaceous shrubs, sedges and other hydrophytic plants, and sphagnum moss. Halophytic sedge meadows occupy the upper tidal zone, particularly in the Fox River Flats in upper Kachemak Bay, and stands of beach wildrye (*Elymus mollis*) help stabilized beach dunes in many places along the coast.

Population

According to the 1990 U.S. Census, the population of the Kenai Peninsula Borough was 40,802. The population increased to 49,691 in 2000. Most of the population centers of the Borough are within the boundaries of the survey area.

Outside the major cities and towns, the population of the Western Kenai Peninsula Area is sparse and widely distributed. Most rural residents live on or near the road system. Several large tracts of land in the northern part of the survey area and the Caribou Hills have few, if any, roads and are very sparsely settled. A substantial

number of homesteads, lodges, and recreational cabins are scattered throughout these remote areas.

How This Survey Was Made

This soil survey is a compilation and update of soil surveys and investigations done from the 1950s through the 1980s and includes both remapping the older surveys and mapping of previously unmapped areas. The published soil surveys and unpublished soil investigations were evaluated to determine if mapping and interpretations were adequate for current and projected land uses and soils information needs. Areas where deficiencies existed were then targeted for remapping and additional data collection. Relevant references and other information on climate, geology, geomorphology, hydrology, and vegetation of the area were researched.

Black-and-white aerial photography, at a scale of 1:25,000, acquired in 1996 was used for mapping. The existing soil surveys, reference information, and new photography were studied in detail to determine general soil-landform and soil-vegetation relationships. Potential users of the survey provided input at public meetings, which helped define survey objectives, procedures, and interpretative needs. Field work for the soil survey was conducted between 1995 and 2003.

Mapping Intensity

The level of mapping intensity and amount of required fieldwork were determined by the anticipated intensity of land use, accessibility, and the reliability of the existing mapping. Remote areas such as the mountains around Bradley Lake, Caribou Hills, and the extreme northern part of the survey area were mapped at a level of intensity that provides general knowledge of the soils and vegetation. The City of Homer, the Fox River Valley, and a half-mile wide corridor from the mouth of the Kenai River to the Kenai National Wildlife Refuge boundary has been previously mapped in high detail. Little additional fieldwork was necessary in these areas. Small map unit delineations were combined into larger units that correlate with current concepts.

Field Data Collection

Field mapping and data collection were accomplished by traversing the landscape and running detailed transects in representative delineations of soil map units. During the traverse, soil pits were dug on landform positions, soil profile characteristics were described, and map unit boundaries were noted. Detailed soil and vegetation descriptions were collected at representative sites.

Detailed soil-vegetation transects were run across selected delineations of each map unit. Each transect consisted of one to ten or more data collection stops, depending on the size of the delineation and complexity of the map unit. Stops were spaced at predetermined, paced intervals or by sampling representative landform positions. Detailed data on soils and vegetation were collected at most stops. Corresponding data and notes were linked to map units using common transect and stop numbers. All traverse and transect locations were plotted on the back of the aerial photographs for permanent record and later reference during map preparation and data analysis. The global positioning system (GPS) coordinates for each stop is part of the digital database for the survey area.

The number of transects in each map unit was determined by the intensity of mapping, data needs, and accessibility. Map units with large acreage have many transects. Most map units are documented by at least two transects.

Soils Data Collection

During traverses and transects, data on landscape characteristics and soil properties were collected and field observations were recorded. Landscape characteristics included slope, depth to water table, and landform; soil properties included soil horizons, texture, rock fragments, and reaction. Soil descriptions were completed using standard guidelines, codes, and terminology provided in the *National Soil Survey Handbook* (USDA 1996) and *Soil Survey Manual* (Soil Survey Division Staff 1993).

After describing the soils in the survey area and determining their properties, the soils were assigned to taxonomic classes (units) (*Soil Taxonomy* (Soil Survey Staff 1999) and *Keys to Soil Taxonomy* (Soil Survey Staff 1998)). After classifying and naming the soils in the survey area, they can be compared with similar soils in the same taxonomic class in other areas to confirm properties and standardize technical nomenclature, thereby providing a basis for the transfer of soils information.

Taxonomic classes are concepts, with each taxonomic class having a set of soil characteristics with precisely defined limits. However, these limits are artificial and often do not correspond with the natural range of soil properties as they occur in the field. In the detailed map unit descriptions in this report full ranges in properties are described for the soil component as it is observed on the landscape.

While the soil survey was in progress, samples of representative soils were collected for laboratory analyses and engineering tests. These data, together with the observed soil characteristics and properties, were used to predict the expected behavior of the soils under different land uses.

Vegetation Data Collection

Detailed vegetation data were collected for most traverses and transects. Types of data included vegetation type; stand structure and species cover; age, diameter, and height of site trees; and current annual production of vascular plants. On most transects, data were collected in at least one stand in each major vegetation type. Not all types of data were collected in each stand.

Data were collected within an area of the stand approximately centered on the soil pit. The size of the sample area was variable but encompassed an area large enough to encounter all species in the stand and adequately represent the variability within the stand. Canopy cover by species of vascular plants and total moss, total lichen, and other ground cover was visually estimated to the nearest 5 percent (nearest 1 percent when cover was less than 7 percent). Total basal area of trees was measured using angle gauges.

Site trees were selected from dominant and codominant trees that were free of major defects and disease. Age and diameter were measured at breast height, approximately 4.5 feet (1.4 m) above the base. Age was determined from cores extracted with an increment borer. Total height was measured using horizontal distance and percent scale techniques.

Current annual production data were collected in typical or representative areas of the stand using a modified double sampling technique. Production data were collected in most unforested vegetation types and in forest vegetation types suitable for livestock grazing.

All soils and vegetation field data were entered into Alaska Soil Survey Field Database for management and analysis.

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.

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 non-contrasting, 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.

Map units that consist of one major component are called *consociations*. Beluga silt loam, 0 to 4 percent slopes is an example.

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

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. Cohoe-Nikolai complex, hilly 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. Kenai-Starichkof association, 0 to 25 percent slopes is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Killey and Moose River soils is an undifferentiated group in this survey area.

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

Table 7 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.

501—Aquic Cryofluvents, 0 to 2 percent slopes

Elevation: 0 to 115 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Aquic Cryofluvents and similar soils

Extent: 75 to 95 percent of the map unit

Landform: alluvial fans on alluvial flats, channels on alluvial flats

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: coarse-loamy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: somewhat poorly drained

Flooding: occasional

Depth to high water table (approximate): April-May—28 inches; June-Sept.—28 to more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, high permeability

Cg₁—6 to 31 inches; silt loam, high permeability

Cg₂—31 to 48 inches; stratified silt loam to fine sandy loam to sand, high permeability

2Cg₃—48 to 60 inches; gravelly sand, high permeability

Minor Components

Susitna and similar soils: 0 to 20 percent of the map unit

Moose River and similar soils: 0 to 15 percent of the map unit

502—Aquic Cryofluvents, shallow, 0 to 2 percent slopes*Elevation:* 0 to 328 feet*Mean annual precipitation:* 16 to 30 inches*Frost-free period:* 75 to 120 days**Aquic Cryofluvents, shallow, and similar soils***Extent:* 75 to 90 percent of the map unit*Landform:* channels on alluvial flats, alluvial fans on alluvial flats*Slope shape:* linear*Slope range:* 0 to 2 percent*Parent material:* coarse-loamy alluvium*Hazard of erosion (organic mat removed):* by water—slight; by wind—severe*Runoff:* very low*Drainage class:* somewhat poorly drained*Flooding:* occasional*Depth to high water table (approximate):* April-May—28 inches; June-Sept.—28 to more than 60 inches*Ponding:* none*Available water capacity (approximate):* 5.4 inches*Representative Profile:*

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, high permeability

Cg1—6 to 19 inches; stratified silt loam to fine sandy loam to sand, high permeability

2Cg2—19 to 60 inches; gravelly sand, high permeability

Minor Components

Niklason and similar soils: 0 to 25 percent of the map unit

Moose River and similar soils: 0 to 10 percent of the map unit

503—Badland, sea cliffs*Elevation:* 0 to 492 feet*Mean annual precipitation:* 16 to 30 inches*Frost-free period:* 85 to 120 days**Badland, sea cliffs***Extent:* 100 percent of the map unit*Landform:* cliffs*Slope range:* 100 to 200 percent**504—Badland, sea cliffs-Typic Cryorthents complex, very steep***Elevation:* 0 to 492 feet*Mean annual precipitation:* 16 to 30 inches*Frost-free period:* 85 to 120 days

Badland, sea cliffs

Extent: 40 to 70 percent of the map unit

Landform: cliffs

Slope range: 100 to 200 percent

Typic Cryorthents and similar soils

Extent: 30 to 60 percent of the map unit

Landform: sea cliffs

Position on slope: backslopes

Slope shape: concave

Slope range: 45 to 150 percent

Parent material: debris slide deposits derived from interbedded sedimentary rock

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

505—Beaches

Elevation: 0 to 33 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Beaches

Extent: 80 to 100 percent of the map unit

Landform: beaches

Slope range: 1 to 6 percent

Minor Components

Beaches, tidal flats: 0 to 20 percent of the map unit

506—Beluga silt loam, 0 to 4 percent slopes

Elevation: 16 to 410 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 80 to 95 percent of the map unit

Landform: alluvial fans

Position on slope: toeslopes

Slope shape: linear
Slope range: 0 to 4 percent
Parent material: silty and clayey slope alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-May—8 inches; June-Sept.—8 to 15 inches
Ponding: rare
Available water capacity (approximate): 13.4 inches
Representative Profile:
 Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability
 A—5 to 7 inches; silt loam, moderately high permeability
 Cg1—7 to 32 inches; silt loam, moderately high permeability
 2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Slikok and similar soils: 0 to 10 percent of the map unit
 Smokey Bay and similar soils: 0 to 10 percent of the map unit
 Starichkof and similar soils: 0 to 10 percent of the map unit

507—Beluga silt loam, 4 to 8 percent slopes

Elevation: 16 to 1,148 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 85 to 90 percent of the map unit
Landform: alluvial fans
Position on slope: footslopes, backslopes
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: silty and clayey slope alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 13.4 inches
Representative Profile:
 Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability
 A—5 to 7 inches; silt loam, moderately high permeability
 Cg1—7 to 32 inches; silt loam, moderately high permeability
 2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Smokey Bay and similar soils: 5 to 15 percent of the map unit

Slikok and similar soils: 0 to 5 percent of the map unit

508—Beluga silt loam, 8 to 15 percent slopes

Elevation: 131 to 951 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 85 to 90 percent of the map unit

Landform: alluvial fans

Position on slope: backslopes, footslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability

A—5 to 7 inches; silt loam, moderately high permeability

Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Smokey Bay and similar soils: 5 to 15 percent of the map unit

Slikok and similar soils: 0 to 5 percent of the map unit

509—Beluga-Mutnala complex, 0 to 8 percent slopes

Elevation: 16 to 328 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 35 to 60 percent of the map unit

Landform: alluvial fans

Position on slope: toeslopes

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: silty and clayey slope alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 13.4 inches
Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability
 A—5 to 7 inches; silt loam, moderately high permeability
 Cg1—7 to 32 inches; silt loam, moderately high permeability
 2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Mutnala and similar soils

Extent: 35 to 60 percent of the map unit
Landform: moraines on till plains
Position on slope: summits
Slope shape: convex
Slope range: 0 to 8 percent
Parent material: ash influenced loess over loamy till
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 14.2 inches
Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
 E,B—4 to 7 inches; silt loam, high permeability
 Bw—7 to 23 inches; silt loam, high permeability
 2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Starichkof and similar soils: 0 to 10 percent of the map unit

510—Beluga-Smokey Bay complex, 4 to 8 percent slopes

Elevation: 16 to 623 feet
Mean annual precipitation: 30 to 39 inches
Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 50 to 70 percent of the map unit
Landform: alluvial fans
Position on slope: footslopes, backslopes
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: silty and clayey slope alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 13.4 inches
Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability
 A—5 to 7 inches; silt loam, moderately high permeability
 Cg1—7 to 32 inches; silt loam, moderately high permeability
 2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Smokey Bay and similar soils

Extent: 30 to 50 percent of the map unit
Landform: alluvial fans
Position on slope: shoulders
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: stratified alluvium and/or colluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: high
Drainage class: somewhat poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 14.6 inches
Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability
 A—2 to 9 inches; silt loam, moderately high permeability
 Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability
 Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

Minor Components

Slikok and similar soils: 0 to 5 percent of the map unit

511—Beluga-Smokey Bay complex, 8 to 15 percent slopes

Elevation: 66 to 623 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 120 days

Beluga and similar soils

Extent: 45 to 60 percent of the map unit
Landform: alluvial fans
Position on slope: backslopes, footslopes
Slope shape: linear
Slope range: 8 to 15 percent
Parent material: silty and clayey slope alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 13.4 inches

Representative Profile:

Oe—0 to 5 inches; moderately decomposed plant material, moderately high permeability

A—5 to 7 inches; silt loam, moderately high permeability

Cg1—7 to 32 inches; silt loam, moderately high permeability

2Cg2—32 to 60 inches; silty clay loam, moderately low permeability

Smokey Bay and similar soils

Extent: 40 to 50 percent of the map unit

Landform: alluvial fans

Position on slope: shoulders

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A—2 to 9 inches; silt loam, moderately high permeability

Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability

Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

Minor Components

Slikok and similar soils: 0 to 5 percent of the map unit

512—Benka silt loam, 0 to 4 percent slopes

Elevation: 148 to 656 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Benka and similar soils

Extent: 60 to 90 percent of the map unit

Landform: outwash plains

Position on slope: backslopes

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 10.6 inches
Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability
 E—3 to 5 inches; silt loam, moderately high permeability
 B—5 to 30 inches; silt loam, moderately high permeability
 2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Doroshin and similar soils: 0 to 10 percent of the map unit
 Kalifonsky and similar soils: 0 to 30 percent of the map unit

513—Benka silt loam, 4 to 8 percent slopes

Elevation: 197 to 1,427 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Benka and similar soils

Extent: 75 to 95 percent of the map unit
Landform: outwash plains
Position on slope: backslopes
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 10.6 inches
Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability
 E—3 to 5 inches; silt loam, moderately high permeability
 B—5 to 30 inches; silt loam, moderately high permeability
 2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Iliamna and similar soils: 0 to 10 percent of the map unit
 Kalifonsky and similar soils: 0 to 15 percent of the map unit

514—Benka silt loam, 8 to 15 percent slopes

Elevation: 180 to 1,230 feet
Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

Benka and similar soils

Extent: 85 to 90 percent of the map unit

Landform: outwash plains

Position on slope: backslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability

B—5 to 30 inches; silt loam, moderately high permeability

2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Qutal and similar soils: 0 to 10 percent of the map unit

Tlikakila and similar soils: 0 to 10 percent of the map unit

515—Benka silt loam, 15 to 25 percent slopes

Elevation: 115 to 1,050 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Benka and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability

B—5 to 30 inches; silt loam, moderately high permeability

2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Chulitna and similar soils: 0 to 15 percent of the map unit
Kalifonsky and similar soils: 0 to 15 percent of the map unit

516—Benka silt loam, 25 to 60 percent slopes

Elevation: 0 to 1,148 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 90 to 120 days

Benka and similar soils

Extent: 90 to 95 percent of the map unit
Landform: moraines
Position on slope: backslopes
Slope shape: linear
Slope range: 25 to 60 percent
Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 10.6 inches
Representative Profile:
O_i—0 to 3 inches; slightly decomposed plant material, high permeability
E—3 to 5 inches; silt loam, moderately high permeability
B—5 to 30 inches; silt loam, moderately high permeability
2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Tlikakila and similar soils: 0 to 10 percent of the map unit

517—Benka silt loams, strongly sloping and gently sloping

Elevation: 246 to 361 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 115 days

Benka, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit
Landform: outwash plains
Position on slope: backslopes
Slope shape: linear
Slope range: 9 to 15 percent
Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability

B—5 to 30 inches; silt loam, moderately high permeability

2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Benka, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: outwash plains

Position on slope: summits, toeslopes, shoulders

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.6 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E—3 to 5 inches; silt loam, moderately high permeability

B—5 to 30 inches; silt loam, moderately high permeability

2C—30 to 60 inches; stratified coarse sand to fine sand, high permeability

Minor Components

Qutal and similar soils: 5 to 10 percent of the map unit

Tlikakila and similar soils: 0 to 10 percent of the map unit

518—Boxcar silt loam, 0 to 8 percent slopes

Elevation: 902 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

Boxcar and similar soils

Extent: 65 to 85 percent of the map unit

Landform: kame moraines, lateral moraines

Slope shape: convex

Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C—20 to 60 inches; extremely cobbly loamy fine sand, high permeability

Minor Components

Tokositna and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 15 percent of the map unit

519—Boxcar silt loam, 8 to 25 percent slopes

Elevation: 1,148 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Boxcar and similar soils

Extent: 75 to 85 percent of the map unit

Landform: lateral moraines, kame moraines

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 7.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 5 inches; silt loam, high permeability

E,B—5 to 20 inches; very fine sandy loam, high permeability

2C—20 to 60 inches; extremely cobbly loamy fine sand, high permeability

Minor Components

Tokositna and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 5 to 15 percent of the map unit

520—Boxcar silt loam, 25 to 60 percent slopes

Elevation: 984 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Boxcar and similar soils

Extent: 80 to 90 percent of the map unit

Landform: kame moraines, lateral moraines
Slope shape: convex
Slope range: 25 to 60 percent
Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.7 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 A—3 to 5 inches; silt loam, high permeability
 E,B—5 to 20 inches; very fine sandy loam, high permeability
 2C—20 to 60 inches; extremely cobbly loamy fine sand, high permeability

Minor Components

Truuli and similar soils: 5 to 15 percent of the map unit
 Kachemak and similar soils: 0 to 10 percent of the map unit

521—Boxcar silt loam, cool, 0 to 8 percent slopes

Elevation: 1,640 to 2,247 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Boxcar, cool, and similar soils

Extent: 75 to 85 percent of the map unit
Landform: kame moraines, lateral moraines
Slope shape: convex
Slope range: 0 to 8 percent
Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.7 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 A—3 to 5 inches; silt loam, high permeability
 E,B—5 to 20 inches; very fine sandy loam, high permeability
 2C—20 to 60 inches; extremely cobbly loamy fine sand, high permeability

Minor Components

Kachemak, cool, and similar soils: 5 to 15 percent of the map unit
 Tuxedni and similar soils: 5 to 15 percent of the map unit

522—Boxcar silt loam, cool, 25 to 60 percent slopes

Elevation: 1,542 to 2,592 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Boxcar, cool, and similar soils

Extent: 60 to 85 percent of the map unit
Landform: lateral moraines, kame moraines
Slope shape: convex
Slope range: 25 to 60 percent
Parent material: silty volcanic ash and/or silty loess over sandy and gravelly ablation till
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.7 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 A—3 to 5 inches; silt loam, high permeability
 E,B—5 to 20 inches; very fine sandy loam, high permeability
 2C—20 to 60 inches; extremely cobbly loamy fine sand, high permeability

Minor Components

Kachemak, cool, and similar soils: 5 to 25 percent of the map unit
 Snowdance and similar soils: 5 to 15 percent of the map unit

523—Chenega silt loam, 0 to 2 percent slopes

Elevation: 7 to 131 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 90 to 120 days

Chenega and similar soils

Extent: 50 to 95 percent of the map unit
Landform: alluvial fans, flood plains, stream terraces
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: gravelly alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very low
Drainage class: somewhat excessively drained
Flooding: frequent
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 3.9 inches
Representative Profile:
 Oi—0 to 4 inches; slightly decomposed plant material, high permeability
 A—4 to 7 inches; silt loam, high permeability

C—7 to 60 inches; very gravelly sand, high permeability

Minor Components

Riverwash: 5 to 15 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

524—Chenega silt loam, cool, 0 to 2 percent slopes

Elevation: 2,231 to 2,379 feet

Mean annual precipitation: 49 to 59 inches

Frost-free period: 75 to 115 days

Chenega, cool, and similar soils

Extent: 80 to 95 percent of the map unit

Landform: flood plains, stream terraces, alluvial fans

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.9 inches

Representative Profile:

Oi—0 to 4 inches; slightly decomposed plant material, high permeability

A—4 to 7 inches; silt loam, high permeability

C—7 to 60 inches; very gravelly sand, high permeability

Minor Components

Riverwash: 0 to 15 percent of the map unit

525—Chenega very fine sandy loam, occasionally flooded, 0 to 2 percent slopes

Elevation: 7 to 98 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Chenega, occasionally flooded, and similar soils

Extent: 75 to 95 percent of the map unit

Landform: stream terraces, flood plains, alluvial fans

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.9 inches

Representative Profile:

Oi—0 to 4 inches; slightly decomposed plant material, high permeability

A—4 to 7 inches; very fine sandy loam, high permeability

C—7 to 60 inches; very gravelly sand, high permeability

Minor Components

Riverwash: 5 to 15 percent of the map unit

Typic Cryaquents and similar soils: 0 to 10 percent of the map unit

526—Chulitna silt loam, 0 to 4 percent slopes

Elevation: 131 to 722 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Chulitna and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; loamy sand, high permeability

Minor Components

Benka and similar soils: 0 to 30 percent of the map unit

Spensard and similar soils: 0 to 10 percent of the map unit

527—Chulitna silt loam, 4 to 8 percent slopes

Elevation: 82 to 1,575 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Chulitna and similar soils

Extent: 50 to 85 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; loamy sand, high permeability

Minor Components

Spenard and similar soils: 0 to 20 percent of the map unit

Kashwitna and similar soils: 5 to 25 percent of the map unit

528—Chulitna silt loam, 8 to 15 percent slopes

Elevation: 230 to 1,657 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Chulitna and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains, terraces on till plains

Position on slope: summits

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; loamy sand, high permeability

Minor Components

Whitsol and similar soils: 5 to 30 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

529—Chulitna silt loam, 15 to 25 percent slopes

Elevation: 66 to 1,903 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Chulitna and similar soils

Extent: 80 to 90 percent of the map unit

Landform: terraces on till plains, moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, high permeability

E,B—2 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; loamy sand, high permeability

Minor Components

Whitsol and similar soils: 0 to 20 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

530—Chunilna mucky silt loam, 0 to 4 percent slopes

Elevation: 115 to 820 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Chunilna and similar soils

Extent: 75 to 95 percent of the map unit

Landform: till plains

Position on slope: toeslopes, footslopes

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

- Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
- A1—4 to 8 inches; mucky silt loam, high permeability
- A2,Bg—8 to 18 inches; silt loam, high permeability
- 2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Tuxedni and similar soils: 0 to 20 percent of the map unit

Doroshin and similar soils: 0 to 5 percent of the map unit

531—Chunilna mucky silt loam, 4 to 8 percent slopes

Elevation: 66 to 1,640 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Chunilna and similar soils

Extent: 70 to 85 percent of the map unit

Landform: till plains

Position on slope: footslopes, toeslopes

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

- Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
- A1—4 to 8 inches; mucky silt loam, high permeability
- A2,Bg—8 to 18 inches; silt loam, high permeability
- 2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Tuxedni and similar soils: 5 to 20 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

532—Chunilna mucky silt loam, cool, 0 to 8 percent slopes

Elevation: 787 to 2,001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Chunilna, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: toeslopes, footslopes

Slope shape: convex

Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—9 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability

A2,Bg—8 to 18 inches; silt loam, high permeability

2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Tokositna and similar soils: 0 to 15 percent of the map unit

Doroshin and similar soils: 0 to 15 percent of the map unit

533—Chunilna mucky silt loam, cool, 8 to 25 percent slopes

Elevation: 591 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Chunilna, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: footslopes, toeslopes

Slope shape: convex

Slope range: 8 to 25 percent

Parent material: silty volcanic ash and/or silty loess over gravelly till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—18 inches

Ponding: none

Available water capacity (approximate): 9.4 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

A1—4 to 8 inches; mucky silt loam, high permeability

A2,Bg—8 to 18 inches; silt loam, high permeability

2C—18 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Tokositna and similar soils: 0 to 20 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

534—Clam Gulch silt loam, 0 to 4 percent slopes

Elevation: 3 to 315 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Clam Gulch and similar soils

Extent: 70 to 90 percent of the map unit

Landform: depressions on till plains

Position on slope: toeslopes

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: silty loess over silty and clayey glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 16.3 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 15 inches; silt loam, high permeability

2Cg—15 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Doroshin and similar soils: 0 to 15 percent of the map unit

Kenai and similar soils: 0 to 10 percent of the map unit

Slikok and similar soils: 0 to 15 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

535—Clunie peat, 0 to 2 percent slopes

Elevation: 3 to 98 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Clunie and similar soils

Extent: 85 to 95 percent of the map unit

Landform: tidal flats

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: herbaceous organic material over silty and clayey marine deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained
Flooding: frequent
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: frequent
Available water capacity (approximate): 13.6 inches
Representative Profile:
 Oi—0 to 33 inches; peat, high permeability
 2Cg—33 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Typic Cryaquents and similar soils: 0 to 15 percent of the map unit
 Starichkof and similar soils: 0 to 5 percent of the map unit

536—Coal Creek silt loam, 0 to 4 percent slopes

Elevation: 16 to 1,542 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 75 to 120 days

Coal Creek and similar soils

Extent: 70 to 85 percent of the map unit
Landform: till plains, depressions on stream terraces
Slope shape: concave
Slope range: 0 to 4 percent
Parent material: colluvium and/or eolian deposits over drift
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 14.7 inches
Representative Profile:
 Oi—0 to 6 inches; slightly decomposed plant material, high permeability
 A—6 to 15 inches; silt loam, moderately high permeability
 Cg1—15 to 23 inches; silt loam, moderately high permeability
 2Cg2—23 to 60 inches; gravelly silt loam, moderately high permeability

Minor Components

Cohoe and similar soils: 0 to 15 percent of the map unit
 Naptowne and similar soils: 0 to 15 percent of the map unit
 Slikok and similar soils: 0 to 10 percent of the map unit

537—Coal Creek silt loam, 4 to 8 percent slopes

Elevation: 16 to 1,673 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 75 to 120 days

Coal Creek and similar soils

Extent: 60 to 90 percent of the map unit

Landform: depressions on till plains

Position on slope: toeslopes, footslopes

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: colluvium and/or eolian deposits over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.7 inches

Representative Profile:

O_i—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 15 inches; silt loam, moderately high permeability

Cg₁—15 to 23 inches; silt loam, moderately high permeability

2Cg₂—23 to 60 inches; gravelly silt loam, moderately high permeability

Minor Components

Starichkof and similar soils: 0 to 25 percent of the map unit

Mutnala and similar soils: 0 to 20 percent of the map unit

538—Coal Creek silt loam, 8 to 15 percent slopes

Elevation: 16 to 1,476 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

Coal Creek and similar soils

Extent: 65 to 90 percent of the map unit

Landform: depressions on till plains

Position on slope: footslopes, toeslopes

Slope shape: concave

Slope range: 8 to 15 percent

Parent material: colluvium and/or eolian deposits over drift

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.7 inches

Representative Profile:

O_i—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 15 inches; silt loam, moderately high permeability

Cg₁—15 to 23 inches; silt loam, moderately high permeability

2Cg₂—23 to 60 inches; gravelly silt loam, moderately high permeability

Minor Components

Qutal and similar soils: 5 to 25 percent of the map unit
Doroshin and similar soils: 0 to 15 percent of the map unit

539—Cohoe silt loam, 0 to 4 percent slopes

Elevation: 49 to 1,460 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 85 to 120 days

Cohoe and similar soils

Extent: 65 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes
Slope shape: convex
Slope range: 0 to 4 percent
Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 18.7 inches
Representative Profile:
Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
E,B—2 to 24 inches; silt loam, high permeability
2BC—24 to 52 inches; silt loam, high permeability
3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 25 percent of the map unit
Doroshin and similar soils: 0 to 10 percent of the map unit

540—Cohoe silt loam, 4 to 8 percent slopes

Elevation: 16 to 1,345 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 85 to 120 days

Cohoe and similar soils

Extent: 70 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes
Slope shape: convex
Slope range: 4 to 8 percent
Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 25 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

541—Cohoe silt loam, 8 to 15 percent slopes

Elevation: 98 to 1,640 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Cohoe and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

542—Cohoe silt loam, 15 to 25 percent slopes

Elevation: 82 to 1,476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Cohoe and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

543—Cohoe silt loam, 25 to 45 percent slopes

Elevation: 33 to 1,378 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 115 days

Cohoe and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Kichatna and similar soils: 5 to 15 percent of the map unit
 Mutnala and similar soils: 5 to 15 percent of the map unit

544—Cohoe silt loam, 45 to 60 percent slopes

Elevation: 16 to 919 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 115 days

Cohoe and similar soils

Extent: 60 to 95 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes
Slope shape: convex
Slope range: 45 to 60 percent
Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 18.7 inches
Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Kichatna and similar soils: 10 to 35 percent of the map unit
 Truuli and similar soils: 0 to 5 percent of the map unit

545—Cohoe silt loam, dry, 0 to 4 percent slopes

Elevation: 66 to 328 feet
Mean annual precipitation: 16 to 20 inches
Frost-free period: 75 to 120 days

Cohoe, dry, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spensard and similar soils: 5 to 25 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

546—Cohoe silt loam, dry, 4 to 8 percent slopes

Elevation: 3 to 410 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Cohoe, dry, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 25 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

547—Cohoe silt loam, dry, 8 to 15 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 130 days

Cohoe, dry, and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

548—Cohoe silt loam, dry, 15 to 25 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Cohoe, dry, and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 18.7 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E,B—2 to 24 inches; silt loam, high permeability
 2BC—24 to 52 inches; silt loam, high permeability
 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

549—Cohoe silt loam, dry, 25 to 45 percent slopes

Elevation: 66 to 407 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 85 to 120 days

Cohoe, dry, and similar soils

Extent: 70 to 85 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes
Slope shape: convex
Slope range: 25 to 45 percent
Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 18.7 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E,B—2 to 24 inches; silt loam, high permeability
 2BC—24 to 52 inches; silt loam, high permeability
 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Kichatna and similar soils: 5 to 15 percent of the map unit
 Naptowne and similar soils: 5 to 15 percent of the map unit

550—Cohoe silt loam, dry, 45 to 60 percent slopes

Elevation: 82 to 262 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 105 days

Cohoe, dry, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 45 to 60 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Kichatna and similar soils: 10 to 35 percent of the map unit

Truuli and similar soils: 0 to 5 percent of the map unit

551—Cohoe silt loams, moderately steep and gently sloping

Elevation: 82 to 574 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

Cohoe, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Cohoe, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, toeslopes

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Qutal and similar soils: 5 to 15 percent of the map unit

Slikok and similar soils: 0 to 10 percent of the map unit

552—Cohoe silt loams, dry, moderately steep and gently sloping

Elevation: 148 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Cohoe, dry, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: linear, convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Cohoe, dry, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, toeslopes, summits

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E,B—2 to 24 inches; silt loam, high permeability
- 2BC—24 to 52 inches; silt loam, high permeability
- 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Minor Components

Qutal and similar soils: 5 to 15 percent of the map unit

Slikok and similar soils: 0 to 10 percent of the map unit

553—Cohoe-Kenai complex, 8 to 15 percent slopes

Elevation: 98 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Cohoe, dry, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Kenai and similar soils

Extent: 20 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

Soldotna and similar soils: 0 to 10 percent of the map unit

554—Cohoe-Kenai complex, 15 to 25 percent slopes

Elevation: 115 to 410 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Cohoe, dry, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Kenai and similar soils

Extent: 20 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

Soldotna and similar soils: 0 to 10 percent of the map unit

555—Cohoe-Nikolai complex, hilly

Elevation: 3 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Cohoe, dry, and similar soils

Extent: 65 to 75 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 6 to 30 percent

Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 18.7 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E,B—2 to 24 inches; silt loam, high permeability
 2BC—24 to 52 inches; silt loam, high permeability
 3C—52 to 60 inches; very gravelly sandy loam, high permeability

Nikolai and similar soils

Extent: 25 to 35 percent of the map unit
Landform: depressions on till plains, depressions on coastal plains
Slope shape: linear
Slope range: 0 to 12 percent
Parent material: organic material over loamy till over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—12 inches
Ponding: rare
Available water capacity (approximate): 20.4 inches
Representative Profile:
 Oe—0 to 2 inches; peat, moderately high permeability
 Oa—2 to 32 inches; muck, moderately high permeability
 2Cg1—32 to 41 inches; silt loam, high permeability
 3Cg2—41 to 60 inches; loamy sand, very high permeability

556—Cohoe-Nikolai complex, undulating to rolling

Elevation: 3 to 344 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 85 to 120 days

Cohoe, dry, and similar soils

Extent: 65 to 75 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes
Slope shape: convex
Slope range: 3 to 16 percent
Parent material: ash influenced loess over loamy glaciolacustrine deposits
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 18.7 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 24 inches; silt loam, high permeability

2BC—24 to 52 inches; silt loam, high permeability

3C—52 to 60 inches; very gravelly sandy loam, high permeability

Nikolai and similar soils

Extent: 25 to 35 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability

Oa—2 to 32 inches; muck, moderately high permeability

2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2—41 to 60 inches; loamy sand, very high permeability

557—Cytex Creek silt loam, 4 to 15 percent slopes

Elevation: 1,083 to 1,804 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

Cytex Creek and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: footslopes, toeslopes, summits

Slope shape: concave

Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—16 to 24 inches; June-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 3 inches; silt loam, high permeability

Bs—3 to 7 inches; very fine sandy loam, high permeability

Bw—7 to 31 inches; fine sandy loam, high permeability

2C—31 to 60 inches; very cobbly loamy sand, high permeability

Minor Components

Nikolaevsk and similar soils: 5 to 25 percent of the map unit

Tokositna and similar soils: 5 to 15 percent of the map unit

558—Doroshin mucky peat, 0 to 4 percent slopes

Elevation: 3 to 1,919 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

Doroshin and similar soils

Extent: 50 to 90 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability

2Cg—36 to 60 inches; silt loam, moderately high permeability

Minor Components

Starichkof and similar soils: 5 to 25 percent of the map unit

Slikok and similar soils: 5 to 25 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

559—Doroshin mucky peat, 4 to 8 percent slopes

Elevation: 16 to 1,968 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

Doroshin and similar soils

Extent: 75 to 95 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability

2Cg—36 to 60 inches; silt loam, moderately high permeability

Minor Components

Starichkof and similar soils: 0 to 25 percent of the map unit

Slikok and similar soils: 0 to 5 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

560—Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes

Elevation: 1,673 to 2,707 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Dystrocryepts and similar soils

Extent: 40 to 60 percent of the map unit

Landform: hills, moraines on till plains

Slope shape: convex

Slope range: 4 to 25 percent

Parent material: ash-influenced gravelly glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 2.3 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 7 inches; very gravelly fine sandy loam, high permeability

Bw—7 to 23 inches; extremely gravelly loamy sand, high permeability

C—23 to 60 inches; extremely gravelly sand, high permeability

Typic Cryorthents and similar soils

Extent: 20 to 40 percent of the map unit

Landform: moraines on till plains, hills

Slope shape: convex

Slope range: 15 to 35 percent

Parent material: sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

Iliamna, cool, and similar soils

Extent: 10 to 30 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 4 to 25 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 29 inches; silt loam, high permeability

2C—29 to 60 inches; loamy fine sand, high permeability

561—Foreland peat, 0 to 4 percent slopes

Elevation: 3 to 1,378 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Foreland and similar soils

Extent: 70 to 85 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 4.3 inches

Representative Profile:

- O—0 to 13 inches; peat, high permeability
- A—13 to 19 inches; sand, high permeability
- Cg—19 to 60 inches; sand, high permeability

Minor Components

Truuli and similar soils: 0 to 20 percent of the map unit
 Doroshin and similar soils: 0 to 10 percent of the map unit
 Water, fresh: 0 to 3 percent of the map unit

562—Foreland-Starichkof-Soldotna complex, undulating

Elevation: 49 to 591 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Foreland and similar soils

Extent: 40 to 65 percent of the map unit

Landform: outwash plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 4.3 inches

Representative Profile:

- O—0 to 13 inches; peat, high permeability
- A—13 to 19 inches; sand, high permeability
- Cg—19 to 60 inches; sand, high permeability

Soldotna and similar soils

Extent: 15 to 30 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

- Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
- E—4 to 7 inches; silt loam, high permeability
- Bs—7 to 22 inches; silt loam, high permeability
- C1—22 to 29 inches; silt loam, high permeability
- 2C2—29 to 60 inches; very gravelly sand, high permeability

Starichkof and similar soils

Extent: 15 to 40 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

- Oi—0 to 7 inches; peat, high permeability
- Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Water, fresh: 0 to 5 percent of the map unit

563—Gravel pits

Elevation: 13 to 1,919 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

Pits, gravel

Extent: 85 to 100 percent of the map unit

Landform: outwash plains

Minor Components

Water, fresh: 0 to 20 percent of the map unit

564—Iliamna silt loam, 0 to 4 percent slopes

Elevation: 3 to 1,608 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Iliamna and similar soils

Extent: 60 to 90 percent of the map unit

Landform: plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 29 inches; silt loam, high permeability

2C—29 to 60 inches; loamy fine sand, high permeability

Minor Components

Benka and similar soils: 5 to 15 percent of the map unit

Tlikakila and similar soils: 5 to 25 percent of the map unit

565—Iliamna silt loam, 4 to 15 percent slopes

Elevation: 16 to 1,886 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Iliamna and similar soils

Extent: 70 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 4 to 15 percent

Parent material: ash influenced loess over sandy glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 29 inches; silt loam, high permeability

2C—29 to 60 inches; loamy fine sand, high permeability

Minor Components

Cohoe and similar soils: 8 to 25 percent of the map unit
 Spenard and similar soils: 2 to 16 percent of the map unit

566—Iliamna silt loam, 15 to 45 percent slopes

Elevation: 10 to 1,936 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Iliamna and similar soils

Extent: 60 to 90 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex
Slope range: 15 to 45 percent
Parent material: ash influenced loess over sandy glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 11.5 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E,B—2 to 29 inches; silt loam, high permeability
 2C—29 to 60 inches; loamy fine sand, high permeability

Minor Components

Tlikakila and similar soils: 5 to 15 percent of the map unit
 Cohoe and similar soils: 5 to 25 percent of the map unit

567—Iliamna silt loam, cool, 0 to 15 percent slopes

Elevation: 1,542 to 2,133 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 120 days

Iliamna, cool, and similar soils

Extent: 85 to 95 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex
Slope range: 0 to 15 percent
Parent material: ash influenced loess over sandy glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.5 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E,B—2 to 29 inches; silt loam, high permeability

2C—29 to 60 inches; loamy fine sand, high permeability

Minor Components

Snowdance and similar soils: 5 to 15 percent of the map unit

568—Island silt loam, 0 to 4 percent slopes

Elevation: 16 to 1,722 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

Island and similar soils

Extent: 70 to 95 percent of the map unit

Landform: till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability

Bw—13 to 24 inches; silt loam, high permeability

BC—24 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Tuxedni and similar soils: 3 to 25 percent of the map unit

Nikolai and similar soils: 0 to 5 percent of the map unit

569—Island silt loam, 4 to 8 percent slopes

Elevation: 16 to 755 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Island and similar soils

Extent: 80 to 95 percent of the map unit

Landform: till plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

O_i—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability

B_w—13 to 24 inches; silt loam, high permeability

BC—24 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Tuxedni and similar soils: 5 to 15 percent of the map unit

Doroshin and similar soils: 0 to 5 percent of the map unit

570—Island silt loam, 8 to 15 percent slopes

Elevation: 3 to 820 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Island and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hillslopes on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

O_i—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability

B_w—13 to 24 inches; silt loam, high permeability

BC—24 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Tuxedni and similar soils: 5 to 15 percent of the map unit

571—Island silt loam, 15 to 45 percent slopes

Elevation: 33 to 755 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 115 days

Island and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hillslopes on till plains

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability

Bw—13 to 24 inches; silt loam, high permeability

BC—24 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Tuxedni and similar soils: 5 to 15 percent of the map unit

572—Island silt loam, forested, 0 to 8 percent slopes

Elevation: 16 to 1,509 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Island, forested, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: till plains

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.5 inches

Representative Profile:

Oi—0 to 1 inch; slightly decomposed plant material, high permeability

A—1 to 13 inches; silt loam, high permeability

Bw—13 to 24 inches; silt loam, high permeability

BC—24 to 33 inches; silt loam, high permeability

2C—33 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Tuxedni and similar soils: 3 to 15 percent of the map unit

Benka and similar soils: 0 to 15 percent of the map unit

573—Kachemak silt loam, 4 to 8 percent slopes

Elevation: 410 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak and similar soils

Extent: 70 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 5 to 10 percent of the map unit

Tuxedni and similar soils: 5 to 25 percent of the map unit

574—Kachemak silt loam, 8 to 15 percent slopes

Elevation: 164 to 2,001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 5 to 20 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

575—Kachemak silt loam, 15 to 25 percent slopes

Elevation: 197 to 2,018 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 5 to 15 percent of the map unit

576—Kachemak silt loam, 25 to 35 percent slopes

Elevation: 197 to 2,034 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 25 to 35 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 5 to 25 percent of the map unit

577—Kachemak silt loam, 35 to 45 percent slopes

Elevation: 312 to 2,313 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak and similar soils

Extent: 85 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 35 to 45 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Tuxedni and similar soils: 5 to 15 percent of the map unit

578—Kachemak silt loam, cool, 4 to 8 percent slopes

Elevation: 1,197 to 2,362 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Kachemak, cool, and similar soils

Extent: 70 to 100 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 0 to 15 percent of the map unit

Tuxedni and similar soils: 0 to 10 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

579—Kachemak silt loam, cool, 8 to 15 percent slopes

Elevation: 1,280 to 2,247 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Kachemak, cool, and similar soils

Extent: 70 to 100 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 10 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

580—Kachemak silt loam, cool, 15 to 25 percent slopes

Elevation: 1,230 to 2,247 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 5 to 15 percent of the map unit

581—Kachemak silt loam, cool, 25 to 35 percent slopes

Elevation: 1,362 to 2,329 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 25 to 35 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 10 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 10 percent of the map unit

582—Kachemak silt loam, cool, 35 to 45 percent slopes

Elevation: 1,247 to 2,001 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Kachemak, cool, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 35 to 45 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 10 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 10 percent of the map unit

583—Kachemak silt loam, forested, 4 to 8 percent slopes

Elevation: 541 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

Kachemak, forested, and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, summits, shoulders

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 5 to 20 percent of the map unit

Tuxedni and similar soils: 5 to 15 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

584—Kachemak silt loam, forested, 8 to 15 percent slopes

Elevation: 476 to 2,018 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak, forested, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes, summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Tuxedni and similar soils: 5 to 15 percent of the map unit

Redoubt and similar soils: 5 to 15 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

585—Kachemak silt loam, forested, 15 to 25 percent slopes

Elevation: 492 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Kachemak, forested, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Minor Components

Redoubt and similar soils: 0 to 15 percent of the map unit

Tuxedni and similar soils: 10 to 15 percent of the map unit

586—Kachemak, cool-Snowdance complex, 0 to 4 percent slopes

Elevation: 1,640 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

Kachemak, cool, and similar soils

Extent: 50 to 70 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, shoulders, backslopes

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Snowdance and similar soils

Extent: 30 to 50 percent of the map unit

Landform: till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability

Bw—8 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

587—Kachemak, cool-Snowdance complex, 4 to 8 percent slopes

Elevation: 1,673 to 2,182 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 130 days

Kachemak, cool, and similar soils

Extent: 50 to 70 percent of the map unit
Landform: moraines on till plains
Position on slope: summits, shoulders, backslopes
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: ash influenced loess over glacial drift
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 15.2 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 A—3 to 8 inches; silt loam, high permeability
 B—8 to 30 inches; silt loam, high permeability
 2C—30 to 60 inches; silt loam, moderately high permeability

Snowdance and similar soils

Extent: 30 to 50 percent of the map unit
Landform: till plains
Position on slope: summits
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: silty volcanic ash and/or silty loess over loamy till
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 9.7 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 A—3 to 8 inches; mucky silt loam, high permeability
 Bw—8 to 24 inches; silt loam, high permeability
 2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

588—Kachemak, cool-Snowdance complex, 8 to 15 percent slopes

Elevation: 1,575 to 2,411 feet
Mean annual precipitation: 30 to 39 inches
Frost-free period: 90 to 130 days

Kachemak, cool, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, summits, backslopes

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.2 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; silt loam, high permeability

B—8 to 30 inches; silt loam, high permeability

2C—30 to 60 inches; silt loam, moderately high permeability

Snowdance and similar soils

Extent: 25 to 50 percent of the map unit

Landform: till plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability

Bw—8 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

589—Kalifonsky silt loam, 0 to 4 percent slopes

Elevation: 3 to 361 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Kalifonsky and similar soils

Extent: 80 to 86 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: loess over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—6 inches
Ponding: rare
Available water capacity (approximate): 7.2 inches
Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 A—2 to 9 inches; silt loam, high permeability
 Cg—9 to 16 inches; silt loam, high permeability
 2C—16 to 60 inches; gravelly sand, high permeability

Minor Components

Cohoe, dry, and similar soils: 5 to 15 percent of the map unit
 Doroshin and similar soils: 4 to 10 percent of the map unit

590—Kalifonsky silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,148 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 85 to 120 days

Kalifonsky and similar soils

Extent: 80 to 90 percent of the map unit
Landform: depressions on till plains
Slope shape: concave
Slope range: 4 to 8 percent
Parent material: loess over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—moderate; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—6 inches
Ponding: rare
Available water capacity (approximate): 7.2 inches
Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 A—2 to 9 inches; silt loam, high permeability
 Cg—9 to 16 inches; silt loam, high permeability
 2C—16 to 60 inches; gravelly sand, high permeability

Minor Components

Spensard and similar soils: 10 to 20 percent of the map unit

591—Kalifonsky-Typic Cryorthents complex, 4 to 45 percent slopes

Elevation: 344 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Kalifonsky and similar soils

Extent: 30 to 75 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 4 to 7 percent

Parent material: loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 7.2 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 9 inches; silt loam, high permeability

Cg—9 to 16 inches; silt loam, high permeability

2C—16 to 60 inches; gravelly sand, high permeability

Typic Cryorthents and similar soils

Extent: 15 to 50 percent of the map unit

Landform: terraces on outwash plains

Slope shape: linear

Slope range: 20 to 45 percent

Parent material: sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

Minor Components

Kichatna and similar soils: 0 to 20 percent of the map unit

Spensard and similar soils: 0 to 20 percent of the map unit

592—Karluk silt loam, 0 to 4 percent slopes

Elevation: 3 to 148 feet
Mean annual precipitation: 16 to 20 inches
Frost-free period: 85 to 115 days

Karluk and similar soils

Extent: 70 to 85 percent of the map unit
Landform: bogs on stream terraces
Slope shape: concave
Slope range: 0 to 4 percent
Parent material: ash influenced loess over fine-silty diatomaceous earth
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-May—14 inches; June-Sept.—14 to 20 inches
Ponding: none
Available water capacity (approximate): 13.8 inches
Representative Profile:
 Oa—0 to 3 inches; highly decomposed plant material, moderately low permeability
 A—3 to 10 inches; silt loam, moderately high permeability
 Cg1—10 to 17 inches; silt loam, moderately high permeability
 2Cg2—17 to 60 inches; silt loam, moderately high permeability

Minor Components

Nikolai and similar soils: 5 to 15 percent of the map unit
 Soldotna and similar soils: 5 to 15 percent of the map unit

593—Kashwitna silt loam, 0 to 4 percent slopes

Elevation: 180 to 1,017 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Kashwitna and similar soils

Extent: 60 to 90 percent of the map unit
Landform: outwash plains, kame moraines
Position on slope: backslopes
Slope shape: convex
Slope range: 0 to 4 percent
Parent material: ash influenced loess over gravelly outwash
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.6 inches

Representative Profile:

- O_i—0 to 3 inches; slightly decomposed plant material, high permeability
- E—3 to 5 inches; silt loam, high permeability
- B—5 to 21 inches; silt loam, high permeability
- 2C—21 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 5 to 15 percent of the map unit
 Iliamna and similar soils: 0 to 10 percent of the map unit

594—Kashwitna silt loam, 4 to 8 percent slopes

Elevation: 115 to 1,230 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Kashwitna and similar soils

Extent: 75 to 90 percent of the map unit
Landform: kame moraines, outwash plains
Position on slope: backslopes
Slope shape: convex
Slope range: 4 to 8 percent
Parent material: ash influenced loess over gravelly outwash
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.6 inches
Representative Profile:

- O_i—0 to 3 inches; slightly decomposed plant material, high permeability
- E—3 to 5 inches; silt loam, high permeability
- B—5 to 21 inches; silt loam, high permeability
- 2C—21 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 5 to 15 percent of the map unit
 Qutal and similar soils: 5 to 15 percent of the map unit

595—Kashwitna silt loam, 8 to 15 percent slopes

Elevation: 197 to 1,394 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Kashwitna and similar soils

Extent: 70 to 90 percent of the map unit
Landform: kame moraines, outwash plains

Position on slope: backslopes
Slope shape: convex
Slope range: 8 to 15 percent
Parent material: ash influenced loess over gravelly outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.6 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 E—3 to 5 inches; silt loam, high permeability
 B—5 to 21 inches; silt loam, high permeability
 2C—21 to 60 inches; very gravelly sand, high permeability

Minor Components

Tlikakila and similar soils: 5 to 15 percent of the map unit
 Redoubt and similar soils: 5 to 15 percent of the map unit

596—Kashwitna silt loams, moderately steep and strongly sloping

Elevation: 164 to 1,542 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Kashwitna, moderately steep, and similar soils

Extent: 40 to 55 percent of the map unit
Landform: outwash plains, kame moraines
Position on slope: backslopes
Slope shape: convex
Slope range: 21 to 30 percent
Parent material: ash influenced loess over gravelly outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.6 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 E—3 to 5 inches; silt loam, high permeability
 B—5 to 21 inches; silt loam, high permeability
 2C—21 to 60 inches; very gravelly sand, high permeability

Kashwitna, strongly sloping, and similar soils

Extent: 35 to 45 percent of the map unit
Landform: kame moraines, outwash plains
Position on slope: summits, footslopes, shoulders

Slope shape: convex
Slope range: 10 to 20 percent
Parent material: ash influenced loess over gravelly outwash
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 7.6 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 E—3 to 5 inches; silt loam, high permeability
 B—5 to 21 inches; silt loam, high permeability
 2C—21 to 60 inches; very gravelly sand, high permeability

Minor Components

Spenard and similar soils: 5 to 20 percent of the map unit

597—Kenai silt loam, 0 to 4 percent slopes

Elevation: 3 to 328 feet
Mean annual precipitation: 16 to 20 inches
Frost-free period: 75 to 115 days

Kenai and similar soils

Extent: 65 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: shoulders, backslopes
Slope shape: convex
Slope range: 0 to 4 percent
Parent material: ash influenced loess over clayey till
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 17.1 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E—2 to 6 inches; silt loam, high permeability
 B—6 to 19 inches; silt loam, high permeability
 2BC—19 to 24 inches; very fine sandy loam, high permeability
 3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit
 Clam Gulch and similar soils: 4 to 15 percent of the map unit

598—Kenai silt loam, 4 to 8 percent slopes

Elevation: 82 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Kenai and similar soils

Extent: 65 to 85 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 5 to 25 percent of the map unit

Redoubt and similar soils: 0 to 25 percent of the map unit

599—Kenai silt loam, 8 to 15 percent slopes

Elevation: 66 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Kenai and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 0 to 15 percent of the map unit

Soldotna and similar soils: 0 to 10 percent of the map unit

600—Kenai silt loam, 15 to 25 percent slopes

Elevation: 148 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 120 days

Kenai and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Soldotna and similar soils: 0 to 15 percent of the map unit

Clam Gulch and similar soils: 0 to 10 percent of the map unit

601—Kenai silt loam, 25 to 45 percent slopes

Elevation: 164 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 115 days

Kenai and similar soils

Extent: 85 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability

3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 5 to 10 percent of the map unit

Redoubt and similar soils: 0 to 5 percent of the map unit

602—Kenai silt loams, moderately steep and gently sloping

Elevation: 82 to 361 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 85 to 115 days

Kenai, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines on till plains

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 11 to 20 percent

Parent material: ash influenced loess over clayey till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 17.1 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

E—2 to 6 inches; silt loam, high permeability

B—6 to 19 inches; silt loam, high permeability

2BC—19 to 24 inches; very fine sandy loam, high permeability
 3C—25 to 60 inches; silty clay loam, moderately low permeability

Kenai, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit
Landform: moraines on till plains
Position on slope: summits, shoulders, toeslopes
Slope shape: convex
Slope range: 4 to 10 percent
Parent material: ash influenced loess over clayey till
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 17.1 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E—2 to 6 inches; silt loam, high permeability
 B—6 to 19 inches; silt loam, high permeability
 2BC—19 to 24 inches; very fine sandy loam, high permeability
 3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 5 to 15 percent of the map unit
 Redoubt and similar soils: 0 to 15 percent of the map unit

603—Kenai-Starichkof association, 0 to 25 percent slopes

Elevation: 3 to 328 feet
Mean annual precipitation: 16 to 20 inches
Frost-free period: 75 to 115 days

Kenai and similar soils

Extent: 50 to 70 percent of the map unit
Landform: moraines on till plains
Position on slope: shoulders, backslopes
Slope shape: convex
Slope range: 4 to 25 percent
Parent material: ash influenced loess over clayey till
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 17.1 inches

Representative Profile:

- Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- E—2 to 6 inches; silt loam, high permeability
- B—6 to 19 inches; silt loam, high permeability
- 2BC—19 to 24 inches; very fine sandy loam, high permeability
- 3C—25 to 60 inches; silty clay loam, moderately low permeability

Starichkof and similar soils

Extent: 20 to 40 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

- Oi—0 to 7 inches; peat, high permeability
- Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Clam Gulch and similar soils: 0 to 15 percent of the map unit

604—Kichatna silt loam, 0 to 8 percent slopes

Elevation: 3 to 295 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Kichatna and similar soils

Extent: 60 to 85 percent of the map unit

Landform: terraces on outwash plains

Slope shape: linear

Slope range: 0 to 8 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

- Oi—0 to 2 inches; slightly decomposed plant material, high permeability
- E—2 to 4 inches; silt loam, moderately high permeability

Bs—4 to 11 inches; silt loam, moderately high permeability
 2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability
 2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Soldotna and similar soils: 0 to 20 percent of the map unit
 Tangerra and similar soils: 0 to 12 percent of the map unit
 Longmare and similar soils: 0 to 12 percent of the map unit
 Nikolai and similar soils: 0 to 5 percent of the map unit

605—Kichatna silt loam, 8 to 15 percent slopes

Elevation: 98 to 262 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 75 to 115 days

Kichatna and similar soils

Extent: 60 to 90 percent of the map unit
Landform: hills on outwash plains
Slope shape: linear
Slope range: 8 to 15 percent
Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 5.7 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 E—2 to 4 inches; silt loam, moderately high permeability
 Bs—4 to 11 inches; silt loam, moderately high permeability
 2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability
 2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Soldotna and similar soils: 10 to 25 percent of the map unit
 Coal Creek and similar soils: 0 to 8 percent of the map unit
 Starichkof and similar soils: 0 to 8 percent of the map unit

606—Kichatna silt loam, 15 to 25 percent slopes

Elevation: 66 to 1,772 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 85 to 120 days

Kichatna and similar soils

Extent: 65 to 80 percent of the map unit

Landform: hills on outwash plains

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

B_s—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Soldotna and similar soils: 15 to 35 percent of the map unit

Karluk and similar soils: 0 to 5 percent of the map unit

Doroshin and similar soils: 0 to 5 percent of the map unit

607—Kichatna silt loam, 25 to 45 percent slopes

Elevation: 3 to 2,034 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Kichatna and similar soils

Extent: 80 to 90 percent of the map unit

Landform: hills on outwash plains

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

B_s—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 0 to 7 percent of the map unit

Soldotna and similar soils: 0 to 15 percent of the map unit
 Tlikakila and similar soils: 0 to 7 percent of the map unit

608—Kichatna silt loam, 45 to 60 percent slopes

Elevation: 0 to 1,575 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 75 to 120 days

Kichatna and similar soils

Extent: 65 to 80 percent of the map unit
Landform: hills on outwash plains
Slope shape: linear
Slope range: 45 to 60 percent
Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 5.7 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 E—2 to 4 inches; silt loam, moderately high permeability
 Bs—4 to 11 inches; silt loam, moderately high permeability
 2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability
 2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Benka and similar soils: 10 to 20 percent of the map unit
 Qutal and similar soils: 0 to 10 percent of the map unit
 Redoubt and similar soils: 0 to 25 percent of the map unit
 Spenard and similar soils: 0 to 7 percent of the map unit

609—Kichatna-Killey association, 0 to 65 percent slopes

Elevation: 16 to 1,886 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 75 to 120 days

Kichatna and similar soils

Extent: 40 to 80 percent of the map unit
Landform: terraces on outwash plains
Slope shape: linear
Slope range: 25 to 65 percent
Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

Bs—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

Killey and similar soils

Extent: 20 to 60 percent of the map unit

Landform: flood plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: frequent

Depth to high water table (approximate): April-May—18 to 30 inches; June-Sept.—18 inches

Ponding: none

Available water capacity (approximate): 6.6 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, moderately high permeability

C1—6 to 29 inches; stratified fine sand to silt loam, moderately high permeability

2C2—29 to 60 inches; very gravelly coarse sand, high permeability

610—Kidazqeni silt loam, 0 to 2 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 90 to 120 days

Kidazqeni and similar soils

Extent: 80 to 90 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat excessively drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.0 inches

Representative Profile:

A—0 to 4 inches; silt loam, moderately high permeability

AC—4 to 21 inches; stratified sand to silt loam, high permeability

2C—21 to 60 inches; very gravelly sand, high permeability

Minor Components

Riverwash: 0 to 15 percent of the map unit

Susitna and similar soils: 0 to 10 percent of the map unit

611—Killey and Moose River soils, 0 to 2 percent slopes

Elevation: 0 to 1,886 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

Killey and similar soils

Extent: 25 to 75 percent of the map unit

Landform: flood plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very high

Drainage class: poorly drained

Flooding: frequent

Depth to high water table (approximate): April-May—18 to 30 inches; June-Sept.—18 inches

Ponding: none

Available water capacity (approximate): 6.6 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

A—2 to 6 inches; silt loam, moderately high permeability

C₁—6 to 29 inches; stratified fine sand to silt loam, moderately high permeability

2C₂—29 to 60 inches; very gravelly coarse sand, high permeability

Moose River and similar soils

Extent: 25 to 75 percent of the map unit

Landform: flood plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—8 inches

Ponding: none

Available water capacity (approximate): 6.3 inches

Representative Profile:

O_i—0 to 5 inches; slightly decomposed plant material, high permeability

A—5 to 10 inches; silt loam, moderately high permeability

Cg₁—10 to 39 inches; stratified fine sand to silt loam to slightly decomposed plant material, moderately high permeability

2Cg2—39 to 60 inches; very gravelly sand, high permeability

Minor Components

Chunilna and similar soils: 0 to 25 percent of the map unit

Slikok and similar soils: 0 to 25 percent of the map unit

Doroshin and similar soils: 0 to 15 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

612—Liten very fine sandy loam, 0 to 6 percent slopes

Elevation: 197 to 410 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Liten and similar soils

Extent: 70 to 90 percent of the map unit

Landform: dunes

Position on slope: shoulders, summits, backslopes

Slope shape: convex

Slope range: 0 to 6 percent

Parent material: loess over sandy eolian deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: somewhat excessively drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.4 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E, B_s—2 to 8 inches; very fine sandy loam, high permeability

2C—8 to 60 inches; sand, high permeability

Minor Components

Slikok and similar soils: 5 to 15 percent of the map unit

Cohoe, dry, and similar soils: 0 to 20 percent of the map unit

613—Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 25 to 45 percent slopes

Elevation: 656 to 3,150 feet

Mean annual precipitation: 20 to 59 inches

Frost-free period: 75 to 120 days

Lithic Haplocryands and similar soils

Extent: 30 to 70 percent of the map unit

Landform: mountains

Position on slope: footslopes, backslopes

Slope shape: convex

Slope range: 25 to 45 percent
Parent material: volcanic ash over till
Depth to bedrock (lithic): 8 to 19 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 3.7 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 A,B—2 to 12 inches; gravelly silt loam, moderately high permeability
 R—12 to 60 inches; bedrock, impermeable

Alic Haplocryands and similar soils

Extent: 10 to 45 percent of the map unit
Landform: mountains
Slope shape: convex
Slope range: 25 to 45 percent
Parent material: volcanic ash over till
Depth to bedrock (lithic): 22 to 60 inches
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 8.4 inches
Representative Profile:
 Oe—0 to 4 inches; moderately decomposed plant material, high permeability
 A,B—4 to 21 inches; silt loam, high permeability
 2C—21 to 31 inches; very gravelly sandy loam, high permeability
 R—31 to 60 inches; bedrock, impermeable

Rock outcrop

Extent: 5 to 25 percent of the map unit
Landform: hills, mountains
Slope range: 35 to 75 percent

Minor Components

Typic Cryaquands and similar soils: 0 to 10 percent of the map unit

614—Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 45 to 100 percent slopes

Elevation: 558 to 3,773 feet
Mean annual precipitation: 30 to 59 inches
Frost-free period: 75 to 120 days

Lithic Haplocryands and similar soils

Extent: 30 to 70 percent of the map unit
Landform: mountains
Position on slope: backslopes, footslopes
Slope shape: convex
Slope range: 45 to 100 percent
Parent material: volcanic ash over till
Depth to bedrock (lithic): 8 to 19 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 3.7 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 A,B—2 to 12 inches; gravelly silt loam, moderately high permeability
 R—12 to 60 inches; bedrock, impermeable

Alic Haplocryands and similar soils

Extent: 10 to 45 percent of the map unit
Landform: mountains
Slope shape: concave
Slope range: 45 to 100 percent
Parent material: volcanic ash over till
Depth to bedrock (lithic): 22 to 60 inches
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 8.4 inches
Representative Profile:
 Oe—0 to 4 inches; moderately decomposed plant material, high permeability
 A,B—4 to 21 inches; silt loam, high permeability
 2C—21 to 31 inches; very gravelly sandy loam, high permeability
 R—31 to 60 inches; bedrock, impermeable

Rock outcrop

Extent: 15 to 25 percent of the map unit
Landform: hills, mountains
Slope range: 45 to 120 percent

Minor Components

Typic Cryaquands and similar soils: 0 to 10 percent of the map unit

615—Longmare silt loam, 0 to 4 percent slopes

Elevation: 3 to 328 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Longmare and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines, outwash plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—29 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 10.5 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E—4 to 6 inches; silt loam, high permeability

B—6 to 18 inches; silt loam, high permeability

C1—18 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Soldotna and similar soils: 0 to 15 percent of the map unit

Kalifonsky and similar soils: 0 to 10 percent of the map unit

Tangerra and similar soils: 0 to 10 percent of the map unit

616—Longmare silt loam, 4 to 8 percent slopes

Elevation: 3 to 295 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Longmare and similar soils

Extent: 70 to 85 percent of the map unit

Landform: moraines, outwash plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—29 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 10.5 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E—4 to 6 inches; silt loam, high permeability

B—6 to 18 inches; silt loam, high permeability

C1—18 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Soldotna and similar soils: 0 to 15 percent of the map unit

Kalifonsky and similar soils: 0 to 10 percent of the map unit

Tangerra and similar soils: 0 to 10 percent of the map unit

617—Mutnala silt loam, 0 to 4 percent slopes

Elevation: 33 to 1,542 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Mutnala and similar soils

Extent: 50 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability

Bw—7 to 23 inches; silt loam, high permeability

2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Qutal and similar soils: 10 to 25 percent of the map unit

Redoubt and similar soils: 5 to 25 percent of the map unit

Spenard and similar soils: 5 to 25 percent of the map unit

618—Mutnala silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Mutnala and similar soils

Extent: 50 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability

Bw—7 to 23 inches; silt loam, high permeability

2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Spensard and similar soils: 5 to 25 percent of the map unit

Qutal and similar soils: 5 to 25 percent of the map unit

Redoubt and similar soils: 5 to 25 percent of the map unit

619—Mutnala silt loam, 8 to 15 percent slopes

Elevation: 3 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Mutnala and similar soils

Extent: 60 to 95 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

- Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
- E,B—4 to 7 inches; silt loam, high permeability
- Bw—7 to 23 inches; silt loam, high permeability
- 2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Spensard and similar soils: 10 to 15 percent of the map unit

Qutal and similar soils: 5 to 25 percent of the map unit

620—Mutnala silt loam, 15 to 25 percent slopes

Elevation: 0 to 1,854 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Mutnala and similar soils

Extent: 80 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

- Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
- E,B—4 to 7 inches; silt loam, high permeability
- Bw—7 to 23 inches; silt loam, high permeability
- 2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Spensard and similar soils: 0 to 15 percent of the map unit

Qutal and similar soils: 0 to 5 percent of the map unit

621—Mutnala silt loam, 25 to 45 percent slopes

Elevation: 230 to 1,476 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Mutnala and similar soils

Extent: 60 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability

Bw—7 to 23 inches; silt loam, high permeability

2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Kichatna and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 15 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

622—Mutnala silt loam, 45 to 60 percent slopes

Elevation: 49 to 1,427 feet

Mean annual precipitation: 30 to 39 inches

Frost-free period: 90 to 120 days

Mutnala and similar soils

Extent: 65 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 45 to 60 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability

Bw—7 to 23 inches; silt loam, high permeability

2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Kichatna and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 15 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

623—Mutnala-Starichkof-Slikok association, undulating to hilly

Elevation: 180 to 1,837 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 130 days

Mutnala and similar soils

Extent: 20 to 60 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 14.2 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,B—4 to 7 inches; silt loam, high permeability

Bw—7 to 23 inches; silt loam, high permeability

2C—23 to 60 inches; gravelly sandy loam, moderately high permeability

Starichkof and similar soils

Extent: 20 to 75 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Slikok and similar soils

Extent: 5 to 40 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability

A—13 to 51 inches; mucky silt loam, high permeability

2C—51 to 60 inches; gravelly silt loam, moderately high permeability

624—Naptowne silt loam, 0 to 4 percent slopes

Elevation: 3 to 394 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 130 days

Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains, moraines

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 2 to 10 percent of the map unit

Nikolai and similar soils: 0 to 5 percent of the map unit

625—Naptowne silt loam, 4 to 8 percent slopes

Elevation: 3 to 459 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines, till plains

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 2 to 10 percent of the map unit

Nikolai and similar soils: 0 to 5 percent of the map unit

626—Naptowne silt loam, 8 to 15 percent slopes

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

- Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability
- E,Bs—3 to 14 inches; silt loam, high permeability
- Bw—13 to 20 inches; silt loam, high permeability
- 2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

- Soldotna and similar soils: 5 to 15 percent of the map unit
- Tuxedni and similar soils: 2 to 10 percent of the map unit
- Nikolai and similar soils: 0 to 5 percent of the map unit

627—Naptowne silt loam, 15 to 25 percent slopes

- Elevation:* 131 to 476 feet
- Mean annual precipitation:* 16 to 20 inches
- Frost-free period:* 75 to 115 days

Naptowne and similar soils

- Extent:* 70 to 90 percent of the map unit
- Landform:* moraines
- Slope shape:* linear
- Slope range:* 15 to 25 percent
- Parent material:* ash influenced loess over gravelly drift
- Hazard of erosion (organic mat removed):* by water—severe; by wind—severe
- Runoff:* high
- Drainage class:* well drained
- Flooding:* none
- Depth to high water table (approximate):* April-Sept.—more than 60 inches
- Ponding:* none
- Available water capacity (approximate):* 11.0 inches
- Representative Profile:*
 - Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability
 - E,Bs—3 to 14 inches; silt loam, high permeability
 - Bw—13 to 20 inches; silt loam, high permeability
 - 2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

- Soldotna and similar soils: 5 to 15 percent of the map unit
- Tuxedni and similar soils: 2 to 10 percent of the map unit
- Nikolai and similar soils: 0 to 5 percent of the map unit

628—Naptowne silt loam, 25 to 60 percent slopes

- Elevation:* 98 to 427 feet
- Mean annual precipitation:* 16 to 20 inches
- Frost-free period:* 75 to 115 days

Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines

Slope shape: linear

Slope range: 25 to 60 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 2 to 10 percent of the map unit

Nikolai and similar soils: 2 to 7 percent of the map unit

629—Naptowne silt loam, undulating

Elevation: 115 to 410 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

Naptowne and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains, moraines

Slope shape: linear

Slope range: 3 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit

Tuxedni and similar soils: 2 to 10 percent of the map unit

Nikolai and similar soils: 1 to 7 percent of the map unit

630—Naptowne silt loams, moderately steep and strongly sloping

Elevation: 148 to 459 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Naptowne, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 21 to 30 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Naptowne, strongly sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines

Position on slope: summits, shoulders, footslopes

Slope shape: convex

Slope range: 10 to 20 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit

Nikolai and similar soils: 2 to 7 percent of the map unit

Tuxedni and similar soils: 2 to 10 percent of the map unit

631—Naptowne silt loams, strongly sloping and gently sloping

Elevation: 131 to 443 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Naptowne, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: moraines

Position on slope: backslopes

Slope shape: linear

Slope range: 8 to 16 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability

Bw—13 to 20 inches; silt loam, high permeability

2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Naptowne, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines

Position on slope: summits, footslopes, shoulders

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bs—3 to 14 inches; silt loam, high permeability
 Bw—13 to 20 inches; silt loam, high permeability
 2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

Minor Components

Soldotna and similar soils: 5 to 15 percent of the map unit
 Nikolai and similar soils: 2 to 7 percent of the map unit
 Tuxedni and similar soils: 2 to 10 percent of the map unit

632—Niklason very fine sandy loam, 0 to 2 percent slopes

Elevation: 3 to 262 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 75 to 120 days

Niklason and similar soils

Extent: 80 to 90 percent of the map unit
Landform: flood plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: loamy alluvium over sandy and gravelly alluvium
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: occasional
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 5.8 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 A—2 to 6 inches; silt loam, moderately high permeability
 C1—6 to 23 inches; stratified sand to silt loam, high permeability
 2C2—23 to 60 inches; extremely gravelly sand, high permeability

Minor Components

Kidazqeni and similar soils: 5 to 15 percent of the map unit

633—Nikolaevsk silt loam, 0 to 4 percent slopes

Elevation: 213 to 2,018 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Nikolaevsk and similar soils

Extent: 75 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: summits, footslopes, toeslopes
Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.9 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E, B—2 to 20 inches; silt loam, high permeability

2C_g—20 to 60 inches; very cobbly loamy sand, high permeability

Minor Components

Tokositna and similar soils: 0 to 15 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

634—Nikolaevsk silt loam, 4 to 8 percent slopes

Elevation: 689 to 1,886 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Nikolaevsk and similar soils

Extent: 75 to 90 percent of the map unit

Landform: moraines on till plains

Position on slope: summits, footslopes, toeslopes

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—16 inches

Ponding: none

Available water capacity (approximate): 7.9 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E, B—2 to 20 inches; silt loam, high permeability

2C_g—20 to 60 inches; very cobbly loamy sand, high permeability

Minor Components

Tokositna and similar soils: 5 to 20 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

635—Nikolaevsk silt loam, 8 to 15 percent slopes

Elevation: 1,165 to 1,837 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 130 days

Nikolaevsk and similar soils

Extent: 80 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: toeslopes, footslopes, summits
Slope shape: concave
Slope range: 8 to 15 percent
Parent material: ash influenced loess over sandy and gravelly till
Hazard of erosion (organic mat removed): by water—severe; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—16 inches
Ponding: none
Available water capacity (approximate): 7.9 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 E,B—2 to 20 inches; silt loam, high permeability
 2Cg—20 to 60 inches; very cobbly loamy sand, high permeability

Minor Components

Tokositna and similar soils: 5 to 15 percent of the map unit
 Doroshin and similar soils: 0 to 5 percent of the map unit

636—Nikolai peat, 0 to 4 percent slopes

Elevation: 3 to 1,690 feet
Mean annual precipitation: 16 to 39 inches
Frost-free period: 85 to 120 days

Nikolai and similar soils

Extent: 60 to 95 percent of the map unit
Landform: depressions on till plains, depressions on coastal plains
Slope shape: linear
Slope range: 0 to 4 percent
Parent material: organic material over loamy till over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—12 inches
Ponding: rare
Available water capacity (approximate): 20.4 inches
Representative Profile:
 Oe—0 to 2 inches; peat, moderately high permeability

Oa—2 to 32 inches; muck, moderately high permeability
 2Cg1—32 to 41 inches; silt loam, high permeability
 3Cg2—41 to 60 inches; loamy sand, very high permeability

Minor Components

Starichkof and similar soils: 2 to 25 percent of the map unit
 Truuli and similar soils: 3 to 20 percent of the map unit

637—Nikolai, somewhat poorly drained-Tuxedni complex, 0 to 4 percent slopes

Elevation: 3 to 771 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 85 to 115 days

Nikolai, somewhat poorly drained, and similar soils

Extent: 50 to 80 percent of the map unit
Landform: depressions on till plains, depressions on coastal plains
Slope shape: concave
Slope range: 0 to 4 percent
Parent material: organic material over loamy till over sandy and gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: medium
Drainage class: somewhat poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—25 inches
Ponding: none
Available water capacity (approximate): 20.4 inches
Representative Profile:
 Oe—0 to 2 inches; peat, moderately high permeability
 Oa—2 to 32 inches; muck, moderately high permeability
 2Cg1—32 to 41 inches; silt loam, high permeability
 3Cg2—41 to 60 inches; loamy sand, very high permeability

Tuxedni and similar soils

Extent: 15 to 40 percent of the map unit
Landform: till plains
Slope shape: linear
Slope range: 0 to 3 percent
Parent material: ash influenced loess over loamy till
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: low
Drainage class: somewhat poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—24 inches
Ponding: none
Available water capacity (approximate): 15.0 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability
 2C1—24 to 36 inches; silt loam, high permeability
 3C2—36 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Cohoe, dry, and similar soils: 0 to 15 percent of the map unit
 Soldotna and similar soils: 0 to 20 percent of the map unit

638—Puntilla silt loam, 4 to 15 percent slopes

Elevation: 968 to 1,903 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 130 days

Puntilla and similar soils

Extent: 50 to 90 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes, shoulders
Slope shape: convex
Slope range: 4 to 15 percent
Parent material: ash influenced loess over glacial till
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 13.8 inches
Representative Profile:
 Oi—0 to 6 inches; slightly decomposed plant material, high permeability
 A—6 to 10 inches; silt loam, high permeability
 E,B—10 to 36 inches; silt loam, high permeability
 2C—36 to 60 inches; gravelly loam, moderately high permeability

Minor Components

Kachemak and similar soils: 10 to 35 percent of the map unit
 Tuxedni and similar soils: 0 to 15 percent of the map unit

639—Puntilla silt loam, 8 to 25 percent slopes

Elevation: 902 to 1,903 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 130 days

Puntilla and similar soils

Extent: 70 to 85 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes, shoulders
Slope shape: convex

Slope range: 8 to 25 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 13.8 inches

Representative Profile:

O_i—0 to 6 inches; slightly decomposed plant material, high permeability

A—6 to 10 inches; silt loam, high permeability

E, B—10 to 36 inches; silt loam, high permeability

2C—36 to 60 inches; gravelly loam, moderately high permeability

Minor Components

Snowdance and similar soils: 0 to 15 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

640—Qutal silt loam, 0 to 4 percent slopes

Elevation: 49 to 2,198 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Qutal and similar soils

Extent: 50 to 95 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

O_e—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E, B—3 to 10 inches; silt loam, high permeability

B_w—10 to 24 inches; silt loam, high permeability

2C_g—24 to 48 inches; silt loam, moderately high permeability

3C—48 to 60 inches; very gravelly sand, high permeability

Minor Components

Spenard and similar soils: 0 to 25 percent of the map unit

Whitsol and similar soils: 5 to 25 percent of the map unit

Starichkof and similar soils: 0 to 25 percent of the map unit

641—Qutal silt loam, 4 to 8 percent slopes

Elevation: 3 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Qutal and similar soils

Extent: 50 to 99 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,B—3 to 10 inches; silt loam, high permeability

Bw—10 to 24 inches; silt loam, high permeability

2Cg—24 to 48 inches; silt loam, moderately high permeability

3C—48 to 60 inches; very gravelly sand, high permeability

Minor Components

Spenard and similar soils: 0 to 25 percent of the map unit

Whitsol and similar soils: 0 to 25 percent of the map unit

642—Qutal silt loam, 8 to 15 percent slopes

Elevation: 16 to 1,542 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Qutal and similar soils

Extent: 70 to 90 percent of the map unit

Landform: depressions on till plains, moraines on till plains

Position on slope: footslopes

Slope shape: concave

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-May—24 inches; June-Sept.—24 to more than 60 inches

Ponding: none

Available water capacity (approximate): 15.9 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,B—3 to 10 inches; silt loam, high permeability

Bw—10 to 24 inches; silt loam, high permeability

2Cg—24 to 48 inches; silt loam, moderately high permeability

3C—48 to 60 inches; very gravelly sand, high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

Whitsol and similar soils: 5 to 15 percent of the map unit

643—Redoubt silt loam, 0 to 4 percent slopes

Elevation: 10 to 1,690 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 90 to 130 days

Redoubt, terraces, and similar soils

Extent: 60 to 95 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Iliamna, terraces, and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 20 percent of the map unit

644—Redoubt silt loam, 4 to 15 percent slopes

Elevation: 16 to 1,739 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Redoubt and similar soils

Extent: 70 to 95 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 4 to 15 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Spenard and similar soils: 5 to 15 percent of the map unit

Iliamna and similar soils: 5 to 20 percent of the map unit

645—Redoubt silt loam, 15 to 45 percent slopes

Elevation: 3 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Redoubt and similar soils

Extent: 70 to 90 percent of the map unit

Landform: hills

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability
 2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Iliamna and similar soils: 0 to 15 percent of the map unit
 Tuxedni and similar soils: 5 to 15 percent of the map unit

646—Redoubt silt loam, cool, 0 to 8 percent slopes

Elevation: 1,066 to 1,985 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 85 to 120 days

Redoubt, cool, and similar soils

Extent: 50 to 85 percent of the map unit
Landform: hills
Position on slope: shoulders, backslopes
Slope shape: convex
Slope range: 0 to 8 percent
Parent material: ash influenced loess over loamy glacial till
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 12.0 inches
Representative Profile:
 Oe—0 to 2 inches; mucky peat, moderately high permeability
 E,Bhs—2 to 22 inches; silt loam, high permeability
 2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Benka and similar soils: 0 to 25 percent of the map unit
 Spenard and similar soils: 0 to 25 percent of the map unit

647—Redoubt silt loams, moderately steep and gently sloping

Elevation: 3 to 558 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Redoubt, moderately steep, and similar soils

Extent: 40 to 50 percent of the map unit
Landform: hills
Position on slope: backslopes, shoulders
Slope shape: convex
Slope range: 11 to 20 percent
Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Redoubt, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 4 to 10 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Minor Components

Starichkof and similar soils: 5 to 15 percent of the map unit

Slikok and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

648—Redoubt, cool-Tuxedni complex, 3 to 45 percent slopes

Elevation: 1,115 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 120 days

Redoubt, cool, and similar soils

Extent: 50 to 75 percent of the map unit

Landform: hills

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 3 to 45 percent

Parent material: ash influenced loess over loamy glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oe—0 to 2 inches; mucky peat, moderately high permeability

E,Bhs—2 to 22 inches; silt loam, high permeability

2C—22 to 60 inches; gravelly sandy loam, moderately high permeability

Tuxedni and similar soils

Extent: 25 to 40 percent of the map unit

Landform: till plains, hills

Position on slope: toeslopes

Slope shape: concave

Slope range: 3 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability

2C1—24 to 36 inches; silt loam, high permeability

3C2—36 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Chunilna and similar soils: 0 to 10 percent of the map unit

649—Riverwash

Elevation: 0 to 164 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Riverwash

Extent: 100 percent of the map unit

Landform: flood plains

Slope range: 0 to 2 percent

650—Salamatof and Doroshin peats, 0 to 2 percent slopes

Elevation: 98 to 1,985 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

Salamatof and similar soils

Extent: 50 to 75 percent of the map unit
Landform: fens on till plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: mossy organic material
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—0 inches
Ponding: occasional
Available water capacity (approximate): 16.5 inches
Representative Profile:
 Oi1—0 to 4 inches; peat, high permeability
 Oi2—4 to 60 inches; woody peat, high permeability

Doroshin and similar soils

Extent: 20 to 50 percent of the map unit
Landform: depressions on till plains, fens on till plains
Slope shape: linear
Slope range: 0 to 2 percent
Parent material: organic material over till
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—6 inches
Ponding: rare
Available water capacity (approximate): 20.8 inches
Representative Profile:
 Oe—0 to 36 inches; mucky peat, moderately high permeability
 2Cg—36 to 60 inches; silt loam, moderately high permeability

Minor Components

Slikok and similar soils: 0 to 25 percent of the map unit
 Water, fresh: 0 to 5 percent of the map unit

651—Salamatof peat, 0 to 4 percent slopes

Elevation: 3 to 1,952 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 75 to 130 days

Salamatof and similar soils

Extent: 50 to 90 percent of the map unit
Landform: fens on till plains
Slope shape: linear
Slope range: 0 to 4 percent
Parent material: mossy organic material

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—0 inches

Ponding: occasional

Available water capacity (approximate): 16.5 inches

Representative Profile:

Oi1—0 to 4 inches; peat, high permeability

Oi2—4 to 60 inches; woody peat, high permeability

Minor Components

Doroshin and similar soils: 5 to 35 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

652—Slikok peat, 0 to 4 percent slopes

Elevation: 3 to 1,558 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Slikok and similar soils

Extent: 65 to 90 percent of the map unit

Landform: depressions on till plains, flood plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability

A—13 to 51 inches; mucky silt loam, high permeability

2C—51 to 60 inches; gravelly silt loam, moderately high permeability

Minor Components

Doroshin and similar soils: 0 to 25 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

653—Slikok peat, 4 to 8 percent slopes

Elevation: 33 to 1,575 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Slikok and similar soils

Extent: 60 to 90 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

Oa—0 to 13 inches; peat, moderately low permeability

A—13 to 51 inches; mucky silt loam, high permeability

2C—51 to 60 inches; gravelly silt loam, moderately high permeability

Minor Components

Mutnala and similar soils: 0 to 15 percent of the map unit

Doroshin and similar soils: 0 to 25 percent of the map unit

654—Smithfha loamy very fine sand, 4 to 8 percent slopes

Elevation: 7 to 213 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Smithfha and similar soils

Extent: 80 to 95 percent of the map unit

Landform: plains

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: coarse-loamy eolian deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, high permeability

E—3 to 4 inches; loamy very fine sand, high permeability

Bw—4 to 18 inches; loamy very fine sand, high permeability

C—18 to 60 inches; loamy very fine sand, high permeability

Minor Components

Cohoe, dry, and similar soils: 0 to 15 percent of the map unit

Nikolai and similar soils: 0 to 10 percent of the map unit

655—Smithfha loamy very fine sand, 30 to 45 percent slopes

Elevation: 33 to 230 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Smithfha and similar soils

Extent: 85 to 95 percent of the map unit

Landform: hills

Slope shape: convex

Slope range: 30 to 45 percent

Parent material: coarse-loamy eolian deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, high permeability

E—3 to 4 inches; loamy very fine sand, high permeability

Bw—4 to 18 inches; loamy very fine sand, high permeability

C—18 to 60 inches; loamy very fine sand, high permeability

Minor Components

Coal Creek and similar soils: 0 to 8 percent of the map unit

Starichkof and similar soils: 0 to 7 percent of the map unit

656—Smokey Bay silt loam, 0 to 4 percent slopes

Elevation: 3 to 279 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Smokey Bay and similar soils

Extent: 75 to 90 percent of the map unit

Landform: alluvial fans

Position on slope: shoulders

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: stratified alluvium and/or colluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 14.6 inches

Representative Profile:

Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability

A—2 to 9 inches; silt loam, moderately high permeability
 Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability
 Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

Minor Components

Beluga and similar soils: 10 to 25 percent of the map unit

657—Smokey Bay silt loam, 8 to 15 percent slopes

Elevation: 16 to 656 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 90 to 120 days

Smokey Bay and similar soils

Extent: 75 to 90 percent of the map unit
Landform: alluvial fans
Position on slope: shoulders
Slope shape: linear
Slope range: 8 to 15 percent
Parent material: stratified alluvium and/or colluvium
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: high
Drainage class: somewhat poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—15 inches
Ponding: none
Available water capacity (approximate): 14.6 inches
Representative Profile:
 Oa—0 to 2 inches; highly decomposed plant material, moderately low permeability
 A—2 to 9 inches; silt loam, moderately high permeability
 Cg1—9 to 55 inches; stratified silt loam to fine sandy loam, moderately high permeability
 Cg2—55 to 60 inches; fine sandy loam, moderately high permeability

Minor Components

Beluga and similar soils: 10 to 25 percent of the map unit

658—Snowdance mucky silt loam, 0 to 8 percent slopes

Elevation: 1,509 to 2,657 feet
Mean annual precipitation: 30 to 39 inches
Frost-free period: 85 to 130 days

Snowdance and similar soils

Extent: 80 to 90 percent of the map unit
Landform: till plains
Position on slope: summits
Slope shape: linear

Slope range: 0 to 8 percent

Parent material: silty volcanic ash and/or silty loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—15 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

A—3 to 8 inches; mucky silt loam, high permeability

B_w—8 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

Minor Components

Kachemak, cool, and similar soils: 0 to 20 percent of the map unit

659—Soldotna silt loam, 0 to 4 percent slopes

Elevation: 7 to 377 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Soldotna and similar soils

Extent: 75 to 95 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

O_e—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

B_s—7 to 22 inches; silt loam, high permeability

C₁—22 to 29 inches; silt loam, high permeability

2C₂—29 to 60 inches; very gravelly sand, high permeability

Minor Components

Tlikakila and similar soils: 5 to 15 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

660—Soldotna silt loam, 4 to 8 percent slopes

Elevation: 3 to 377 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Soldotna and similar soils

Extent: 70 to 95 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 0 to 10 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

661—Soldotna silt loam, 8 to 15 percent slopes

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Soldotna and similar soils

Extent: 80 to 95 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 0 to 10 percent of the map unit

Starichkof and similar soils: 0 to 10 percent of the map unit

Foreland and similar soils: 0 to 5 percent of the map unit

662—Soldotna silt loam, 15 to 25 percent slopes

Elevation: 16 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Soldotna and similar soils

Extent: 80 to 90 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 0 to 10 percent of the map unit

Starichkof and similar soils: 0 to 10 percent of the map unit

Foreland and similar soils: 0 to 5 percent of the map unit

663—Soldotna silt loam, sandy substratum, 4 to 8 percent slopes

Elevation: 66 to 394 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

664—Soldotna silt loam, sandy substratum, 8 to 15 percent slopes

Elevation: 82 to 459 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit

Kenai and similar soils: 0 to 5 percent of the map unit

Tangerra and similar soils: 0 to 5 percent of the map unit

Nikolai and similar soils: 0 to 5 percent of the map unit

Spenard and similar soils: 0 to 5 percent of the map unit

665—Soldotna silt loam, sandy substratum, 15 to 25 percent slopes

Elevation: 16 to 525 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

Soldotna, sandy substratum, and similar soils

Extent: 75 to 85 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 15 to 25 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Naptowne and similar soils: 0 to 15 percent of the map unit

Kenai and similar soils: 0 to 10 percent of the map unit

Tangerra and similar soils: 0 to 10 percent of the map unit

666—Soldotna silt loam, sandy substratum, undulating

Elevation: 3 to 443 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Soldotna, sandy substratum, and similar soils

Extent: 70 to 90 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.7 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; sand, high permeability

Minor Components

Cohoe, dry, and similar soils: 5 to 20 percent of the map unit

Tangerra and similar soils: 0 to 10 percent of the map unit

Tuxedni, warm, and similar soils: 0 to 10 percent of the map unit

Coal Creek and similar soils: 0 to 10 percent of the map unit

667—Soldotna silt loams, strongly sloping and gently sloping

Elevation: 66 to 623 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Soldotna, strongly sloping, and similar soils

Extent: 40 to 50 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 7 to 12 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Soldotna, gently sloping, and similar soils

Extent: 35 to 45 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits, shoulders, toeslopes

Slope shape: linear, convex

Slope range: 2 to 6 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Minor Components

Kalifonsky and similar soils: 0 to 7 percent of the map unit

Starichkof and similar soils: 5 to 15 percent of the map unit

Foreland and similar soils: 3 to 10 percent of the map unit

668—Soldotna, sandy substratum-Kenai complex, 25 to 45 percent slopes

Elevation: 66 to 476 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 120 days

Soldotna, sandy substratum, and similar soils

Extent: 30 to 65 percent of the map unit

Landform: moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly drift
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 11.7 inches
Representative Profile:
 Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
 E—4 to 7 inches; silt loam, high permeability
 Bs—7 to 22 inches; silt loam, high permeability
 C1—22 to 29 inches; silt loam, high permeability
 2C2—29 to 60 inches; sand, high permeability

Kenai and similar soils

Extent: 30 to 50 percent of the map unit
Landform: moraines on till plains
Position on slope: shoulders, backslopes
Slope shape: convex
Slope range: 25 to 45 percent
Parent material: ash influenced loess over clayey till
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: very high
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 17.1 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E—2 to 6 inches; silt loam, high permeability
 B—6 to 19 inches; silt loam, high permeability
 2BC—19 to 24 inches; very fine sandy loam, high permeability
 3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Naptowne and similar soils: 0 to 15 percent of the map unit
 Clam Gulch and similar soils: 0 to 5 percent of the map unit
 Cohoe, dry, and similar soils: 0 to 15 percent of the map unit

669—Soldotna, sandy substratum-Kenai complex, undulating

Elevation: 82 to 361 feet
Mean annual precipitation: 16 to 20 inches
Frost-free period: 75 to 115 days

Soldotna, sandy substratum, and similar soils

Extent: 30 to 65 percent of the map unit

Landform: outwash plains
Slope shape: linear
Slope range: 2 to 10 percent
Parent material: ash influenced loess over sandy and gravelly drift
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 11.7 inches
Representative Profile:
 Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability
 E—4 to 7 inches; silt loam, high permeability
 Bs—7 to 22 inches; silt loam, high permeability
 C1—22 to 29 inches; silt loam, high permeability
 2C2—29 to 60 inches; sand, high permeability

Kenai and similar soils

Extent: 30 to 50 percent of the map unit
Landform: moraines on till plains
Position on slope: backslopes, shoulders
Slope shape: convex
Slope range: 2 to 10 percent
Parent material: ash influenced loess over clayey till
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 17.1 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 E—2 to 6 inches; silt loam, high permeability
 B—6 to 19 inches; silt loam, high permeability
 2BC—19 to 24 inches; very fine sandy loam, high permeability
 3C—25 to 60 inches; silty clay loam, moderately low permeability

Minor Components

Clam Gulch and similar soils: 0 to 15 percent of the map unit
 Cohoe, dry, and similar soils: 0 to 15 percent of the map unit
 Naptowne, gently sloping, and similar soils: 0 to 15 percent of the map unit
 Naptowne, steep, and similar soils: 0 to 5 percent of the map unit

670—Soldotna-Kichatna complex, rolling

Elevation: 197 to 509 feet
Mean annual precipitation: 16 to 30 inches
Frost-free period: 75 to 115 days

Soldotna and similar soils

Extent: 40 to 70 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Kichatna and similar soils

Extent: 25 to 45 percent of the map unit

Landform: hills on outwash plains

Slope shape: linear

Slope range: 8 to 15 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

Bs—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Foreland and similar soils: 5 to 15 percent of the map unit

671—Soldotna-Kichatna complex, steep

Elevation: 3 to 476 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 115 days

Soldotna and similar soils

Extent: 40 to 70 percent of the map unit

Landform: moraines on till plains, outwash plains

Position on slope: summits

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Kichatna and similar soils

Extent: 25 to 45 percent of the map unit

Landform: hills on outwash plains

Slope shape: linear

Slope range: 25 to 45 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 5.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 4 inches; silt loam, moderately high permeability

Bs—4 to 11 inches; silt loam, moderately high permeability

2BC—11 to 14 inches; very gravelly loamy coarse sand, high permeability

2C—14 to 60 inches; very gravelly sand, high permeability

Minor Components

Foreland and similar soils: 5 to 15 percent of the map unit

672—Soldotna-Nikolai complex, 0 to 4 percent slopes

Elevation: 3 to 492 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Soldotna and similar soils

Extent: 50 to 75 percent of the map unit

Landform: outwash plains, moraines on till plains

Position on slope: summits

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: ash influenced loess over sandy and gravelly drift

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.1 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E—4 to 7 inches; silt loam, high permeability

Bs—7 to 22 inches; silt loam, high permeability

C1—22 to 29 inches; silt loam, high permeability

2C2—29 to 60 inches; very gravelly sand, high permeability

Nikolai and similar soils

Extent: 25 to 50 percent of the map unit

Landform: depressions on till plains, depressions on coastal plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over loamy till over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—12 inches

Ponding: rare

Available water capacity (approximate): 20.4 inches

Representative Profile:

Oe—0 to 2 inches; peat, moderately high permeability

Oa—2 to 32 inches; muck, moderately high permeability

2Cg1—32 to 41 inches; silt loam, high permeability

3Cg2—41 to 60 inches; loamy sand, very high permeability

673—Spenard peat, 0 to 4 percent slopes

Elevation: 3 to 1,526 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Spenard and similar soils

Extent: 75 to 95 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

O_i—0 to 9 inches; peat, high permeability

E—9 to 14 inches; silt loam, high permeability

B_s—14 to 25 inches; silt loam, high permeability

2C—25 to 60 inches; silt loam, moderately high permeability

Minor Components

Qutal and similar soils: 5 to 25 percent of the map unit

Water, fresh: 0 to 3 percent of the map unit

674—Spenard peat, 4 to 8 percent slopes

Elevation: 3 to 1,788 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

Spenard and similar soils

Extent: 60 to 80 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

O_i—0 to 9 inches; peat, high permeability

E—9 to 14 inches; silt loam, high permeability

B_s—14 to 25 inches; silt loam, high permeability

2C—25 to 60 inches; silt loam, moderately high permeability

Minor Components

Mutnala and similar soils: 5 to 20 percent of the map unit

Qutal and similar soils: 5 to 20 percent of the map unit

Doroshin and similar soils: 0 to 5 percent of the map unit

675—Spenard peat, 8 to 15 percent slopes

Elevation: 3 to 1,788 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Spenard and similar soils

Extent: 75 to 87 percent of the map unit

Landform: moraines on till plains

Position on slope: toeslopes, footslopes

Slope shape: concave

Slope range: 8 to 15 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability

E—9 to 14 inches; silt loam, high permeability

Bs—14 to 25 inches; silt loam, high permeability

2C—25 to 60 inches; silt loam, moderately high permeability

Minor Components

Mutnala and similar soils: 5 to 15 percent of the map unit

Doroshin and similar soils: 0 to 10 percent of the map unit

676—Starichkof and Doroshin soils, 0 to 4 percent slopes

Elevation: 3 to 2,034 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

Starichkof and similar soils

Extent: 40 to 75 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Doroshin and similar soils

Extent: 25 to 60 percent of the map unit

Landform: fens on till plains, depressions on till plains

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability

2Cg—36 to 60 inches; silt loam, moderately high permeability

Minor Components

Slikok and similar soils: 0 to 20 percent of the map unit

677—Starichkof peat, 0 to 4 percent slopes

Elevation: 3 to 1,995 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 130 days

Starichkof and similar soils

Extent: 70 to 85 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Doroshin and similar soils: 5 to 25 percent of the map unit

Slikok and similar soils: 0 to 10 percent of the map unit

Water, fresh: 0 to 7 percent of the map unit

678—Starichkof peat, 4 to 8 percent slopes

Elevation: 66 to 2,018 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 90 to 130 days

Starichkof and similar soils

Extent: 60 to 90 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 4 to 8 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Doroshin and similar soils: 0 to 35 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

679—Starichkof peat, forested, 0 to 6 percent slopes

Elevation: 16 to 1,591 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Starichkof, forested, and similar soils

Extent: 65 to 90 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 6 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Doroshin and similar soils: 0 to 25 percent of the map unit

Water, fresh: 0 to 7 percent of the map unit

680—Starichkof-Slikok-Naptowne complex, 0 to 15 percent slopes

Elevation: 16 to 427 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Starichkof and similar soils

Extent: 30 to 65 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 3 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

Oi—0 to 7 inches; peat, high permeability

Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Slikok and similar soils

Extent: 20 to 40 percent of the map unit

Landform: depressions on till plains, flood plains

Slope shape: linear

Slope range: 5 to 15 percent

Parent material: silty eolian deposits and/or slope alluvium over firm alluvium and/or till

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: occasional

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 19.6 inches

Representative Profile:

- Oa—0 to 13 inches; peat, moderately low permeability
- A—13 to 51 inches; mucky silt loam, high permeability
- 2C—51 to 60 inches; gravelly silt loam, moderately high permeability

Naptowne and similar soils

Extent: 15 to 35 percent of the map unit

Landform: moraines

Slope shape: linear

Slope range: 0 to 10 percent

Parent material: ash influenced loess over gravelly drift

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 11.0 inches

Representative Profile:

- Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability
- E,Bs—3 to 14 inches; silt loam, high permeability
- Bw—13 to 20 inches; silt loam, high permeability
- 2C—20 to 60 inches; very gravelly fine sandy loam, high permeability

681—Starichkof-Spenard complex, undulating

Elevation: 3 to 1,624 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 130 days

Starichkof and similar soils

Extent: 25 to 50 percent of the map unit

Landform: fens

Slope shape: linear

Slope range: 0 to 4 percent

Parent material: mucky peat organic material with thin mineral stratas

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—2 inches

Ponding: occasional

Available water capacity (approximate): 24.4 inches

Representative Profile:

- Oi—0 to 7 inches; peat, high permeability
- Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Spenard and similar soils

Extent: 25 to 50 percent of the map unit

Landform: depressions on till plains

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over glacial till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to 18 inches

Ponding: none

Available water capacity (approximate): 12.0 inches

Representative Profile:

Oi—0 to 9 inches; peat, high permeability

E—9 to 14 inches; silt loam, high permeability

Bs—14 to 25 inches; silt loam, high permeability

2C—25 to 60 inches; silt loam, moderately high permeability

Minor Components

Mutnala and similar soils: 0 to 25 percent of the map unit

Water, fresh: 0 to 5 percent of the map unit

682—Susitna silt loam, 0 to 2 percent slopes

Elevation: 3 to 230 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 75 to 120 days

Susitna and similar soils

Extent: 80 to 95 percent of the map unit

Landform: stream terraces

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: loamy alluvium over sandy and gravelly alluvium and/or loamy alluvium

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: rare

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.3 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A—2 to 3 inches; silt loam, moderately high permeability

C1—3 to 45 inches; stratified fine sand to silt loam, moderately high permeability

2C2—45 to 60 inches; extremely gravelly coarse sand, high permeability

Riverwash

Extent: 0 to 10 percent of the map unit

Landform: flood plains
Slope range: 0 to 2 percent

Minor Components

Aquic Cryofluvents and similar soils: 5 to 20 percent of the map unit

683—Susitna silt loam, 4 to 8 percent slopes

Elevation: 98 to 361 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 90 to 120 days

Susitna and similar soils

Extent: 80 to 95 percent of the map unit
Landform: stream terraces
Slope shape: linear
Slope range: 4 to 8 percent
Parent material: loamy alluvium over sandy and gravelly alluvium and/or loamy alluvium
Hazard of erosion (organic mat removed): by water—moderate; by wind—severe
Runoff: medium
Drainage class: well drained
Flooding: rare
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 8.3 inches
Representative Profile:
 Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability
 A—2 to 3 inches; silt loam, moderately high permeability
 C1—3 to 45 inches; stratified fine sand to silt loam, moderately high permeability
 2C2—45 to 60 inches; extremely gravelly coarse sand, high permeability

Minor Components

Aquic Cryofluvents and similar soils: 5 to 20 percent of the map unit

684—Talkeetna silt loam, 0 to 8 percent slopes

Elevation: 1,001 to 1,936 feet
Mean annual precipitation: 20 to 39 inches
Frost-free period: 90 to 130 days

Talkeetna and similar soils

Extent: 55 to 94 percent of the map unit
Landform: till plains
Slope shape: convex
Slope range: 0 to 8 percent
Parent material: ash influenced loess over friable to firm glacial till
Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.9 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 7 inches; silt loam, high permeability

B—7 to 19 inches; mucky silt loam, high permeability

2C—19 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Starichkof and similar soils: 0 to 15 percent of the map unit

Tuxedni and similar soils: 0 to 15 percent of the map unit

685—Talkeetna silt loam, 15 to 45 percent slopes

Elevation: 984 to 1,936 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Talkeetna and similar soils

Extent: 50 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 45 percent

Parent material: ash influenced loess over friable to firm glacial till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.9 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E—2 to 7 inches; silt loam, high permeability

B—7 to 19 inches; mucky silt loam, high permeability

2C—19 to 60 inches; very gravelly sandy loam, moderately high permeability

Minor Components

Chunilna and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

686—Talkeetna-Starichkof complex, 0 to 25 percent slopes

Elevation: 1,263 to 1,706 feet
Mean annual precipitation: 30 to 39 inches
Frost-free period: 90 to 120 days

Talkeetna and similar soils

Extent: 25 to 60 percent of the map unit
Landform: hills
Position on slope: backslopes
Slope shape: convex
Slope range: 8 to 25 percent
Parent material: ash influenced loess over friable to firm glacial till
Hazard of erosion (organic mat removed): by water—severe; by wind—severe
Runoff: low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 8.9 inches
Representative Profile:
 Oi—0 to 2 inches; slightly decomposed plant material, high permeability
 E—2 to 7 inches; silt loam, high permeability
 B—7 to 19 inches; mucky silt loam, high permeability
 2C—19 to 60 inches; very gravelly sandy loam, moderately high permeability

Starichkof and similar soils

Extent: 30 to 40 percent of the map unit
Landform: fens
Slope shape: linear
Slope range: 0 to 4 percent
Parent material: mucky peat organic material with thin mineral stratas
Hazard of erosion (organic mat removed): by water—slight; by wind—slight
Runoff: very high
Drainage class: very poorly drained
Flooding: none
Depth to high water table (approximate): April-Sept.—2 inches
Ponding: occasional
Available water capacity (approximate): 24.4 inches
Representative Profile:
 Oi—0 to 7 inches; peat, high permeability
 Oe—7 to 60 inches; stratified mucky peat to silt loam to ashy sand, moderately high permeability

Minor Components

Chunilna and similar soils: 5 to 10 percent of the map unit

687—Tangerra silt loam, 0 to 6 percent slopes

Elevation: 3 to 410 feet
Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Tangerra and similar soils

Extent: 70 to 90 percent of the map unit

Landform: depressions on outwash plains, depressions on moraines

Slope shape: concave

Slope range: 0 to 6 percent

Parent material: ash influenced loess over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—6 to 16 inches; June-Sept.—6 inches

Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

Oe—0 to 4 inches; moderately decomposed plant material, moderately high permeability

E,Bs—4 to 8 inches; silt loam, moderately high permeability

Bw—8 to 16 inches; sandy loam, high permeability

2Cg1—16 to 46 inches; loamy sand, high permeability

3Cg2—46 to 60 inches; very gravelly loamy sand, high permeability

Minor Components

Soldotna and similar soils: 0 to 15 percent of the map unit

Nikolai and similar soils: 0 to 10 percent of the map unit

Qutal and similar soils: 0 to 10 percent of the map unit

Kalifonsky and similar soils: 0 to 10 percent of the map unit

688—Tidal flats

Elevation: 0 to 33 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 120 days

Beaches, tidal flats

Extent: 80 to 100 percent of the map unit

Landform: beaches

Slope range: 0 to 2 percent

Minor Components

Water, saline: 0 to 20 percent of the map unit

689—Tlikakila silt loam, 0 to 4 percent slopes

Elevation: 66 to 1,886 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 120 days

Tlikakila and similar soils

Extent: 70 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high permeability

A,Bw—1 to 19 inches; silt loam, high permeability

2Bg—19 to 34 inches; sandy loam, high permeability

3C—34 to 60 inches; very gravelly sand, high permeability

Minor Components

Nikolai and similar soils: 0 to 30 percent of the map unit

690—Tlikakila silt loam, 4 to 8 percent slopes

Elevation: 459 to 1,968 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Tlikakila and similar soils

Extent: 60 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave

Slope range: 4 to 8 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high permeability

A,Bw—1 to 19 inches; silt loam, high permeability

2Bg—19 to 34 inches; sandy loam, high permeability

3C—34 to 60 inches; very gravelly sand, high permeability

Minor Components

Nikolai and similar soils: 0 to 25 percent of the map unit

Kashwitna and similar soils: 0 to 25 percent of the map unit

691—Tlikakila silt loam, 8 to 15 percent slopes

Elevation: 968 to 1,936 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

Tlikakila and similar soils

Extent: 70 to 95 percent of the map unit

Landform: depressions on till plains, depressions on terraces

Slope shape: concave

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy alluvium over sandy and gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—19 inches

Ponding: none

Available water capacity (approximate): 9.3 inches

Representative Profile:

Oe—0 to 1 inch; moderately decomposed plant material, moderately high permeability

A,Bw—1 to 19 inches; silt loam, high permeability

2Bg—19 to 34 inches; sandy loam, high permeability

3C—34 to 60 inches; very gravelly sand, high permeability

Minor Components

Chunilna and similar soils: 0 to 15 percent of the map unit

Cohoe and similar soils: 0 to 15 percent of the map unit

692—Tokositna silt loam, 0 to 4 percent slopes

Elevation: 148 to 1,903 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Tokositna and similar soils

Extent: 65 to 85 percent of the map unit

Landform: till plains

Position on slope: shoulders, summits

Slope shape: convex

Slope range: 0 to 4 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: very low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E,B—2 to 13 inches; silt loam, high permeability

Bs—13 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

Minor Components

Spensard and similar soils: 0 to 15 percent of the map unit

Tuxedni and similar soils: 0 to 10 percent of the map unit

693—Tokositna silt loam, 4 to 8 percent slopes

Elevation: 148 to 1,903 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Tokositna and similar soils

Extent: 70 to 90 percent of the map unit

Landform: till plains

Position on slope: summits, shoulders

Slope shape: convex

Slope range: 4 to 8 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, high permeability

E,B—2 to 13 inches; silt loam, high permeability

Bs—13 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

Minor Components

Tuxedni and similar soils: 0 to 25 percent of the map unit

694—Tokositna silt loam, 8 to 15 percent slopes

Elevation: 230 to 1,821 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Tokositna and similar soils

Extent: 60 to 90 percent of the map unit

Landform: hills, till plains

Position on slope: summits, shoulders

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: silty volcanic ash and/or loess over gravelly till

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 9.7 inches

Representative Profile:

O_i—0 to 2 inches; slightly decomposed plant material, high permeability

E, B—2 to 13 inches; silt loam, high permeability

B_s—13 to 24 inches; silt loam, high permeability

2C—24 to 60 inches; very cobbly sandy loam, moderately high permeability

Minor Components

Spenard and similar soils: 0 to 15 percent of the map unit

695—Truuli muck, 0 to 4 percent slopes

Elevation: 98 to 2,001 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 85 to 130 days

Truuli and similar soils

Extent: 50 to 90 percent of the map unit

Landform: depressions on terraces, depressions on till plains

Slope shape: concave

Slope range: 0 to 4 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: poorly drained

Flooding: none

Depth to high water table (approximate): April-May—12 inches; June-Sept.—12 to more than 60 inches

Ponding: none

Available water capacity (approximate): 17.9 inches

Representative Profile:

O_a—0 to 9 inches; muck, moderately low permeability

A—9 to 19 inches; very fine sandy loam, high permeability

2Bg, 2Cg1—19 to 43 inches; silt loam, high permeability

3Cg2—43 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Nikolai and similar soils: 0 to 25 percent of the map unit

Tuxedni and similar soils: 0 to 25 percent of the map unit

696—Tutka-Kasitsna-Rock outcrop complex, very steep

Elevation: 0 to 2,149 feet

Mean annual precipitation: 20 to 49 inches

Frost-free period: 85 to 120 days

Tutka and similar soils

Extent: 40 to 60 percent of the map unit

Landform: mountain slopes

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 45 to 100 percent

Parent material: silty volcanic ash over glacial till over hard bedrock

Depth to bedrock (lithic): 12 to 25 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

Oe—0 to 7 inches; moderately decomposed plant material, moderately high permeability

E,B—7 to 13 inches; silt loam, high permeability

2B—13 to 21 inches; very gravelly mucky silt loam, high permeability

R—21 to 60 inches; bedrock, impermeable

Kasitsna and similar soils

Extent: 20 to 50 percent of the map unit

Landform: mountain slopes

Slope shape: convex

Slope range: 45 to 100 percent

Parent material: silty volcanic ash over gravelly basal till; silty volcanic ash over; reworked gravelly till; silty volcanic ash over gravelly colluvium

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 12.2 inches

Representative Profile:

Oe—0 to 3 inches; moderately decomposed plant material, moderately high permeability

E,Bhs—3 to 18 inches; mucky silt loam, high permeability

Bs—18 to 31 inches; loam, moderately high permeability

2C—31 to 60 inches; very gravelly loam, moderately high permeability

Rock outcrop

Extent: 15 to 25 percent of the map unit

Landform: hills, mountains

Slope range: 45 to 120 percent

697—Tutka-Portgraham complex, hilly to steep

Elevation: 3 to 1,427 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 90 to 120 days

Tutka and similar soils

Extent: 40 to 60 percent of the map unit

Landform: mountain slopes

Position on slope: backslopes, shoulders

Slope shape: convex

Slope range: 20 to 50 percent

Parent material: silty volcanic ash over glacial till over hard bedrock

Depth to bedrock (lithic): 12 to 25 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 6.8 inches

Representative Profile:

O_e—0 to 7 inches; moderately decomposed plant material, moderately high permeability

E, B—7 to 13 inches; silt loam, high permeability

2B—13 to 21 inches; very gravelly mucky silt loam, high permeability

R—21 to 60 inches; bedrock, impermeable

Portgraham and similar soils

Extent: 25 to 30 percent of the map unit

Landform: mountain slopes

Position on slope: shoulders, backslopes

Slope shape: convex

Slope range: 25 to 35 percent

Parent material: silty volcanic ash over bedrock

Depth to bedrock (lithic): 20 to 40 inches

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 8.1 inches

Representative Profile:

- O_i—0 to 2 inches; slightly decomposed plant material, high permeability
- E—2 to 4 inches; silt loam, high permeability
- B—4 to 27 inches; mucky silt loam, high permeability
- R—27 to 60 inches; bedrock, impermeable

Minor Components

Typic Cryaquands and similar soils: 0 to 15 percent of the map unit

698—Tuxedni silt loam, 0 to 8 percent slopes

Elevation: 689 to 1,968 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 130 days

Tuxedni and similar soils

Extent: 60 to 85 percent of the map unit

Landform: till plains

Slope shape: linear, convex

Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

- O_e—0 to 2 inches; moderately decomposed plant material, moderately high permeability
- A,B—2 to 24 inches; silt loam, high permeability
- 2C1—24 to 36 inches; silt loam, high permeability
- 3C2—36 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Redoubt and similar soils: 0 to 25 percent of the map unit

Spenard and similar soils: 0 to 20 percent of the map unit

699—Tuxedni silt loam, 8 to 15 percent slopes

Elevation: 1,001 to 1,919 feet

Mean annual precipitation: 20 to 39 inches

Frost-free period: 85 to 130 days

Tuxedni and similar soils

Extent: 60 to 85 percent of the map unit

Landform: hills, till plains

Position on slope: toeslopes

Slope shape: concave

Slope range: 8 to 15 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability

2C1—24 to 36 inches; silt loam, high permeability

3C2—36 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Redoubt and similar soils: 0 to 25 percent of the map unit

Spenard and similar soils: 0 to 20 percent of the map unit

700—Tuxedni silt loam, warm, 0 to 8 percent slopes

Elevation: 3 to 1,214 feet

Mean annual precipitation: 16 to 39 inches

Frost-free period: 75 to 120 days

Tuxedni, warm, and similar soils

Extent: 50 to 95 percent of the map unit

Landform: till plains

Slope shape: linear, convex

Slope range: 0 to 8 percent

Parent material: ash influenced loess over loamy till

Hazard of erosion (organic mat removed): by water—slight; by wind—severe

Runoff: low

Drainage class: somewhat poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—24 inches

Ponding: none

Available water capacity (approximate): 15.0 inches

Representative Profile:

Oe—0 to 2 inches; moderately decomposed plant material, moderately high permeability

A,B—2 to 24 inches; silt loam, high permeability

2C1—24 to 36 inches; silt loam, high permeability

3C2—36 to 60 inches; gravelly sandy loam, high permeability

Minor Components

Truuli and similar soils: 0 to 25 percent of the map unit

Whitsol and similar soils: 0 to 10 percent of the map unit

701—Typic Cryaquents, 0 to 2 percent slopes

Elevation: 3 to 197 feet

Mean annual precipitation: 16 to 30 inches

Frost-free period: 85 to 120 days

Typic Cryaquents and similar soils

Extent: 90 to 99 percent of the map unit

Landform: estuaries, deltas

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: silty and clayey over sandy and silty marine deposits

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: frequent

Depth to high water table (approximate): April-Sept.—8 inches

Ponding: none

Available water capacity (approximate): 3.3 inches

Representative Profile:

Oi—0 to 2 inches; slightly decomposed plant material, moderately high permeability

Cg—2 to 6 inches; silt loam, moderately high permeability

C—6 to 60 inches; very gravelly sand, high permeability

Minor Components

Killey and similar soils: 0 to 10 percent of the map unit

Clunie and similar soils: 0 to 5 percent of the map unit

Water, saline: 0 to 7 percent of the map unit

702—Typic Cryopsamments, 3 to 45 percent slopes

Elevation: 3 to 262 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 115 days

Typic Cryopsamments and similar soils

Extent: 80 to 95 percent of the map unit

Landform: dunes

Position on slope: backslopes, shoulders, summits

Slope shape: linear

Slope range: 3 to 45 percent

Parent material: beach sand

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: medium

Drainage class: excessively drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 3.5 inches

Representative Profile:

C—0 to 60 inches; sand, high permeability

Minor Components

Smithfha and similar soils: 5 to 15 percent of the map unit

Starichkof and similar soils: 0 to 5 percent of the map unit

Kalifonsky and similar soils: 0 to 5 percent of the map unit

703—Typic Cryorthents, 100 to 150 percent slopes

Elevation: 0 to 1,427 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 90 to 130 days

Typic Cryorthents and similar soils

Extent: 70 to 100 percent of the map unit

Landform: sea cliffs

Position on slope: backslopes

Slope shape: concave

Slope range: 100 to 150 percent

Parent material: debris slide deposits derived from interbedded sedimentary rock

Hazard of erosion (organic mat removed): by water—severe; by wind—moderate

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 10.1 inches

Representative Profile:

Oi—0 to 1 inch; gravelly slightly decomposed plant material, high permeability

C1—1 to 33 inches; gravelly very fine sandy loam, high permeability

C2—33 to 60 inches; very gravelly silt loam, moderately high permeability

Minor Components

Badland, sea cliffs: 0 to 20 percent of the map unit

Beluga and similar soils: 0 to 10 percent of the map unit

Kachemak and similar soils: 0 to 10 percent of the map unit

704—Urban land

Elevation: 3 to 1,345 feet

Mean annual precipitation: 16 to 20 inches

Frost-free period: 75 to 115 days

Urban land

Extent: 80 to 90 percent of the map unit

Minor Components

Cohoe and similar soils: 0 to 10 percent of the map unit
 Kalifonsky and similar soils: 0 to 10 percent of the map unit
 Starichkof and similar soils: 0 to 10 percent of the map unit

705—Water, fresh

Elevation: 0 to 2,018 feet
Mean annual precipitation: 16 to 49 inches
Frost-free period: 75 to 130 days

Water, fresh

Extent: 100 percent of the map unit

706—Whitsol silt loam, 0 to 4 percent slopes

Elevation: 33 to 1,296 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 50 to 99 percent of the map unit
Landform: till plains
Slope shape: linear, convex
Slope range: 0 to 4 percent
Parent material: ash influenced loess over gravelly glaciofluvial deposits
Hazard of erosion (organic mat removed): by water—slight; by wind—severe
Runoff: very low
Drainage class: well drained
Flooding: none
Depth to high water table (approximate): April-Sept.—more than 60 inches
Ponding: none
Available water capacity (approximate): 15.7 inches
Representative Profile:
 Oi—0 to 3 inches; slightly decomposed plant material, high permeability
 E,B—3 to 29 inches; silt loam, high permeability
 2C1—29 to 51 inches; very fine sandy loam, moderately high permeability
 3C2—51 to 60 inches; very gravelly coarse sand, high permeability

Minor Components

Qutal and similar soils: 0 to 20 percent of the map unit
 Spenard and similar soils: 0 to 15 percent of the map unit

707—Whitsol silt loam, 4 to 8 percent slopes

Elevation: 98 to 1,444 feet
Mean annual precipitation: 20 to 30 inches
Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 50 to 99 percent of the map unit

Landform: till plains

Slope shape: linear, convex

Slope range: 4 to 8 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E, B—3 to 29 inches; silt loam, high permeability

2C₁—29 to 51 inches; very fine sandy loam, moderately high permeability

3C₂—51 to 60 inches; very gravelly coarse sand, high permeability

Minor Components

Qutal and similar soils: 0 to 20 percent of the map unit

Spenard and similar soils: 0 to 15 percent of the map unit

708—Whitsol silt loam, 8 to 15 percent slopes

Elevation: 180 to 1,558 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 50 to 90 percent of the map unit

Landform: till plains, hills

Position on slope: backslopes

Slope shape: convex

Slope range: 8 to 15 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E, B—3 to 29 inches; silt loam, high permeability

2C₁—29 to 51 inches; very fine sandy loam, moderately high permeability

3C₂—51 to 60 inches; very gravelly coarse sand, high permeability

Minor Components

Kashwitna and similar soils: 0 to 25 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

709—Whitsol silt loam, 15 to 25 percent slopes

Elevation: 82 to 1,017 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 50 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 15 to 25 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: medium

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

Oi—0 to 3 inches; slightly decomposed plant material, high permeability

E,B—3 to 29 inches; silt loam, high permeability

2C1—29 to 51 inches; very fine sandy loam, moderately high permeability

3C2—51 to 60 inches; very gravelly coarse sand, high permeability

Minor Components

Kashwitna and similar soils: 0 to 25 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

710—Whitsol silt loam, 25 to 45 percent slopes

Elevation: 295 to 1,214 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 60 to 90 percent of the map unit

Landform: hills

Position on slope: backslopes

Slope shape: convex

Slope range: 25 to 45 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—severe; by wind—severe

Runoff: high

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E, B—3 to 29 inches; silt loam, high permeability

2C₁—29 to 51 inches; very fine sandy loam, moderately high permeability

3C₂—51 to 60 inches; very gravelly coarse sand, high permeability

Minor Components

Kashwitna and similar soils: 0 to 25 percent of the map unit

Redoubt and similar soils: 0 to 5 percent of the map unit

Spenard and similar soils: 0 to 10 percent of the map unit

711—Whitsol-Doroshin complex, undulating

Elevation: 180 to 1,197 feet

Mean annual precipitation: 20 to 30 inches

Frost-free period: 85 to 120 days

Whitsol and similar soils

Extent: 40 to 66 percent of the map unit

Landform: till plains

Slope shape: linear, convex

Slope range: 1 to 8 percent

Parent material: ash influenced loess over gravelly glaciofluvial deposits

Hazard of erosion (organic mat removed): by water—moderate; by wind—severe

Runoff: low

Drainage class: well drained

Flooding: none

Depth to high water table (approximate): April-Sept.—more than 60 inches

Ponding: none

Available water capacity (approximate): 15.7 inches

Representative Profile:

O_i—0 to 3 inches; slightly decomposed plant material, high permeability

E, B—3 to 29 inches; silt loam, high permeability

2C₁—29 to 51 inches; very fine sandy loam, moderately high permeability

3C₂—51 to 60 inches; very gravelly coarse sand, high permeability

Doroshin and similar soils

Extent: 25 to 40 percent of the map unit

Landform: depressions on till plains, fens on till plains

Slope shape: linear

Slope range: 0 to 2 percent

Parent material: organic material over till

Hazard of erosion (organic mat removed): by water—slight; by wind—slight

Runoff: very high

Drainage class: very poorly drained

Flooding: none

Depth to high water table (approximate): April-Sept.—6 inches

Ponding: rare

Available water capacity (approximate): 20.8 inches

Representative Profile:

Oe—0 to 36 inches; mucky peat, moderately high permeability

2Cg—36 to 60 inches; silt loam, moderately high permeability

Minor Components

Spensard and similar soils: 0 to 25 percent of the map unit

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained 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, and compaction characteristics.

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.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 8 gives the engineering classifications and the range of index 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 USDA. 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. An appropriate modifier is added (for example, gravelly) if the content of particles coarser than sand is 15 percent or more. Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO 2000).

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 (75 mm) 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, SP-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 (75 mm) 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.

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.

Rock fragments larger than 10 inches (250 mm) in diameter and 3 to 10 inches (75 to 250 mm) 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 (75 mm) 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.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In [table 9](#), the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. The estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. 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 content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

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.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical and Chemical Analyses of Selected Soils

The results of physical and chemical analysis of selected soil pedons from the survey area are available on the Web at <http://sslldata.nrcs.usda.gov/querypage.asp>. Under "State Admin Div," select "Alaska" and under "Country," select "Kenai Peninsula Borough." Click on "Execute Query" to see a list of sample pedons for the area.

Physical Properties

[Table 10](#) 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.

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 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.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, 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. 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 factors are shown 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 several 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.

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. Soils are grouped according to the amount of stable aggregates more than 0.84 mm in size. Soils containing rock fragments can occur in any group. The groups are as follows:

1. 1 to 9 percent dry soil aggregates. These soils are very highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
2. 10 to 24 percent dry soil aggregates. These soils are highly erodible. Crops can be grown if intensive measures to control wind erosion are used.
3. 25 to 39 percent dry soil aggregates. These soils are erodible. Crops can be grown if intensive measures to control wind erosion are used.
4. 25 to 39 percent dry soil aggregates with greater than 35 percent clay or greater than 5 percent calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control wind erosion are used.
5. 40 to 44 percent dry soil aggregates. These soils are slightly erodible. Crops can be grown if measures to control wind erosion are used.
6. 45 to 49 percent dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
7. 50 percent or more dry soil aggregates. These soils are very slightly erodible. Crops can easily be grown.
8. Stony, gravelly, or wet soils and other soils not subject to wind erosion.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year 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 Properties

Table 11 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.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

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.

Water Features

Table 12 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

The table described in this section 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.

Wet soil 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.

Under *water table kind*, an *apparent* water table is one that generally corresponds to the regional ground water level. A *perched* water table is one that is above an impermeable layer in the soil. The basis for determining that a water table is perched may be general knowledge of the area. The water table is proven to be perched if the water level in a borehole is observed to fall when the borehole is extended through the impermeable layer.

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 13](#) 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 impedes the movement of water and air through the soil or that restricts roots or otherwise provides 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.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

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.

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. It can also help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, foresters, botanists, 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 and forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreation facilities; and for 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, and topsoil. They can use it to identify areas where bedrock, wetness, permafrost, or unstable 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, and trails.

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 land forming 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. Only capability class and subclass are presented for soils in Alaska.

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. There are no Class 1 soils in Alaska due to the climate.

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 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.

The acreage of soils in each capability class or subclass is shown in [table 14](#).

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. Other tables indicate the suitability of the soils for use as source materials. 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 suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *slightly limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *source*, *probable source*, and *improbable source* or as *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. The numerical ratings, as they relate to each specific interpretation, are explained in the sections that follow.

Recreation

The soils of the survey area are rated in [table 15](#) according to limitations that affect their suitability for foot and ATV trails. 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. *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. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and 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 values in the table indicate the severity of individual limitations. The values 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). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

The ratings in the table 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 and vegetation.

The information can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Foot and ATV trails for hiking, horseback riding, and ATV use should require little or no slope modification and site preparation through cutting and filling. These trails are not covered with surfacing material or vegetation. The ratings are based on the soil properties that affect trafficability, erodibility, dustiness, and the ease of revegetation. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Ecological Sites

An ecological site is an area of land, or collective areas of land, with a distinctive mix and pattern of potential natural plant communities (PNC), soils, landforms, hydrology, climate, and ecological properties and processes (such as nutrient cycling, vegetative succession, and productivity). Ecological site classification is not oriented to any type of land or land use and is applicable to forestlands and rangelands, wetlands, and uplands. The relationship between climate, landforms, soils, and vegetation, and the ability to discern differences in these factors from one site to another, is the basis for ecological site classification.

The primary emphasis of ecological site classification is usually the vegetation on a site. Vegetation is considered to be an indicator of the integrated factors of the environment. Productivity, the response of the vegetation to various types of disturbances, and use and management of the vegetation are principal concerns to landowners and managers.

A secondary, but equally important, emphasis of site classification is landform and soil relationships. In general, the relationships between landforms and soils across the landscape are fairly predictable. Natural disturbances by wildfire, wind, and flooding, to name a few, result in considerable variation in vegetation. Landforms and soils provide a stable resource base by which ecological sites can be determined regardless of existing vegetative conditions. In addition, inferences can be made regarding site dynamics and stability, soil processes, and appropriate management systems based on landform and soil types.

While abrupt or distinct breaks between landforms, soils, and vegetation occasionally do occur, more often than not the transition is gradual and indistinct. In addition, precipitation, temperature, and other climatic patterns, as well as micro-climatic variables such as elevation, change gradually across the landscape. Therefore, an ecological site classification should be viewed as a landscape model. The boundaries between ecological sites are sometimes arbitrary and approximate. On the ground, the characteristics and properties within and between ecological sites are complex and variable, and usually overlap to some degree.

Ecological site classification does, however, provide a useful framework for correlating and compiling data and interpretations on multiple resources and landscape processes. Site classification is also a valuable framework for organizing, applying, and monitoring resource conservation systems for livestock grazing, forestry, wildlife habitat management, and other land uses.

Ecological Site-Soils-Vegetation Correlation

An ecological site classification is developed by grouping soils within known climatic zones based on similarities in landforms, soils, and vegetation characteristics and potentials. Soils that support similar vegetation, have similar productivity, have similar ranges in physical characteristics, and whose known or expected ecological and management responses are similar, are grouped together into an ecological site. To achieve a high degree of correlation between the soils and vegetative potentials, soils usually are classified at the series or phase level, and occasionally the family level. At this level of soil classification, an ecological site is correlated to a single PNC.

Often, some segments of the landscape are inventoried and mapped at a lower level of intensity. Ecological sites are defined primarily on general relationships between soils, landforms, and general environmental relationships. Ecological sites associated with this level of classification usually support more than one PNC. Specific relationships between soil and landscape characteristics and the various potential plant communities often can be recognized in such a way that each community can be associated with a discernible portion of the site.

In [table 16](#), the ecological site or sites correlated to the soils are listed by map unit symbol and soil name. A brief narrative description of each site is included below. Detailed descriptions of each ecological site are maintained in the Field Office Technical Guide at the local office of the Natural Resources Conservation Service.

Forestland Ecological Sites of the Western Kenai Peninsula Area

Betula papyrifera–Picea glauca/Alnus–Oplopanax horridus/Calamagrostis canadensis. The climax plant community on this site is composed of a white spruce and alder dominated community, located along streams and rivers in the low elevations of the Fox River Flats. When flooded, this site becomes dominated by balsam poplar with an understory of bluejoint reedgrass. This site occurs at all aspects on elevations up to 65 feet, and on nearly level slopes.

Picea–Betula papyrifera/Ledum–Vaccinium vitis-idaea/Cornus canadensis. A spruce–birch forest is the most common plant community on this site, which ranges in elevation from 50 to 1,150 feet, and commonly occurs on gentle slopes between 0 to 10 percent. This forested site is found on all aspects in the northern part of the survey area.

Picea glauca–Betula papyrifera/Calamagrostis canadensis–Equisetum arvense. This site is found on a wide range of elevations (from 0 to 1,975 feet) and on all aspects. The vegetation is either a spruce–birch forest found on elevations up to 1,065 feet, or a spruce–birch–willow community found at elevations above 1,065 feet. Slopes range from 0 to 45 percent.

Picea glauca–Betula papyrifera/Gymnocarpium dryopteris–Cornus suecica. This is a very common site in the Soldotna–Sterling area. Fire has a strong influence on this site and the plant communities are varied depending on the history of the site, but are nearly always forested by spruce, birch, aspen, balsam poplar, or alder. Slopes are gentle, ranging from 0 to 30 percent, and elevations range from 5 to 650 feet.

Picea glauca–Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris. This site is found on a wide range of elevations (from 0 to 1,975 feet) and on all aspects. The vegetation is either a spruce–birch forest (found on elevations up to 1,066 feet) or a spruce–willow community (found at elevations above 1,066 feet). Slopes range from 0 to 45 percent.

Picea mariana/Betula nana. This organic, wetland site is found on gentle slopes of 0 to 10 percent in low-lying areas and supports a black spruce forest with a sphagnum and dwarf shrub understory. Elevations range from 5 to 985 feet and the site is found on all aspects.

Picea mariana/Empetrum nigrum–Betula nana. This forested site is found on wet soils and is dominated by black spruce with an understory of low shrubs that include crowberry and dwarf birch. Slopes are nearly level, ranging from 1 to 7 percent, with elevations ranging from 0 to 985 feet.

Picea ×lutzi–Betula papyrifera/Gymnocarpium dryopteris–Rubus pedatus. This low elevation (15 to 985 feet) forested site is common south of Tustemena Lake and supports a mixed hardwood and conifer community with an understory of ferns and rusty menziesia on cooler microsites and five-leaf bramble on warmer microsites. Slopes are varied, ranging from 0 to 40 percent.

Picea ×lutzi/Calamagrostis canadensis. Bluejoint reedgrass is a dominant plant on this site. Undisturbed, the site will have an overstory of spruce, with early seral stages of birch. Elevations of this site range from 4 to 1,300 feet and slopes range from 1 to 10 percent. However, it is most commonly found at 165 feet on about a 3 percent slope.

Picea ×lutzi/Salix barclayi/Calamagrostis canadensis–Chamerion angustifolium. This site is found south of Tustemena Lake and supports a Lutz spruce forest with a willow and bluejoint reedgrass understory. Elevations range from 130 to 1,150 feet, but the site is commonly found below 325 feet. Slopes are gentle, ranging from 0 to 30 percent.

Picea ×lutzi/Salix barclayi–Empetrum nigrum/Equisetum arvense. This site is found at elevations from 825 to 1,300 feet in the hill slopes north of Homer. Slopes range from 1 to 35 percent and the vegetation is composed of a spruce forest with a

willow and horsetail understory. When the spruce are first established after a disturbance, the understory may include bluejoint reedgrass and fireweed.

Populus balsamifera/Oplopanax horridus. Stands of balsam poplar dominate the closed canopy of this site, which is located on the coast of Cook Inlet, north and west of the city of Kenai. Because of its location, this site receives more rainfall and is slightly warmer than sites located inland on similar soils. Alder and high bush cranberry are components of one of the plant communities found on this site, growing along with the balsam poplar and devil's club understory. Elevations are low (from 0 to 325 feet) and slopes are variable (from 1 to 30 percent).

Rangeland Ecological Sites of the Western Kenai Peninsula Area

Alpine ridges. Low growing dwarf shrubs dominate this alpine site, which is found on the tops of mountain ridges at elevations above 1,975 feet. Lichen communities make up a large part of this site's biomass; slopes are generally gentle, ranging from 0 to 10 percent.

Beach Dunes and Ridges. This sandy site is found along the shoreline of Cook Inlet where sand has accumulated at sea level. It is tidally influenced during extreme high tides and large storm events. Beach wild rye is the dominant plant and forms a nearly monotypic stand, with minor components of miscellaneous forbs such as beach pea. The vegetation on this site works to stabilize the sandy soil, and acts as a trap for wind blown sand, which slowly builds the dunes up over time.

Loamy slopes. This site is dominated by bluejoint reedgrass and fireweed and is found at elevations of 985 to 1,650 feet. Slopes range from 1 to 45 percent. With exposed soil and a nearby seed source, the site will support spruce trees as well.

Lower Bench Toe Slopes. Located at low elevations (15 to 650 feet) east of Homer, this site has been manipulated by humans for many years. Homesteaders commonly burned this area to keep tree encroachment down for cultivating fields and grazing animals. Slopes are gentle, ranging from 1 to 20 percent, and the vegetation ranges from bluejoint reedgrass dominated meadows to birch and spruce copses.

Mountain slopes. This site includes well drained soils under Alder scrub vegetation on mountain slopes between about 165 and 2,360 feet elevation. Bluejoint reedgrass, ferns, and other herbs dominate the scrub understory. Slopes range from about 5 to 45 percent.

Mountain slopes, drainages. Willow dominates this site, which is commonly found on mountain slopes and ridges at elevations above 1,300 feet. The forb-dominated understory is diverse. Slopes range from 0 to 25 percent. This site commonly occurs in moist areas, including drainages and north-facing slopes.

Ramensk's Sedge. This herbaceous site is found on all aspects of nearly level tidal flats that are frequently inundated by tidewater. Ramensk's sedge is the dominant species, with a few other salt-tolerant forbs found in small amounts.

Rolling Uplands. Located at elevations ranging from 1,150 to 1,975 feet on rolling hills in the Homer area, this site supports an herbaceous flowering meadow in addition to a willow dominated community and if allowed to encroach, a spruce dominated community with a willow understory. Slopes vary from 5 to 45 percent, but are commonly in the 10 to 20 percent range.

Shallow Kettles. This unique site is found on all aspects in the form of meadows surrounded by forest. This site is primarily an herbaceous, diverse forb community, but is slowly being encroached upon by spruce trees. Slopes are generally level and range from 0 to 5 percent. Elevations range from 25 to 985 feet.

Wetland Complex. Many different wetland plant communities can be found on this site, and differences are caused by varying factors including drainage, free water flow, and slight differences in elevation within the wetlands. Plant communities can vary from stunted black spruce forest to dwarf shrub to sedge dominated fringes of open water. Slopes are most commonly nearly level, but can be gently sloping (0 to 5 percent).

Willow–Grass (Riparian). This riparian site is dominated by Barclay's willow with an understory of bluejoint reedgrass. It is found along small streams and large rivers on slopes ranging from 1 to 20 percent and on all aspects. Elevations range from 15 to 1,300 feet.

Forest Productivity

In [table 17](#), the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Engineering

This section provides information for planning land uses related to urban development and 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 estimates given 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 (1.5 to 2.1 m). 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 (1.5 to 2.1 m) of the surface, soil wetness, depth to 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.

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 18](#) and [19](#) show the degree and kind of soil limitations that affect structures and site improvements, including 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. *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. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and 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 values in the tables indicate the severity of individual limitations. The values 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). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

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 (0.6 m) 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 (2.1 m). 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, permafrost, 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 (0.6 m) 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, permafrost, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet (1.5 or 1.8 m) 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, permafrost, 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

Table 20 shows 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. 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. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and 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 values in the tables indicate the severity of individual limitations. The values 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). If the soil is *not limited* (value = 0.00), no entry appears for the numerical value.

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 4 and 6 feet (1.2 and 1.8 m) 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, permafrost, 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 (1.2 m) 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, permafrost, 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 (5 cm) 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 (102 cm), 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.

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 (0.6 m) 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, permafrost, 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.

Construction Materials

Tables 21 and 22 give information about the soils as potential sources of gravel, sand, topsoil, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

In [table 21](#) the soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

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 the table only the probability 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 lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

In [table 22](#) the soils are rated *good*, *fair*, or *poor* as potential sources of topsoil, 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 or roadfill. The lower the number, the greater the limitation. Only material in suitable quantity is evaluated.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches (102 cm) 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. Rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material affect the ease of excavating, loading, and spreading. 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.

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 (1.8 m) 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 (1.5 m). 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 affecting 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. Large stones, depth to a water table, and slope affect the ease of excavation. 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). Susceptibility to frost action is also considered. The soils are rated based on the most limiting layers. Often a soil will have finer textured upper layers that are affected by frost action, while coarser textured lower layers in the same soil may not be affected.

Hydric Soils

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed in [table 23](#).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin et al. 1979; U.S. Army Corps of Engineers 1987; National Research Council 1995; Tiner 1985). Criteria for each 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 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 non-hydric soil, however, information that is more specific is needed, such as information about the depth and duration of the water table. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 1995). These criteria are used to identify a phase of a soil series that normally is 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 1998) and in the *Soil Survey Manual* (Soil Survey Division Staff 1993).

If soils are wet enough for a long enough period 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 in this survey area are specified in *Field Indicators of Hydric Soils in the United States* (Hurt et al. 1998).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches (50 centimeters). 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.

Those soils that meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators, are listed in the table. 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 et al. 1998).

Some map units consist almost entirely of hydric soils, such as map unit SrA (in which all listed components are hydric). Other map units consist primarily of non-hydric soils, such as map unit SIsE (in which all listed components are non-hydric), or map unit KnB (in which hydric soils are present only as minor components). Hydric soils may occur as minor inclusions even in map units listed without any hydric soils.

The table also lists the local landform on which each soil occurs, the hydric criteria code, and whether or not each soil meets the saturation, flooding, or ponding criteria for hydric soils. Codes for hydric soil criteria are explained in the following key:

Key To Hydric Soil Criteria

1. All Histosols except Folists, or
2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of Vertisols, Pachic subgroups, or cumulic subgroups that are:
 - a. somewhat poorly drained and have a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season, or
 - b. poorly drained or very poorly drained and have either:
 - (1) a frequently occurring water table at less than 0.5 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches, or for other soils
 - (2) a frequently occurring water table at less than 1.0 foot from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within 20 inches, or
 - (3) a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than 2 weeks) during the growing season if permeability is less than 6.0 inches/hour in any layer within 20 inches, or
3. Soils that are frequently ponded for a long duration or very long duration during the growing season, or
4. Soils that are frequently flooded for a long duration or very long duration during the growing season.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff 1998; 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 24](#) 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 *spodosol*.

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 *cryod* (*cry*, meaning cold, plus *od*, from *spodosol*).

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 *haplocryod* (*haplo*, meaning low base saturation, plus *cryod*, the suborder of the spodosols that has a cryic temperature 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 Haplocryods*.

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, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is *medial over loamy, amorphic, superactive Andic Haplocryods*.

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. An example from this survey area is the Cohoe series.

Taxonomic Units and Their Morphology

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in this survey area. These descriptions are available on the Web at <http://soils.usda.gov>.

Descriptions for higher level taxonomic units recognized in this survey area are provided below. Characteristics of the soil and the material in which it formed are identified for each taxonomic unit. A pedon, a small three-dimensional area of soil, typical of the taxonomic unit 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 1998). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the taxonomic unit.

Alic Haplocryands

Taxonomic Classification

- Alic Haplocryands

Setting

Depth class: moderately deep to very deep

Drainage class: well drained

Landforms: mountains

Parent material: volcanic ash over till

Elevation: 560 to 3,770 feet

Slope: 25 to 100 percent

Annual precipitation: 20 to 60 inches

Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

Typical Pedon Location

Map unit in which located: Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, steep in the Western Kenai Peninsula Area, Alaska

Location in survey area: NW¼ of sec. 7, T. 5 S., R. 9 W., of the Seward Meridian; UTM north 6626412 and east 619353, Zone 5, about a half mile west of Bradley Lake Dam.

Typical Pedon

Oe—0 to 4 inches; very dark grayish brown (10YR 3/2) moderately decomposed plant material; many very fine, fine, and medium roots; very strongly acid; clear wavy boundary.

A—4 to 7 inches; dark brown (10YR 3/3) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many very fine, fine, and common medium roots; 5 percent gravel; very strongly acid; clear wavy boundary

Bw—7 to 21 inches; very dark brown (10YR 2/2) silt loam; moderate fine granular structure; very friable nonsticky and nonplastic; common very fine, fine, few medium roots; 10 percent gravel; strongly acid; clear wavy boundary.

2C—21 to 32 inches; light olive brown (2.5Y 5/3) very gravelly sandy loam; massive; friable, nonsticky and nonplastic; few very fine and fine roots; 40 percent gravel, 5 percent cobbles; moderately acid.

R—32 inches; hard bedrock.

Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 35 degrees F.

Depth to bedrock (lithic): 20 to 60 inches

Oe horizon:

Reaction—extremely acid to very strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 35 percent gravel, 0 to 5 percent cobbles

Reaction—very strongly acid or strongly acid

B horizon:

Color—hue from 5YR to 10YR; value of 2 or 4; chroma of 1 to 4

Texture—very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 35 percent gravel, 0 to 5 percent cobbles

Reaction—very strongly acid or strongly acid

2C horizon:

Color—hue of 2.5Y or 5Y; value of 4 to 6; chroma of 1 to 3

Texture—fine sandy loam, sandy loam or silt loam modified by 10 to 50 percent total coarse fragments; 10 to 50 percent gravel, 0 to 10 percent cobbles, 0 to 5 percent stones

Reaction—very strongly acid to moderately acid

Aquic Cryofluvents

Taxonomic Classification

- Aquic Cryofluvents

Depth class: very deep

Drainage class: somewhat poorly drained

Landforms: alluvial fans, channels on alluvial plains

Parent material: alluvium

Elevation: 0 to 330 feet

Slope: 0 to 2 percent

Annual precipitation: 15 to 30 inches

Annual temperature: 0 to 37 degrees F.

Frost-free period: 75 to 120 days

Typical Pedon Location

Map unit in which located: Aquic Cryofluvents, 0 to 2 percent slopes in the Western Kenai Peninsula Area, Alaska

Location in survey area: NE¼SE¼ sec. 24, T. 4 S., R. 10 W., of the Seward Meridian; UTM north 6632532 and east 616328, zone 5, in the Fox River Valley.

- Oi—0 to 2 inches; very dark grayish brown (10YR 3/2) slightly decomposed plant material; many fine roots; extremely acid; clear smooth boundary.
- A—2 to 6 inches; dark gray (2.5Y 4/1) silt loam; common fine faint dark grayish brown (2.5Y 4/2) mottles; weak fine subangular block structure; friable, nonsticky and nonplastic; many fine roots; moderately acid; clear smooth boundary.
- Cg1—6 to 16 inches; dark gray (2.5Y 4/1) silt loam; common fine faint very dark grayish brown (2.5Y 3/2) mottles; massive; friable, nonsticky and nonplastic; few fine roots; moderately acid; clear wavy boundary.
- Cg2—16 to 27 inches; dark gray (2.5Y 4/1) silt loam; massive; friable, nonsticky and nonplastic; few fine roots; common fine distinct dark yellowish brown (10YR 4/4) redoximorphic concentrations and few fine prominent strong brown (7.5YR 5/6) concentrations; moderately acid; gradual wavy boundary.
- Cg3—27 to 31 inches; gray (2.5Y 5/1) silt loam; massive; friable, nonsticky and nonplastic; few fine roots; common fine prominent yellowish brown (5YR 5/8) redoximorphic concentrations and few fine faint dark grayish brown (2.5Y 5/2) redoximorphic depletions; moderately acid; gradual wavy boundary.
- Cg4—31 to 48 inches; dark gray (2.5Y 4/1) and dark grayish brown (2.5Y 4/2) stratified silt loam, fine sandy loam, and sand; massive; very friable, nonsticky and nonplastic; moderately acid; clear wavy boundary.
- 2Cg5—48 to 60 inches; dark grayish brown (2.5Y 4/2) gravelly sand; single grain; loose, nonsticky and nonplastic; 15 percent gravel; moderately acid.

Range in Characteristics

Soil moisture class: oxyaquic

Average annual soil temperature: 33 degrees F.

Depth to sands and gravels: 15 to greater than 40 inches

Oi horizon:

Color—hue of 10YR or 2.5Y; value of 2 or 3; chroma of 1 to 3

Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 2.5Y or 5Y; value of 4 or 5; chroma of 1 or 2

Texture—silt loam, very fine sandy loam

Reaction—very strongly acid to moderately acid

Cg horizons:

Color—hue of 2.5Y to N; value of 2.5 to 5; chroma of 1 or 2

Redoximorphic features—hue of 5YR to 5Y; value of 3 to 5; chroma of 2 to 8

Texture—silt loam, very fine sandy loam, stratified silt loam, fine sandy loam, and sand

Reaction—very strongly acid to moderately acid

2Cg horizon:

Color—hue of 2.5Y to N; value of 2.5 to 5; chroma of 1 or 2

Texture—loamy sand and sand modified by 0 to 25 percent total coarse fragments; 10 to 25 percent gravel, 0 to 10 percent cobbles

Reaction—very strongly acid to moderately acid

Dystrocryepts

Taxonomic Classification

- Dystrocryepts

Depth class: very deep

Drainage class: well drained

Landforms: hills, moraines on till plains

Parent material: ash-influenced gravelly glaciofluvial deposits over sandy and gravelly glaciofluvial deposits

Elevation: 1,670 to 2,700 feet

Slope: 4 to 25 percent

Annual precipitation: 20 to 40 inches

Annual temperature: 34 to 37 degrees C

Frost-free period: 90 to 120 days

Typical Pedon Location

Map unit in which located: Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes in the Western Kenai Area, Alaska

Location in survey area: NW¼SW¼ sec. 33, T. 2 S., R. 11 W., of the Seward Meridian; Seldovia D4 SE 1:25,000 quad; UTM north 6648273 and east 601194, zone 5, about one mile north of Cytex Creek.

Oi—0 to 2 inches; very dark brown (10YR 2/2) slightly decomposed plant material; many very fine, fine, and medium roots; extremely acid; abrupt smooth boundary.

A—2 to 7 inches; very dark brown (7.5YR 2.5/3) very gravelly fine sandy loam; weak fine granular structure; very friable, nonsticky and nonplastic; 50 percent gravel, 2 percent cobbles; very strongly acid; abrupt smooth boundary.

Bw—7 to 17 inches; dark yellowish brown (10YR 3/4) and dark yellowish brown (10YR 4/4) extremely gravelly loamy sand; single grain; very friable, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.

BC—17 to 23 inches; dark olive brown (2.5Y 3/3) extremely gravelly loamy sand; single grain; very friable, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.

C—23 to 60 inches; olive (5Y 3/3) extremely gravelly sand; single grain; loose, nonsticky and nonplastic; 65 percent gravel, 2 percent cobbles; very strongly acid; clear smooth boundary.

Range in Characteristics

Average annual soil temperature: 34 degrees F.

Oi horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—sandy loam, fine sandy loam, silt loam or very fine sandy loam modified by 0 to 55 percent total coarse fragments; 5 to 55 percent gravel, 0 to 4 percent cobbles, 0 to 4 percent stones

Reaction—very strongly acid to strongly acid

Bw horizon:

Color—hue of 10YR or 2.5Y; value of 2 to 4; chroma of 2 to 4

Texture—fine sandy loam, loamy sand modified by 25 to 70 percent total coarse fragments; 25 to 70 percent gravel, 0 to 3 percent cobbles, 0 to 2 percent stones

Reaction—very strongly acid or strongly acid

C or BC horizons:

Color—hue of 10YR to 5Y; value of 3 to 5; chroma of 1 to 4

Texture—loamy sand, fine sandy loam, sand modified by 25 to 70 percent total coarse fragments; 25 to 70 percent gravel, 0 to 35 percent cobbles, 0 to 25 percent stones

Reaction—very strongly acid or strongly acid

Lithic Haplocryands

Taxonomic Classification

- Lithic Haplocryands

Depth class: very shallow or shallow

Drainage class: well drained

Landforms: mountains

Parent material: volcanic ash over till

Elevation: 560 to 3,770 feet

Slope: 25 to 100 percent

Annual precipitation: 20 to 60 inches

Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

Typical Pedon Location

Map unit in which located: Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, steep in the Western Kenai Area, Alaska

Location in survey area: SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 4 S., R. 9 W., of the Seward Meridian; Seldovia D3 SE 1:25,000 quad; UTM east 619112, north 6628632, Zone 5, about a quarter mile west of Bradley River.

Oi—0 to 1 inch; dark brown (10YR 3/2) slightly decomposed plant material; many very fine, fine, and common medium roots; extremely acid; abrupt smooth boundary.

Oa—1 to 2 inches; very dark brown (10YR 2/2) highly decomposed plant material; many very fine, fine, and common medium roots; extremely acid; abrupt smooth boundary.

A—2 to 7 inches; very dark brown (10YR 2/2) silt loam; weak fine granular structure; very friable, nonsticky and nonplastic; many very fine, fine, and common medium roots; 5 percent gravel; extremely acid; clear smooth boundary.

Bw1—7 to 9 inches; very dark brown (7.5YR 2.5/2) gravelly silt loam; moderate medium granular structure; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 15 percent gravel; extremely acid; clear smooth boundary.

Bw2—9 to 12 inches; dark brown (10YR 3/3) silt loam; moderate medium granular structure; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 10 percent gravel; extremely acid; abrupt smooth boundary.

R—12 inches; fractured bedrock.

Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

Depth to bedrock (lithic): 8 to 19 inches

Oi horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—slightly decomposed plant material, moderately decomposed plant material, or highly decomposed plant material

Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

A horizon:

Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3

Texture—silt loam or very fine sandy loam modified by 0 to 45 percent total coarse fragments; 10 to 45 percent gravel, 0 to 10 percent cobbles

Reaction—extremely acid to strongly acid

B horizon:

Color—hue of 5YR to 10YR; value of 2 to 4; chroma of 2 to 4

Texture—silt loam or very fine sandy loam modified by 0 to 45 percent total coarse fragments; 10 to 45 percent gravel, 0 to 10 percent cobbles

Reaction—extremely acid to strongly acid

Typic Cryaquands

Taxonomic Classification

- Typic Cryaquands

Depth class: shallow to deep

Drainage class: poorly drained

Landforms: mountains

Parent material: volcanic ash over till

Elevation: 5 to 3,700 feet

Slope: 0 to 25 percent

Annual precipitation: 20 to 60 inches

Annual temperature: 32 to 37 degrees F.

Frost-free period: 75 to 120 days

Typical Pedon Location

Map unit in which located: Tutka-Portgraham complex, hilly to steep in the Western Kenai Area, Alaska

Location in survey area: NE¼SE¼ sec. 35 T. 4 S., R. 11 W., of the Seward Meridian; Seldovia D3 SW 1:25,000 quad; UTM north 6628980 and east 606041, Zone 5, about a quarter mile east of Falls Creek.

Oi—0 to 3 inches; very dark brown (10YR 3/2) slightly decomposed plant material; extremely acid; abrupt smooth boundary.

A—3 to 7 inches; very dark grayish brown (10YR 3/2) silt loam; weak medium granular structure; very friable, slightly sticky and nonplastic; very strongly acid; clear smooth boundary.

Bw—7 to 26 inches; dark brown (10YR 3/3) silt loam; weak medium granular structure; very friable, slightly sticky and nonplastic; 2 percent gravel, 2 percent cobbles; moderately acid; abrupt smooth boundary.
 R—27 inches; fractured bedrock.

Range in Characteristics

Soil moisture class: aquic
Average annual soil temperature: 33 degrees F.
Depth to bedrock (lithic): 22 to 50 inches

Oi horizon:
 Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3
 Organic matter content—85 to 95 percent
 Reaction—extremely acid to strongly acid

A horizon:
 Color—hue of 7.5YR or 10YR; value of 2 or 3; chroma of 1 to 3
 Texture—silt loam or very fine sandy loam modified by 0 to 40 percent total coarse fragments; 0 to 10 percent gravel, 0 to 15 percent cobbles, 0 to 15 percent stones
 Reaction—very strongly acid to strongly acid

B horizon:
 Color—hue of 7.5YR or 10YR; value of 3 to 5; chroma of 2 to 4
 Texture—silt loam or very fine sandy loam modified by 0 to 40 percent total coarse fragments; 0 to 10 percent gravel, 0 to 15 percent cobbles, 0 to 15 percent stones
 Reaction—very strongly acid to moderately acid

Typic Cryaquents

Taxonomic Classification

- Typic Cryaquents

Depth class: very deep
Drainage class: very poorly drained
Landforms: deltas, estuaries
Parent material: silty and clayey over sandy and silty marine deposits
Elevation: 1 to 200 feet
Slope: 0 to 2 percent
Annual precipitation: 15 to 30 inches
Annual temperature: 33 to 37 degrees F.
Frost-free period: 85 to 120 days

Typical Pedon Location

Map unit in which located: Typic Cryaquents, 0 to 2 percent slopes in the Western Kenai Area, Alaska
Location in survey area: SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3 T. 5 S., R. 10 W., of the Seward Meridian; Seldovia D3 SW 1:25,000 quad; UTM north 6627217 and east 614181, Zone 5, about a half mile north of Battle Creek.

Oi—0 to 2 inches; very dark gray (10YR 3/1) slightly decomposed plant material common very fine and fine roots; slightly acid; abrupt smooth boundary.

Cg—2 to 6 inches; very dark gray (5Y 3/1) silt loam; massive; very friable, slightly sticky and slightly plastic; common very fine and fine roots; 10 percent 4 mm prominent brown (7.5YR) redoximorphic concentrations; neutral; gradual wavy boundary.

C—6 to 60 inches; very dark gray (2.5Y 3/1) very gravelly sand; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; 40 percent gravel, 10 percent cobbles; moderately alkaline.

Range in Characteristics

Soil moisture class: aquic

Average annual soil temperature: 33 degrees F.

Depth to sands and gravel: 5 to greater than 60 inches

O_i horizon:

Color—value of 2 or 3; chroma of 1 to 3

Organic matter content—75 to 90 percent

Reaction—moderately acid to neutral

C_g horizon:

Color—hue of 10YR to 5Y; value of 3 or 4; chroma of 1 or 2

Redoximorphic concentrations—hue of 7.5YR or 10YR; value of 3 or 4; chroma of 3 to 6

Texture—silty loam or very fine sandy loam

Reaction—slightly acid to moderately alkaline

C horizon:

Color—hue of 2.5Y or 5Y; value of 3 or 4; chroma of 1 to 4

Texture—sandy loam, loamy sand, sand or silt loam modified by 0 to 55 percent total coarse fragments; 0 to 50 percent gravel, 0 to 30 percent cobbles

Reaction—slightly alkaline to moderately alkaline

Typic Cryopsamments

Taxonomic Classification

- Typic Cryopsamments

Depth class: very deep

Drainage class: excessively drained

Landforms: dunes on coastal plains

Parent material: beach sand

Elevation: 3 to 262 feet

Slope: 3 to 45 percent

Annual precipitation: 20 to 29.5 inches

Annual temperature: 34 to 36 degrees C

Frost-free period: 85 to 115 days

Typical Pedon Location

Map unit in which located: Typic Cryopsamments, 3 to 45 percent slopes in the Western Kenai Peninsula Area, Alaska

Location in survey area: NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2 T. 3 N., R. 12 W., of the Seward Meridian; Kenai B4 1:25,000 quad; UTM north 6695358 and east 592927, Zone 5, about one mile west of the Kasilof River.

A—0 to 1 inch; dark grayish brown (10YR 4/2) loamy sand; single grain; loose, nonsticky and nonplastic; many very fine and fine, many medium and common coarse roots; slightly acid; abrupt smooth boundary.

C—1 to 60 inches; variegated sand; single grain; loose, nonsticky and nonplastic; many very fine and fine and common medium roots; neutral.

Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

C horizon:

Color—hue of 10YR or 2.5Y; value of 3 to 5; chroma of 1 to 3

Texture—loamy fine sand, loamy sand or sand

Reaction—moderately acid to neutral

Typic Cryorthents

Taxonomic Classification

- Typic Cryorthents

Depth class: very deep

Drainage class: well drained

Landforms: hills, sea cliffs, and terraces

Parent material: debris slide deposits

Elevation: 0 to 1,430 feet

Slope: 15 to 150 percent

Annual precipitation: 20 to 30 inches

Annual temperature: 33 to 39 degrees F.

Frost-free period: 90 to 130 days

Typical Pedon Location

Map unit in which located: Dystrocryepts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes in the Western Kenai Area, Alaska

Location in survey area: SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7 T. 3 S., R. 10 W., of the Seward Meridian; Seldovia D3 NW 1:25,000; UTM north 6644917 and east 608715, Zone 5, about one and a half miles north of Caribou Lake.

Oi—0 to 1 inch; very dark grayish brown (10YR 3/2) gravelly slightly decomposed plant material; common very fine, fine, and few medium roots; 25 percent gravel, 2 percent cobbles, 1 percent stones; extremely acid; abrupt smooth boundary.

C1—1 to 33 inches; olive gray (5Y 5/2) gravelly very fine sandy loam; massive; very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; 25 percent gravel, 2 percent cobbles, 1 percent stones; very strongly acid; gradual smooth boundary.

C2—33 to 60 inches; olive gray (5Y 4/2) and dark grayish brown (2.5Y 4/2) very gravelly silt loam; massive; friable, slightly sticky and nonplastic; fine roots 25 percent gravel, 15 percent cobbles, 2 percent stones; strongly acid.

Range in Characteristics

Soil moisture class: udic

Average annual soil temperature: 34 degrees F.

Oi horizon:

Color—value of 2 or 3; chroma of 2 to 3

Texture—slightly decomposed plant material modified by 0 to 30 percent total coarse fragments, 0 to 30 percent gravel, 0 to 10 percent cobbles, 0 to 3 percent stones

Organic matter content—85 to 95 percent

Reaction—extremely acid to strongly acid

C horizons:

Color—hue of 2.5Y or 5Y; value of 3 to 5; chroma of 1 to 3

Texture—silty clay loam, very fine sandy loam or silt loam modified by 0 to 40 percent total coarse fragments; 0 to 30 percent gravel, 0 to 20 percent cobbles, 0 to 3 percent stones

Reaction—very strongly acid to moderately alkaline

Formation of the Soils

Soil is the unconsolidated mineral and organic material on the surface of the earth that serves as a natural medium for the growth of land plants (Soil Survey Staff 1999). Soil formation is controlled by genetic and environmental factors of climate (including both temperature and moisture effects), topography, parent material, and living organisms—all acting over a period of time. The influence of any one of these factors varies from place to place, and the interaction of all of them determines the kind of soil that forms (Jenny, 1941).

Climate, apart from its influence on soil properties, determines to a large extent the kind of vegetation that grows in a particular area. The vegetation, in turn, has a profound influence on soil characteristics. The degree of modification of the soil parent materials by climate and biologic forces and the degree of soil development depend largely on the length of time the soil-forming processes have been active. Local variations in relief also affect the nature and intensity of soil development. In low-lying areas, for example, a permanent high water table may cause the formation of a different kind of soil than those formed in well-drained uplands within the same general area.

Parent material

The underlying bedrock of the survey area consists primarily of Tertiary sediments. This bedrock, in turn, is overlain by glacial, glaciofluvial, glaciolacustrine, alluvial, colluvial, and eolian deposits of late Quaternary age. The overall landscape of the western Kenai Peninsula area is the result of multiple glaciations. Evidence of three major ice inundations of late Pleistocene age is preserved in the western Kenai Peninsula area (Reger 2004).

Eolian deposits include several tephra erupted from volcanoes on the west side of Cook Inlet. The thickness of eolian deposits ranges from only a few inches to more than 40 inches. The Cohoe and Kachemak soils are examples of soils that formed in silty materials and volcanic ash overlying Tertiary sediments. The Mutnala soils are examples of soils that formed in silty material over glacial till. On the alluvial plains and in many of the upland depressions, the soils have formed in materials deposited by streams or washed in from the surrounding slopes. In many of the depressions, and in large remnant meltwater channels with underfit streams, organic soils formed from the accumulated remains of plants including mosses and sedges. Salamatof soils are examples of these organic soils

Climate

The survey area is characterized by cool summers and moderately cold winters. The rates of evaporation and transpiration are comparatively low, and as such, much of the precipitation percolates through the soil and is effective in leaching the upper soil horizons. Under the native vegetation, the well drained soils remain cool and moist during most of the summer.

Vegetation

In this climate, the soils of the uplands for the most part support a forest of spruce and birch. There has been extensive mortality in spruce stands due to beetle infestation, resulting in encroachment of grasslands. The native vegetation on the well drained soils at higher elevations is mainly native grasses. A more open forest of willow, balsam poplar, and black spruce, in which there are many grassy areas, covers most of the somewhat poorly and poorly drained soils of the alluvial plains and upland depressions. Low shrubs and black spruce grow in the organic soils of the fens.

Relief

The soils in this survey area are relatively young, and the effect of relief and topographic position, though considerable, is not as apparent as on older soils in other regions. On most, but not all, of the steep slopes the loess mantle is somewhat thinner than in more level areas. Soil development generally is about as equally advanced on the steep parts of uplands as it is on the gently sloping and nearly level areas. Most concave or depressional areas, however, are poorly drained, and the soils exhibit characteristics related to wetness.

Time

All of the soils of the survey area developed in the relatively short period of time that has elapsed since the last glaciers receded from the survey area. The development of major soil horizons is well advanced in most well drained soils of the uplands, but wetter soils show little profile development.

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Glossary

- Ablation till.** Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
- 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.
- Alluvial cone.** The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.
- Alluvial fan.** The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.
- 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.
- Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- Aspect.** The direction in which a slope faces.
- 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 (available moisture capacity).** The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. 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 3 |
| Low | 3 to 6 |
| Moderate..... | 6 to 9 |
| High..... | 9 to 12 |
| Very high..... | more than 12 |
- Backslope.** The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.
- Basal area.** The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.
- 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.
- Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- Boulders.** Rock fragments larger than 2 feet (61 cm) in diameter.
- Breaks.** The steep and very steep broken land at the border of an upland summit that is dissected by ravines.
- Breast height.** An average height of 4.5 feet (1.4 m) above the ground surface; the point on a tree where diameter measurements are ordinarily taken.
- Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- 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, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.
- Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- Cation-exchange capacity.** 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.
- 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 cm) along the longest axis. A single piece is called a channer.
- Cirque.** A semicircular, concave, bowl-like area that has steep faces primarily resulting from glacial ice and snow abrasion.
- 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.
- 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 textured soil.** Sand or loamy sand. Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 cm) 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 cm) 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.** Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.
- 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.

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*.

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 (25 cm) and 40 or 80 inches (102 or 203 cm).

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.

Cropping system. Growing crops according to a planned system of rotation and management practices.

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.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 cm) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 cm); moderately deep, 20 to 40 inches (51 to 102 cm); shallow, 10 to 20 inches (25 to 51 cm); and very shallow, less than 10 inches (25 cm).

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.

Draw. A small stream valley that generally is more open and has broader bottom land than a ravine or gulch.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

- 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.
- 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.
- 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 (7 ft) are saturated.
- Eolian soil material.** Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.
- 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 (7 feet) 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.
- 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. Synonym: scarp.
- Esker.** A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.
- Fan terrace.** A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.
- 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.
- Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of fiber that is well preserved and readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- 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*.
- Fine-textured soil.** Sandy clay, silty clay, or clay.
- 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 cm) long.
- Flood plain.** A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.
- Fluvial.** Of or pertaining to rivers; produced by river action, as a fluvial plain.
- Foothill.** A steeply sloping upland that has relief of as much as 1,000 feet (305 m) 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.
- 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.
- Glacial drift.** Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.
- Glacial outwash.** Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.
- Glacial till.** Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.
- Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.
- Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.
- Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- 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 mm to 7.6 cm) 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 cm) in diameter.
- Ground water.** Water filling all the unblocked pores of the material below the water table.
- Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- 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 natural elevation of the land surface, rising as much as 1,000 feet (305 m) above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.
- 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.

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.

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.

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.

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

- Interfluve.** An elevated area between two drainageways that sheds water to those drainageways.
- Intermittent stream.** A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.
- 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.
- Kame.** An irregular, short ridge or hill of stratified glacial drift.
- Karst (topography).** The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.
- Knoll.** A small, low, rounded hill rising above adjacent landforms.
- K_{sat} .** Saturated hydraulic conductivity. (See Permeability.)
- Lacustrine deposit.** Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.
- 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.
- Linear extensibility.** Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. 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. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.
- Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.
- Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.
- Loess.** Fine grained material, dominantly of silt-sized particles, deposited by wind.
- Low strength.** The soil is not strong enough to support loads.
- 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.
- Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.
- Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.
- 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 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. An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

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 in); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 in); and *coarse*, more than 15 millimeters (about 0.6 in).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet (305 m) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

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.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

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.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

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 organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

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 m to 10 square m), depending on the variability of the soil.

Percolation. The 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

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

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.

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.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. 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

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.
- Relief.** The elevations or inequalities of a land surface, considered collectively.
- Residuum (residual soil material).** Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.
- Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
- 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.
- 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.
- Sapric soil material (muck).** The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
- 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.** Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.
- 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 formed by the hardening of a clay deposit.
- 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.
- 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.

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.

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:

Nearly level.....	0 to 2 percent
Gently sloping.....	2 to 4 percent
Moderately sloping	4 to 8 percent
Strongly sloping.....	8 to 15 percent
Moderately steep.....	15 to 25 percent
Steep.....	25 to 45 percent
Very steep.....	More than 45 percent

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.

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 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 concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 cm) in diameter if rounded or 15 to 24 inches (38 to 60 cm) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

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).

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

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 cm). 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.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Tephra. Materials of all types and sizes that are erupted from a volcano and deposited from the air.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. 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.

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, silty, 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."

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 position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

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.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

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.

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.

Windthrow. The uprooting and tipping over of trees by the wind.

Plates



Plate 1. Kachemak soils (map unit 575) are the dominant soils on the rolling hills of the Diamond Ridge area. Cook Inlet and the Alaska Range are in the background.



Plate 2. Coalesced alluvial fans form the Homer Bench. Beluga and Smokey Bay soils (map unit 703) formed in slope alluvium derived from the bluffs of the Kenai Formation in the background.



Plate 3. Grazing occurs at the head of Kachemak Bay on Typic Cryaquents (map unit 701) in the foreground. Tutka-Portgraham complex, hilly to steep, (map unit 697) occurs on the mountain slopes in the background.



Plate 4. Deep Creek cuts through glacial drift and into the underlying Kenai Formation. Killey and Moose River soils (map unit 611) occupy the valley bottom.



Plate 5. Kachemak soils (map unit 577) occur on the south slopes of the Boxcar Hills. Mutnala and Starichkof soils (map unit 623) are at the base of these hills.



Plate 6. Dystrocryepts and Typic Cryorthents (map unit 560) are at the higher elevations of the Caribou Hills.



Plate 7. Starichkof soils (map unit 677) are in large remnant meltwater channels with small underfit streams.



Plate 8. Soldotna soils (map unit 659) occur on large, nearly level, outwash plains and deltaic deposits.



Plate 9. Typic Cryopsammets (map unit 702) occur on dunes overlying glacial till.

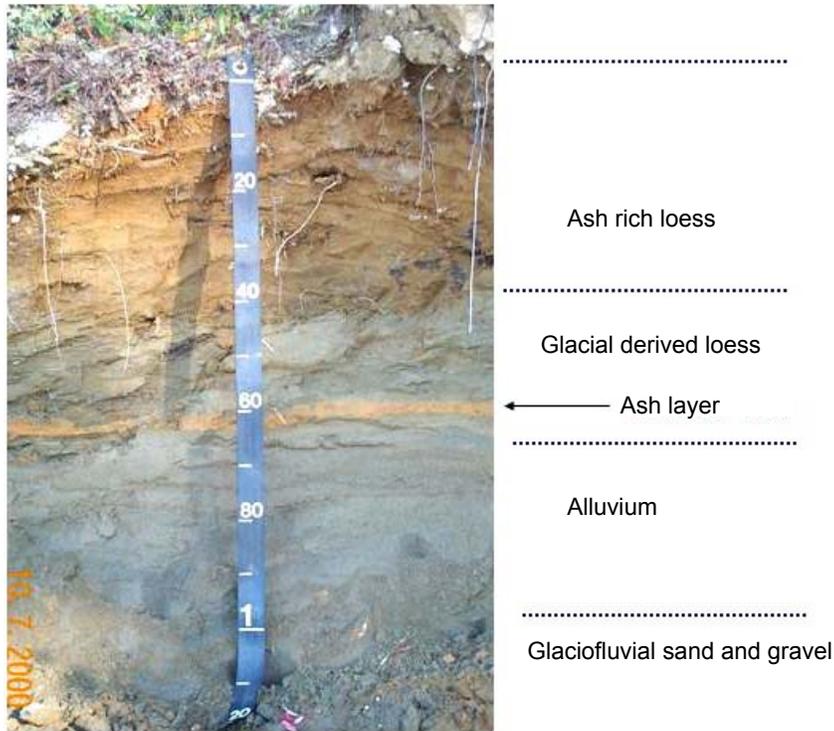


Plate 10. Ash observed in a profile of Soldotna soils near the town of Soldotna.



Plate 11. Profile of Naptowne silt loam. The silty mantle extends to about 27.5 inches (70 cm) over glacial till.



Plate 12. Profile of Cohoe silt loam. The silty eolian mantle extends to about 51 inches (130 cm) over glacial drift.



Plate 13. Profile of Redoubt silt loam. The thick dark Bhs horizons at 10 to 18.5 inches (25-47 cm) have organic carbon content well above 6 percent.



Plate 14. Redoubt soils (map unit 644) commonly occur under an open canopy of mixed birch and spruce forest.

Tables

Table 1. Temperature and Precipitation at Kenai, Alaska

TAPS Station: KENAI FAA AIRPORT, AK4546

Start yr. - 1971 End yr. - 2000

Temperature: 30 years available out of 30 requested in this analysis

Precipitation: 30 years available out of 30 requested in this analysis

Month	Temperature (Degrees F.)						Precipitation (Inches)				
	avg daily max	avg daily min	avg	2 yrs in 10 will have		avg # of grow deg days*	avg	2 yrs in 10 will have		avg # of days w/.1 or more	avg total snow fall
				max temp. >than	min temp. <than			less than	more than		
January	21.2	5.3	13.2	42	-37	0	1.07	0.37	1.73	3	9.2
February	25.7	7.3	16.5	43	-29	0	0.91	0.41	1.33	2	9.1
March	32.8	14.2	23.5	46	-22	0	0.81	0.22	1.32	2	8.3
April	42.4	26.4	34.4	57	3	14	0.64	0.18	1.08	1	2.8
May	52.7	35.8	44.2	69	21	142	0.95	0.34	1.52	3	0.2
June	58.5	43.0	50.8	74	31	321	1.09	0.54	1.65	3	0.0
July	62.0	47.8	54.9	77	31	459	1.75	0.88	2.58	5	0.0
August	61.6	46.0	53.8	76	31	427	2.61	1.43	3.78	7	0.0
September	54.6	38.8	46.7	66	18	213	3.31	2.17	4.30	8	0.1
October	41.0	27.5	34.3	55	2	26	2.66	1.61	3.52	6	6.2
November	28.9	14.4	21.7	45	-16	1	1.69	0.52	2.74	4	11.5
December	23.6	8.8	16.2	42	-26	0	1.45	0.63	2.16	4	13.4
Yearly :	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Average	42.1	26.3	34.2	---	---	---	---	---	---	---	---
Extreme	86	-47	---	79	-37	---	---	---	---	---	---
Total	---	---	---	---	---	1603	18.93	16.14	21.59	48	60.8

Average number of days per year with at least 1 inch of snow on the ground: 145

*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 (Threshold: 40.0 deg. F)

Table 2. Temperature and Precipitation at Homer, Alaska

TAPS Station: HOMER WSO AIRPORT, AK3665
 Start yr. - 1971 End yr. - 2000
 Temperature: 30 years available out of 30 requested in this analysis
 Precipitation: 30 years available out of 30 requested in this analysis

Month	Temperature (Degrees F.)						Precipitation (Inches)				
	avg daily max.	avg daily min.	avg	2 yrs in 10 will have		avg. # of grow degree days*	avg	2 yrs in 10 will have		avg # of days w/ .1 or more	avg total snow fall
				max temp. >than	min temp. <than			less than	more than		
January	29.3	17.5	23.4	46	-12	1	2.64	1.10	4.09	7	9.9
February	31.4	18.3	24.8	46	-7	1	2.02	0.78	3.22	5	12.2
March	36.3	22.5	29.4	48	-2	1	1.86	0.50	3.23	5	10.2
April	43.4	29.3	36.3	56	12	17	1.17	0.50	1.75	3	3.5
May	50.5	36.6	43.6	64	23	123	1.07	0.44	1.67	3	0.4
June	57.0	42.9	50.0	70	33	299	0.96	0.59	1.29	3	0.0
July	60.9	47.2	54.1	72	33	437	1.45	0.69	2.14	4	0.0
August	60.8	46.7	53.8	72	36	426	2.28	1.29	3.29	6	0.0
September	54.8	40.9	47.9	65	23	240	3.37	2.19	4.51	8	0.0
October	44.1	31.4	37.8	55	12	44	2.77	1.46	3.88	8	2.9
November	35.2	23.5	29.4	49	2	7	2.88	0.93	4.58	7	8.5
December	31.6	20.0	25.8	46	-4	2	2.98	0.97	5.05	8	13.2
Yearly :	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Average	44.6	31.4	38.0	---	---	---	---	---	---	---	---
Extreme	81	-24	---	74	-14	---	---	---	---	---	---
Total	---	---	---	---	---	1598	25.44	19.95	29.78	67	60.7

Average number of days per year with at least 1 inch of snow on the ground: 94

*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 (Threshold: 40.0 deg. F).

Table 3. Probability of frost at Kenai, Alaska

FROST Station: KENAI FAA AIRPORT, AK4546

Start yr. - 1971 End yr. - 2000

Requested years of data: 30 Available years of data: 30

Spring:

Years of missing data 24 deg = 0, 28 deg = 0, 32 deg = 0

Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0

Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Fall:

Years of missing data 24 deg = 0, 28 deg = 0, 32 deg = 0

Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0

Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Probability	Temperature		
	24°F or lower	28°F or lower	32°F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 19	June 3	June 18
2 year in 10 later than--	May 10	May 25	June 11
5 year in 10 later than--	April 23	May 7	May 28
First freezing temperature in fall:			
1 yr in 10 earlier than--	September 15	September 5	August 23
2 yr in 10 earlier than--	September 20	September 11	August 28
5 yr in 10 earlier than--	September 28	September 22	September 9

Table 4. Probability of frost at Homer, Alaska

FROST Station: HOMER WSO AIRPORT, AK3665

Start yr. - 1971 End yr. - 2000

Requested years of data: 30

Available years of data: 30

Spring:

Years of missing data 24 deg = 0, 28 deg = 0, 32 deg = 0
 Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0
 Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Fall:

Years of missing data 24 deg = 0, 28 deg = 0, 32 deg = 0
 Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0
 Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Probability	Temperature		
	24°F or lower	28°F or lower	32°F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 14	May 28	June 11
2 year in 10 later than--	May 3	May 19	June 3
5 year in 10 later than--	April 13	May 2	May 20
First freezing temperature in fall:			
1 yr in 10 earlier than--	October 7	September 20	September 10
2 yr in 10 earlier than--	October 11	September 25	September 15
5 yr in 10 earlier than--	October 20	October 2	September 24

Table 5. Growing Season at Kenai, Alaska

GROWTH Station: KENAI FAA AIRPORT, AK4546
 Start yr. - 1971 End yr. - 2000
 Requested years of data: 30 Available years of data: 30
 Years with missing data 24 deg = 0, 28 deg = 0, 32 deg = 0
 Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0
 Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Probability	Daily Minimum Temperature		
	# days > 24°F	# days > 28°F	# days > 32°F
9 years in 10	126	103	72
8 years in 10	137	115	83
5 years in 10	158	137	103
2 years in 10	178	159	123
1 year in 10	189	171	134

Table 6. Growing Season at Homer, Alaska

GROWTH Station: HOMER WSO AIRPORT, AK3665
 Start yr. - 1971 End yr. - 2000
 Requested years of data: 30 Available years of data: 30
 Years with missing data 24 deg = 0, 28 deg = 0, 32 deg = 0
 Years with no occurrence 24 deg = 0, 28 deg = 0, 32 deg = 0
 Data years used 24 deg = 30, 28 deg = 30, 32 deg = 30

Probability	Daily Minimum Temperature		
	# days > 24°F	# days > 28°F	# days > 32°F
9 years in 10	150	122	97
8 years in 10	164	133	107
5 years in 10	189	152	126
2 years in 10	214	172	144
1 year in 10	227	183	154

Table 7. Acreage and Proportionate Extent of the Soils

(An * under "Percent" indicates less than 0.1 percent)

Map symbol	Map unit name	Acres	Percent
501	Aquic Cryofluvents, 0 to 2 percent slopes -----	1,157	0.1
502	Aquic Cryofluvents, shallow, 0 to 2 percent slopes -----	837	*
503	Badland, sea cliffs-----	1,291	0.1
504	Badland, sea cliffs-Typic Cryorthents complex, very steep -----	1,403	0.2
505	Beaches-----	1,702	0.2
506	Beluga silt loam, 0 to 4 percent slopes -----	2,684	0.3
507	Beluga silt loam, 4 to 8 percent slopes -----	2,552	0.3
508	Beluga silt loam, 8 to 15 percent slopes -----	277	*
509	Beluga-Mutnala complex, 0 to 8 percent slopes -----	361	*
510	Beluga-Smokey Bay complex, 4 to 8 percent slopes -----	1,263	0.1
511	Beluga-Smokey Bay complex, 8 to 15 percent slopes -----	745	*
512	Benka silt loam, 0 to 4 percent slopes -----	1,528	0.2
513	Benka silt loam, 4 to 8 percent slopes -----	1,077	0.1
514	Benka silt loam, 8 to 15 percent slopes -----	577	*
515	Benka silt loam, 15 to 25 percent slopes-----	947	0.1
516	Benka silt loam, 25 to 60 percent slopes-----	3,186	0.4
517	Benka silt loams, strongly sloping and gently sloping -----	837	*
518	Boxcar silt loam, 0 to 8 percent slopes -----	1,295	0.1
519	Boxcar silt loam, 8 to 25 percent slopes -----	1,189	0.1
520	Boxcar silt loam, 25 to 60 percent slopes-----	729	*
521	Boxcar silt loam, cool, 0 to 8 percent slopes -----	504	*
522	Boxcar silt loam, cool, 25 to 60 percent slopes -----	2,379	0.3
523	Chenega silt loam, 0 to 2 percent slopes -----	98	*
524	Chenega silt loam, cool, 0 to 2 percent slopes -----	107	*
525	Chenega very fine sandy loam, occasionally flooded, 0 to 2 percent slopes-----	179	*
526	Chulitna silt loam, 0 to 4 percent slopes -----	2,007	0.2
527	Chulitna silt loam, 4 to 8 percent slopes -----	823	*
528	Chulitna silt loam, 8 to 15 percent slopes-----	500	*
529	Chulitna silt loam, 15 to 25 percent slopes -----	387	*
530	Chunilna mucky silt loam, 0 to 4 percent slopes -----	968	0.1
531	Chunilna mucky silt loam, 4 to 8 percent slopes -----	5,447	0.6
532	Chunilna mucky silt loam, cool, 0 to 8 percent slopes-----	5,162	0.6
533	Chunilna mucky silt loam, cool, 8 to 25 percent slopes -----	4,023	0.4
534	Clam Gulch silt loam, 0 to 4 percent slopes-----	4,105	0.5
535	Clunie peat, 0 to 2 percent slopes -----	2,577	0.3
536	Coal Creek silt loam, 0 to 4 percent slopes -----	5,019	0.6
537	Coal Creek silt loam, 4 to 8 percent slopes -----	2,864	0.3
538	Coal Creek silt loam, 8 to 15 percent slopes-----	3,221	0.4
539	Cohoe silt loam, 0 to 4 percent slopes-----	17,987	2.0
540	Cohoe silt loam, 4 to 8 percent slopes-----	14,289	1.6
541	Cohoe silt loam, 8 to 15 percent slopes-----	3,634	0.4
542	Cohoe silt loam, 15 to 25 percent slopes -----	1,746	0.2
543	Cohoe silt loam, 25 to 45 percent slopes -----	1,382	0.2
544	Cohoe silt loam, 45 to 60 percent slopes -----	2,339	0.3
545	Cohoe silt loam, dry, 0 to 4 percent slopes-----	5,910	0.7
546	Cohoe silt loam, dry, 4 to 8 percent slopes -----	10,226	1.1
547	Cohoe silt loam, dry, 8 to 15 percent slopes -----	1,954	0.2
548	Cohoe silt loam, dry, 15 to 25 percent slopes -----	2,129	0.2
549	Cohoe silt loam, dry, 25 to 45 percent slopes -----	493	*
550	Cohoe silt loam, dry, 45 to 60 percent slopes -----	203	*
551	Cohoe silt loams, moderately steep and gently sloping -----	1,227	0.1
552	Cohoe silt loams, dry, moderately steep and gently sloping-----	787	*
553	Cohoe-Kenai complex, 8 to 15 percent slopes -----	2,191	0.2
554	Cohoe-Kenai complex, 15 to 25 percent slopes -----	575	*
555	Cohoe-Nikolai complex, hilly -----	4,327	0.5
556	Cohoe-Nikolai complex, undulating to rolling -----	3,540	0.4
557	Cytex Creek silt loam, 4 to 15 percent slopes -----	1,369	0.2
558	Doroshin mucky peat, 0 to 4 percent slopes -----	5,711	0.6
559	Doroshin mucky peat, 4 to 8 percent slopes -----	1,762	0.2
560	Dystrocrypts-Typic Cryorthents-Iliamna, cool, complex, 4 to 35 percent slopes-----	2,184	0.2

Table 7. Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Map unit name	Acres	Percent
561	Foreland peat, 0 to 4 percent slopes-----	577	*
562	Foreland-Starichkof-Soldotna complex, undulating-----	1,713	0.2
563	Gravel pits-----	1,383	0.2
564	Iliamna silt loam, 0 to 4 percent slopes-----	2,400	0.3
565	Iliamna silt loam, 4 to 15 percent slopes-----	5,836	0.7
566	Iliamna silt loam, 15 to 45 percent slopes-----	5,534	0.6
567	Iliamna silt loam, cool, 0 to 15 percent slopes-----	1,301	0.1
568	Island silt loam, 0 to 4 percent slopes-----	1,618	0.2
569	Island silt loam, 4 to 8 percent slopes-----	760	*
570	Island silt loam, 8 to 15 percent slopes-----	210	*
571	Island silt loam, 15 to 45 percent slopes-----	541	*
572	Island silt loam, forested, 0 to 8 percent slopes-----	3,336	0.4
573	Kachemak silt loam, 4 to 8 percent slopes-----	6,367	0.7
574	Kachemak silt loam, 8 to 15 percent slopes-----	9,602	1.1
575	Kachemak silt loam, 15 to 25 percent slopes-----	7,904	0.9
576	Kachemak silt loam, 25 to 35 percent slopes-----	4,653	0.5
577	Kachemak silt loam, 35 to 45 percent slopes-----	3,702	0.4
578	Kachemak silt loam, cool, 4 to 8 percent slopes-----	1,663	0.2
579	Kachemak silt loam, cool, 8 to 15 percent slopes-----	3,870	0.4
580	Kachemak silt loam, cool, 15 to 25 percent slopes-----	3,241	0.4
581	Kachemak silt loam, cool, 25 to 35 percent slopes-----	3,367	0.4
582	Kachemak silt loam, cool, 35 to 45 percent slopes-----	1,645	0.2
583	Kachemak silt loam, forested, 4 to 8 percent slopes-----	1,754	0.2
584	Kachemak silt loam, forested, 8 to 15 percent slopes-----	5,299	0.6
585	Kachemak silt loam, forested, 15 to 25 percent slopes-----	1,816	0.2
586	Kachemak, cool-Snowdance complex, 0 to 4 percent slopes-----	868	*
587	Kachemak, cool-Snowdance complex, 4 to 8 percent slopes-----	3,246	0.4
588	Kachemak, cool-Snowdance complex, 8 to 15 percent slopes-----	1,664	0.2
589	Kalifonsky silt loam, 0 to 4 percent slopes-----	3,417	0.4
590	Kalifonsky silt loam, 4 to 8 percent slopes-----	434	*
591	Kalifonsky-Typic Cryorthents complex, 4 to 45 percent slopes-----	1,097	0.1
592	Karluk silt loam, 0 to 4 percent slopes-----	88	*
593	Kashwitna silt loam, 0 to 4 percent slopes-----	4,305	0.5
594	Kashwitna silt loam, 4 to 8 percent slopes-----	5,416	0.6
595	Kashwitna silt loam, 8 to 15 percent slopes-----	2,554	0.3
596	Kashwitna silt loams, moderately steep and strongly sloping-----	1,434	0.2
597	Kenai silt loam, 0 to 4 percent slopes-----	1,173	0.1
598	Kenai silt loam, 4 to 8 percent slopes-----	4,102	0.5
599	Kenai silt loam, 8 to 15 percent slopes-----	943	0.1
600	Kenai silt loam, 15 to 25 percent slopes-----	298	*
601	Kenai silt loam, 25 to 45 percent slopes-----	656	*
602	Kenai silt loams, moderately steep and gently sloping-----	517	*
603	Kenai-Starichkof association, 0 to 25 percent slopes-----	3,203	0.4
604	Kichatna silt loam, 0 to 8 percent slopes-----	2,934	0.3
605	Kichatna silt loam, 8 to 15 percent slopes-----	516	*
606	Kichatna silt loam, 15 to 25 percent slopes-----	1,246	0.1
607	Kichatna silt loam, 25 to 45 percent slopes-----	1,606	0.2
608	Kichatna silt loam, 45 to 60 percent slopes-----	6,163	0.7
609	Kichatna-Killey association, 0 to 65 percent slopes-----	5,510	0.6
610	Kidazqeni silt loam, 0 to 2 percent slopes-----	841	*
611	Killey and Moose River soils, 0 to 2 percent slopes-----	20,637	2.3
612	Liten very fine loam, 0 to 6 percent slopes-----	906	0.1
613	Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 25 to 45 percent slopes-----	6,823	0.8
614	Lithic Haplocryands-Alic Haplocryands-Rock outcrop complex, 45 to 100 percent slopes-----	2,388	0.3
615	Longmare silt loam, 0 to 4 percent slopes-----	6,368	0.7
616	Longmare silt loam, 4 to 8 percent slopes-----	292	*
617	Mutnala silt loam, 0 to 4 percent slopes-----	4,141	0.5
618	Mutnala silt loam, 4 to 8 percent slopes-----	10,465	1.2
619	Mutnala silt loam, 8 to 15 percent slopes-----	12,997	1.5
620	Mutnala silt loam, 15 to 25 percent slopes-----	9,188	1.0
621	Mutnala silt loam, 25 to 45 percent slopes-----	1,761	0.2
622	Mutnala silt loam, 45 to 60 percent slopes-----	534	*
623	Mutnala-Starichkof-Slikok association, undulating to hilly-----	9,250	1.0

Table 7. Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Map unit name	Acres	Percent
624	Naptowne silt loam, 0 to 4 percent slopes -----	2,273	0.3
625	Naptowne silt loam, 4 to 8 percent slopes -----	6,501	0.7
626	Naptowne silt loam, 8 to 15 percent slopes -----	2,739	0.3
627	Naptowne silt loam, 15 to 25 percent slopes -----	1,450	0.2
628	Naptowne silt loam, 25 to 60 percent slopes -----	343	*
629	Naptowne silt loam, undulating -----	3,939	0.4
630	Naptowne silt loams, moderately steep and strongly sloping -----	3,374	0.4
631	Naptowne silt loams, strongly sloping and gently sloping -----	1,984	0.2
632	Niklason very fine sandy loam, 0 to 2 percent slopes -----	897	0.1
633	Nikolaevsk silt loam, 0 to 4 percent slopes -----	2,115	0.2
634	Nikolaevsk silt loam, 4 to 8 percent slopes -----	2,389	0.3
635	Nikolaevsk silt loam, 8 to 15 percent slopes -----	1,308	0.1
636	Nikolai peat, 0 to 4 percent slopes -----	7,204	0.8
637	Nikolai, somewhat poorly drained-Tuxedni complex, 0 to 4 percent slopes -----	889	*
638	Puntilla silt loam, 4 to 15 percent slopes -----	2,176	0.2
639	Puntilla silt loam, 8 to 25 percent slopes -----	5,232	0.6
640	Qutal silt loam, 0 to 4 percent slopes -----	6,486	0.7
641	Qutal silt loam, 4 to 8 percent slopes -----	11,093	1.2
642	Qutal silt loam, 8 to 15 percent slopes -----	1,612	0.2
643	Redoubt silt loam, 0 to 4 percent slopes -----	1,205	0.1
644	Redoubt silt loam, 4 to 15 percent slopes -----	9,210	1.0
645	Redoubt silt loam, 15 to 45 percent slopes -----	8,062	0.9
646	Redoubt silt loam, cool, 0 to 8 percent slopes -----	3,342	0.4
647	Redoubt silt loams, moderately steep and gently sloping -----	3,919	0.4
648	Redoubt, cool-Tuxedni complex, 3 to 45 percent slopes -----	1,875	0.2
649	Riverwash -----	353	*
650	Salamatof and Doroshin peats, 0 to 2 percent slopes -----	12,636	1.4
651	Salamatof peat, 0 to 4 percent slopes -----	14,915	1.7
652	Slikok peat, 0 to 4 percent slopes -----	4,765	0.5
653	Slikok peat, 4 to 8 percent slopes -----	2,579	0.3
654	Smithfha loamy very fine sand, 4 to 8 percent slopes -----	591	*
655	Smithfha loamy very fine sand, 30 to 45 percent slopes -----	980	0.1
656	Smokey Bay silt loam, 0 to 4 percent slopes -----	144	*
657	Smokey Bay silt loam, 8 to 15 percent slopes -----	330	*
658	Snowdance mucky silt loam, 0 to 8 percent slopes -----	2,633	0.3
659	Soldotna silt loam, 0 to 4 percent slopes -----	27,740	3.1
660	Soldotna silt loam, 4 to 8 percent slopes -----	7,372	0.8
661	Soldotna silt loam, 8 to 15 percent slopes -----	8,112	0.9
662	Soldotna silt loam, 15 to 25 percent slopes -----	3,320	0.4
663	Soldotna silt loam, sandy substratum, 4 to 8 percent slopes -----	2,759	0.3
664	Soldotna silt loam, sandy substratum, 8 to 15 percent slopes -----	4,251	0.5
665	Soldotna silt loam, sandy substratum, 15 to 25 percent slopes -----	2,916	0.3
666	Soldotna silt loam, sandy substratum, undulating -----	25,926	2.9
667	Soldotna silt loams, strongly sloping and gently sloping -----	4,839	0.5
668	Soldotna, sandy substratum-Kenai complex, 25 to 45 percent slopes -----	1,162	0.1
669	Soldotna, sandy substratum-Kenai complex, undulating -----	3,236	0.4
670	Soldotna-Kichatna complex, rolling -----	1,174	0.1
671	Soldotna-Kichatna complex, steep -----	2,635	0.3
672	Soldotna-Nikolai complex, 0 to 4 percent slopes -----	2,455	0.3
673	Spenard peat, 0 to 4 percent slopes -----	2,892	0.3
674	Spenard peat, 4 to 8 percent slopes -----	5,212	0.6
675	Spenard peat, 8 to 15 percent slopes -----	2,679	0.3
676	Starichkof and Doroshin soils, 0 to 4 percent slopes -----	53,113	5.9
677	Starichkof peat, 0 to 4 percent slopes -----	56,908	6.4
678	Starichkof peat, 4 to 8 percent slopes -----	2,691	0.3
679	Starichkof peat, forested, 0 to 6 percent slopes -----	3,235	0.4
680	Starichkof-Slikok-Naptowne complex, 0 to 15 percent slopes -----	17,207	1.9
681	Starichkof-Spenard complex, undulating -----	10,382	1.2
682	Susitna silt loam, 0 to 2 percent slopes -----	1,531	0.2
683	Susitna silt loam, 4 to 8 percent slopes -----	203	*
684	Talkeetna silt loam, 0 to 8 percent slopes -----	2,865	0.3
685	Talkeetna silt loam, 15 to 45 percent slopes -----	4,250	0.5
686	Talkeetna-Starichkof complex, 0 to 25 percent slopes -----	996	0.1

Table 7. Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Map unit name	Acres	Percent
687	Tangerra silt loam, 0 to 6 percent slopes -----	1,568	0.2
688	Tidal flats -----	12,193	1.4
689	Tliikakila silt loam, 0 to 4 percent slopes-----	1,289	0.1
690	Tliikakila silt loam, 4 to 8 percent slopes-----	3,356	0.4
691	Tliikakila silt loam, 8 to 15 percent slopes-----	1,872	0.2
692	Tokositna silt loam, 0 to 4 percent slopes -----	1,654	0.2
693	Tokositna silt loam, 4 to 8 percent slopes -----	2,788	0.3
694	Tokositna silt loam, 8 to 15 percent slopes-----	2,240	0.3
695	Truuli muck, 0 to 4 percent slopes-----	4,543	0.5
696	Tutka-Kasitsna-Rock outcrop complex, very steep -----	1,565	0.2
697	Tutka-Portgraham complex, hilly to steep -----	6,511	0.7
698	Tuxedni silt loam, 0 to 8 percent slopes-----	2,816	0.3
699	Tuxedni silt loam, 8 to 15 percent slopes -----	1,449	0.2
700	Tuxedni silt loam, warm, 0 to 8 percent slopes-----	2,530	0.3
701	Typic Cryaquents, 0 to 2 percent slopes -----	8,866	1.0
702	Typic Cryopsamments, 3 to 45 percent slopes-----	523	*
703	Typic Cryorthents, 100 to 150 percent slopes -----	13,946	1.6
704	Urban land -----	6,854	0.8
705	Water, fresh-----	20,938	2.3
706	Whitsol silt loam, 0 to 4 percent slopes-----	12,346	1.4
707	Whitsol silt loam, 4 to 8 percent slopes-----	12,152	1.4
708	Whitsol silt loam, 8 to 15 percent slopes -----	2,379	0.3
709	Whitsol silt loam, 15 to 25 percent slopes -----	783	*
710	Whitsol silt loam, 25 to 45 percent slopes -----	350	*
711	Whitsol-Doroshin complex, undulating -----	3,633	0.4
	Total -----	894,793	100.0

Table 8. Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
501: Aquic Cryofluvents -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	ML, MH	A-5, A-4	40-60	NP-5
	6-31	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	31-48	Stratified silt loam to fine sandy loam to sand	SM, ML	A-2, A-4	0-30	NP-5
	48-60	Sand, gravelly sand, gravelly loamy sand	SP-SM, SP, SM	A-1	0-0	NP
502: Aquic Cryofluvents, shallow -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	ML, MH	A-5, A-4	40-60	NP-5
	6-19	Stratified silt loam to fine sandy loam to sand	ML, SM	A-2, A-4	0-30	NP-5
	19-60	Gravelly loamy sand, gravelly sand, sand	SP-SM, SP, SM	A-1	0-0	NP
503: Badland, sea cliffs -----	---	---	---	---	---	---
504: Badland, sea cliffs -----	---	---	---	---	---	---
Typic Cryorthents -----	0-1	Gravelly slightly decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	1-33	Silty clay loam, very fine sandy loam, gravelly very fine sandy loam	CL, SM	A-2, A-1, A-6	25-40	NP-25
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	CL, GM	A-1, A-4, A-6	25-40	NP-25
505: Beaches -----	---	---	---	---	---	---
506: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Silt loam, very fine sandy loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	ML, SM	A-4	10-40	NP-10
	32-60	Very fine sandy loam, clay loam, silty clay loam, silt loam, fine sandy loam	CL, SM	A-7, A-6, A-4	10-50	2-25
507: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Very fine sandy loam, silt loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Fine sandy loam, silty clay loam, very fine sandy loam, silt loam	ML, SM	A-4	10-40	NP-10
	32-60	Fine sandy loam, silty clay loam, clay loam, silt loam, very fine sandy loam	CL, SM	A-7, A-6, A-4	10-50	2-25
508: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Very fine sandy loam, silt loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	ML, SM	A-4	10-40	NP-10
	32-60	Fine sandy loam, clay loam, very fine sandy loam, silt loam, silty clay loam	CL, SM	A-7, A-6, A-4	10-50	2-25

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
509: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Very fine sandy loam, silt loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	ML, SM	A-4	10-40	NP-10
	32-60	Fine sandy loam, clay loam, very fine sandy loam, silt loam, silty clay loam	CL, SM	A-7, A-6, A-4	10-50	2-25
Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	7-23	Very fine sandy loam, silt loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Gravelly sandy loam, very fine sandy loam, silt loam, cobbly fine sandy loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
510: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Silt loam, very fine sandy loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Silty clay loam, fine sandy loam, very fine sandy loam, silt loam	ML, SM	A-4	10-40	NP-10
	32-60	Very fine sandy loam, silty clay loam, silt loam, clay loam, fine sandy loam	CL, SM	A-7, A-6, A-4	10-50	2-25
Smokey Bay -----	0-2	Highly decomposed plant material	PT	A-8	---	---
	2-9	Silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-10
	9-55	Gravelly fine sandy loam, stratified silt loam to fine sandy loam	ML, SM	A-4, A-2	25-35	NP-10
	55-60	Fine sandy loam, gravelly fine sandy loam, loam, silt loam	ML, SM	A-4, A-2	15-35	NP-10
511: Beluga -----	0-5	Moderately decomposed plant material	PT	A-8	---	---
	5-7	Silt loam, very fine sandy loam	SM, ML, OL	A-4	25-35	NP-10
	7-32	Silt loam, fine sandy loam, silty clay loam, very fine sandy loam	ML, SM	A-4	10-40	NP-10
	32-60	Clay loam, silty clay loam, silt loam, very fine sandy loam, fine sandy loam	CL, SM	A-7, A-6, A-4	10-50	2-25
Smokey Bay -----	0-2	Highly decomposed plant material	PT	A-8	---	---
	2-9	Very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-10
	9-55	Stratified silt loam to fine sandy loam, gravelly fine sandy loam	ML, SM	A-4, A-2	25-35	NP-10
	55-60	Gravelly fine sandy loam, silt loam, loam, fine sandy loam	ML, SM	A-4, A-2	15-35	NP-10
512: Benka-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
513: Benka-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Loamy sand, loamy fine sand, sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
514: Benka-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Loamy sand, sand, loamy fine sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
515: Benka-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Loamy sand, loamy fine sand, sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
516: Benka-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
517: Benka, strongly sloping-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-4, A-5	40-60	NP-5
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
Benka, gently sloping-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	5-30	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	30-60	Loamy fine sand, sand, loamy sand, stratified coarse sand to fine sand	SM, SW-SM	A-1	0-5	NP-2
518: Boxcar-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	5-20	Very fine sandy loam, silt loam	SM, MH	A-5	50-70	NP-5
	20-60	Very cobbly fine sandy loam, very gravelly sand, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly loamy sand	GM, GP-GM, SC-SM	A-2	0-10	NP-5
519: Boxcar-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	5-20	Very fine sandy loam, silt loam	MH, SM	A-5	50-70	NP-5
	20-60	Very cobbly fine sand, very cobbly fine sandy loam, very gravelly sand, very gravelly loamy sand, extremely cobbly loamy fine sand	GM, GP-GM, SC-SM	A-2	0-10	NP-5
520: Boxcar-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	5-20	Very fine sandy loam, silt loam	MH, SM	A-5	50-70	NP-5
	20-60	Very cobbly fine sandy loam, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly loamy sand, very gravelly sand	GM, GP-GM, SC-SM	A-2	0-10	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
521: Boxcar, cool-----	In.				Pct.	
	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	5-20	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	20-60	Very gravelly sand, very cobbly fine sandy loam, extremely cobbly loamy fine sand, very cobbly fine sand, very gravelly loamy sand	GM, GP-GM, SC-SM	A-2	0-10	NP-5
522: Boxcar, cool-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	5-20	Silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	20-60	Very gravelly loamy sand, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly sand, very cobbly fine sandy loam	GM, GP-GM, SC-SM	A-2	0-10	NP-5
523: Chenega -----	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	OL, SM, ML	A-4	25-30	NP-5
	7-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly sand	GP, SC-SM, SP-SM	A-1	0-0	NP
524: Chenega, cool-----	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	ML, OL, SM	A-4	25-30	NP-5
	7-60	Extremely gravelly sand, very gravelly sand, very gravelly loamy sand	GP, SC-SM, SP-SM	A-1	0-0	NP
525: Chenega, occasionally flooded-----	0-4	Slightly decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	ML, OL, SM	A-4	25-30	NP-5
	7-60	Very gravelly sand, extremely gravelly sand, very gravelly loamy sand	GP, SC-SM, SP-SM	A-1	0-0	NP
526: Chulitna -----	0-2	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	2-33	Silt loam, very fine sandy loam, mucky silt loam	MH	A-5	50-70	NP-5
	33-60	Loamy sand, fine sand, very gravelly loamy sand, gravelly sand, gravelly loamy fine sand	SM, SP	A-1, A-2	0-0	NP
527: Chulitna -----	0-2	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	2-33	Silt loam, mucky silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
	33-60	Gravelly sand, very gravelly loamy sand, loamy sand, gravelly loamy fine sand, fine sand	SM, SP	A-1, A-2	0-0	NP
528: Chulitna -----	0-2	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	2-33	Silt loam, very fine sandy loam, mucky silt loam	MH	A-5	50-70	NP-5
	33-60	Fine sand, gravelly loamy fine sand, loamy sand, very gravelly loamy sand, gravelly sand	SM, SP	A-1, A-2	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
529: Chulitna -----	0-2	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	2-33	Very fine sandy loam, silt loam, mucky silt loam	MH	A-5	50-70	NP-5
	33-60	Loamy sand, very gravelly loamy sand, gravelly sand, fine sand, gravelly loamy fine sand	SM, SP	A-1, A-2	0-0	NP
530: Chunilna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-8	Mucky silt loam, silt loam	OL, OH	A-5	40-60	NP-5
	8-18	Silt loam, very fine sandy loam	ML, OL, OH	A-5	40-60	NP-5
	18-60	Very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam	GM, GC-GM	A-2, A-1	0-15	NP-5
531: Chunilna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-8	Mucky silt loam, silt loam	OL, OH	A-5	40-60	NP-5
	8-18	Silt loam, very fine sandy loam	ML, OL, OH	A-5	40-60	NP-5
	18-60	Very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam	GC-GM, GM	A-2, A-1	0-15	NP-5
532: Chunilna, cool -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-8	Silt loam, mucky silt loam	OL, OH	A-5	40-60	NP-5
	8-18	Silt loam, very fine sandy loam	OH, ML, OL	A-5	40-60	NP-5
	18-60	Very gravelly fine sandy loam, gravelly fine sandy loam, very gravelly sandy loam	GC-GM, GM	A-2, A-1	0-15	NP-5
533: Chunilna, cool -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-8	Mucky silt loam, silt loam	OL, OH	A-5	40-60	NP-5
	8-18	Silt loam, very fine sandy loam	ML, OL, OH	A-5	40-60	NP-5
	18-60	Gravelly fine sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GM, GC-GM	A-1, A-2	0-15	NP-5
534: Clam Gulch-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-15	Silt loam	OH, ML	A-5	41-60	NP-5
	15-60	Silt loam, clay loam, silty clay loam	ML	A-4, A-7	30-50	5-20
535: Clunie-----	0-33	Peat, woody peat	PT	A-8	---	---
	33-60	Silt loam, silty clay loam	CL	A-6	30-40	10-20
536: Coal Creek -----	0-6	Slightly decomposed plant material	PT	A-8	---	---
	6-15	Silt loam	ML	A-4	25-40	NP-5
	15-23	Very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-5
	23-60	Very gravelly silt loam, gravelly silt loam	GM, ML	A-4, A-2	25-35	NP-5
537: Coal Creek -----	0-6	Slightly decomposed plant material	PT	A-8	---	---
	6-15	Silt loam	ML	A-4	25-40	NP-5
	15-23	Very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-5
	23-60	Gravelly silt loam, very gravelly silt loam	ML, GM	A-2, A-4	25-35	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
538: Coal Creek -----	0-6	Slightly decomposed plant material	PT	A-8	---	---
	6-15	Silt loam	ML	A-4	25-40	NP-5
	15-23	Silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	23-60	Gravelly silt loam, very gravelly silt loam	ML, GM	A-4, A-2	25-35	NP-5
539: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	ML, MH	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, SM, ML	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, gravelly sand, gravelly silt loam, gravelly loam, very gravelly sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
540: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, gravelly loam, gravelly silt loam, gravelly sand, very gravelly sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
541: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly loam, very gravelly sandy loam, sandy loam, gravelly sand, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5
542: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly sand, gravelly loam, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5
543: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Very gravelly sandy loam, sandy loam, gravelly sand, gravelly loam, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5
544: Cohoe -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Very gravelly sandy loam, sandy loam, gravelly loam, gravelly sand, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5
545: Cohoe, dry -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-4, A-5	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly sand, gravelly silt loam, gravelly loam	ML, GM, SM	A-1, A-4	0-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
546: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	ML, MH	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand, sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
547: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5
548: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly silt loam, sandy loam, very gravelly sandy loam, gravelly loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
549: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
550: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly sand, gravelly silt loam, gravelly loam, sandy loam, very gravelly sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
551: Cohoe, moderately steep -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
Cohoe, gently sloping -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
552: Cohoe, dry, moderately steep -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam	GM, SM, ML	A-4, A-1	0-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
552: Cohoe, dry, gently sloping-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly silt loam, gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam	GM, SM, ML	A-4, A-1	0-30	NP-5
553: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Silt loam, loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30
554: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	52-60	Gravelly silt loam, gravelly loam, very gravelly sandy loam, sandy loam, gravelly sand	GM, SM, ML	A-4, A-1	0-30	NP-5
Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Loam, silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30
555: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	MH, ML, SM	A-4, A-5	40-60	NP-5
	52-60	Gravelly silt loam, gravelly sand, gravelly loam, very gravelly sandy loam, sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
Nikolai -----	0-2	Peat	PT	A-8	---	---
	2-32	Muck	PT	A-8	---	---
	32-41	Silt loam, very fine sandy loam, fine sandy loam, gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam	MH, ML, SM	A-2, A-5	0-60	NP-5
	41-60	Gravelly sand, loamy sand, sand, very gravelly loamy sand, gravelly loamy sand, very gravelly sand	SM	A-2, A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
556: Cohoe, dry-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, ML	A-4, A-5	40-60	NP-5
	24-52	Very fine sandy loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	52-60	Gravelly sand, gravelly silt loam, gravelly loam, very gravelly sandy loam, sandy loam	GM, SM, ML	A-4, A-1	0-30	NP-5
Nikolai -----	0-2	Peat	PT	A-8	---	---
	2-32	Muck	PT	A-8	---	---
	32-41	Very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, silt loam, gravelly very fine sandy loam, fine sandy loam	MH, ML, SM	A-2, A-5	0-60	NP-5
	41-60	Sand, gravelly sand, loamy sand, gravelly loamy sand, very gravelly loamy sand, very gravelly sand	SM	A-2, A-1	0-0	NP
557: Cytex Creek-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-3	Very fine sandy loam, silt loam	MH	A-5, A-4	40-60	NP-5
	3-7	Silt loam, very fine sandy loam, fine sandy loam	ML, SM, MH	A-5, A-4	40-60	NP-5
	7-31	Silt loam, gravelly fine sandy loam, fine sandy loam, sandy loam	ML, SM	A-4, A-2	15-30	NP-5
	31-60	Extremely gravelly loamy fine sand, very cobbly loamy sand	GP, SC-SM, SP-SM	A-1	0-14	NP-5
558: Doroshin -----	0-36	Mucky peat	PT	A-8	---	---
	36-60	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
559: Doroshin -----	0-36	Mucky peat	PT	A-8	---	---
	36-60	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
560: Dystrocryepts-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-7	Silt loam, gravelly sandy loam, very gravelly fine sandy loam, very fine sandy loam	CL-ML, GM, GW-GM	A-1, A-4	0-20	NP-5
	7-23	Extremely gravelly loamy sand, gravelly fine sandy loam, gravelly loamy sand	GW-GM, GM, GW	A-1	0-5	NP-2
	23-60	Very gravelly fine sandy loam, very gravelly loamy sand, very cobbly loamy sand, gravelly fine sandy loam, extremely gravelly sand, extremely stony sand	GM, GP, GW	A-1	0-5	NP-2
Typic Cryorthents-----	0-1	Slightly decomposed plant material, gravelly slightly decomposed plant material	PT	A-8	---	---
	1-33	Gravelly very fine sandy loam, silty clay loam, very fine sandy loam	CL, SM	A-2, A-1, A-6	25-40	NP-25
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	CL, GM	A-1, A-4, A-6	25-40	NP-25
Iliamna, cool -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-29	Silt loam, mucky silt loam, very fine sandy loam, fine sandy loam	ML, MH	A-5, A-4	40-60	NP-5
	29-60	Loamy fine sand, gravelly sand, very gravelly sand, sand	SM, GP	A-2, A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
561: Foreland -----	0-13	Peat, mucky peat	PT	A-8	---	---
	13-19	Fine sandy loam, loamy sand, sand	SM, SP-SM, SC-SM	A-3, A-2	0-15	NP-5
	19-60	Gravelly sand, gravelly loamy sand, sand, loamy sand, gravelly sandy loam	SM, SP-SM	A-3, A-2	0-10	NP-2
562: Foreland -----	0-13	Peat, mucky peat	PT	A-8	---	---
	13-19	Fine sandy loam, sand, loamy sand	SM, SP-SM, SC-SM	A-3, A-2	0-15	NP-5
	19-60	Gravelly sand, gravelly loamy sand, sand, loamy sand, gravelly sandy loam	SM, SP-SM	A-3, A-2	0-10	NP-2
Soldotna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
563: Pits, gravel -----	---	---	---	---	---	---
564: Iliamna -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-29	Fine sandy loam, very fine sandy loam, mucky silt loam, silt loam	ML, MH	A-5, A-4	40-60	NP-5
	29-60	Gravelly sand, sand, loamy fine sand, very gravelly sand	SM, GP	A-2, A-1	0-0	NP
565: Iliamna -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-29	Silt loam, fine sandy loam, very fine sandy loam, mucky silt loam	ML, MH	A-5, A-4	40-60	NP-5
	29-60	Very gravelly sand, sand, gravelly sand, loamy fine sand	SM, GP	A-2, A-1	0-0	NP
566: Iliamna -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-29	Fine sandy loam, silt loam, mucky silt loam, very fine sandy loam	ML, MH	A-5, A-4	40-60	NP-5
	29-60	Very gravelly sand, loamy fine sand, sand, gravelly sand	SM, GP	A-2, A-1	0-0	NP
567: Iliamna, cool -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-29	Very fine sandy loam, mucky silt loam, silt loam, fine sandy loam	ML, MH	A-5, A-4	40-60	NP-5
	29-60	Loamy fine sand, very gravelly sand, gravelly sand, sand	SM, GP	A-2, A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
568: Island -----	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-13	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	13-24	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
	24-33	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	33-60	Fine sandy loam, very fine sandy loam, gravelly sandy loam, gravelly loamy sand, silt loam	CL-ML, SM	A-4, A-2, A-1	0-15	NP-5
569: Island -----	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-13	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	13-24	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
	24-33	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	33-60	Gravelly sandy loam, gravelly loamy sand, silt loam, fine sandy loam, very fine sandy loam	CL-ML, SM	A-4, A-2, A-1	0-15	NP-5
570: Island -----	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-13	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	13-24	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	24-33	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly sandy loam, gravelly loamy sand	CL-ML, SM	A-4, A-2, A-1	0-15	NP-5
571: Island -----	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-13	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
	13-24	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	24-33	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly loamy sand, gravelly sandy loam	CL-ML, SM	A-4, A-2, A-1	0-15	NP-5
572: Island, forested-----	0-1	Slightly decomposed plant material	PT	A-8	---	---
	1-13	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	13-24	Very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	24-33	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly loamy sand, gravelly sandy loam	CL-ML, SM	A-4, A-2, A-1	0-15	NP-5
573: Kachemak -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Very fine sandy loam, silt loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Very fine sandy loam, silt loam, mucky silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, silt loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
574: Kachemak -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Silt loam, mucky silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
575: Kachemak -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly silt loam, gravelly fine sandy loam, gravelly very fine sandy loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
576: Kachemak -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Very fine sandy loam, mucky silt loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Silt loam, very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5
577: Kachemak -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Silt loam, very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5
578: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, very fine sandy loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam, gravelly sandy loam	ML, SM	A-4, A-1	5-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
579: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, silt loam, very fine sandy loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Silt loam, very fine sandy loam, mucky silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, silt loam, gravelly sandy loam, gravelly silt loam, very fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5
580: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, very fine sandy loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
581: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Very fine sandy loam, gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
582: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, very fine sandy loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
583: Kachemak, forested -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
584: Kachemak, forested -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
585: Kachemak, forested -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, gravelly fine sandy loam, silt loam, very fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5
586: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Mucky silt loam, silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, gravelly very fine sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
Snowdance-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	8-24	Gravelly silt loam, silt loam, cobbly silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	24-60	Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam	GM, SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
587: Kachemak, cool -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Silt loam, very fine sandy loam, mucky silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	ML, SM	A-4, A-1	5-30	NP-5
Snowdance-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	24-60	Very cobbly sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GM, SC-SM, SM	A-1, A-2, A-4	0-15	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
588:						
Kachemak, cool-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	ML, SM, MH	A-4, A-5	40-60	NP-5
	8-30	Very fine sandy loam, silt loam, mucky silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	30-60	Gravelly very fine sandy loam, gravelly sandy loam, very fine sandy loam, silt loam, gravelly silt loam, gravelly fine sandy loam	ML, SM	A-4, A-1	5-30	NP-5
Snowdance-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Mucky silt loam, silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	24-60	Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam	GM, SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
589:						
Kalifonsky-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-9	Silt loam	ML	A-4	30-35	NP-5
	9-16	Silt loam, very fine sandy loam	ML	A-4	30-35	NP-5
	16-60	Gravelly sand, gravelly loamy sand, sand, loamy sand	SP-SM, SM, SP	A-1, A-2	0-0	NP
590:						
Kalifonsky-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-9	Silt loam	ML	A-4	30-35	NP-5
	9-16	Silt loam, very fine sandy loam	ML	A-4	30-35	NP-5
	16-60	Gravelly sand, loamy sand, gravelly loamy sand, sand	SP-SM, SM, SP	A-1, A-2	0-0	NP
591:						
Kalifonsky-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-9	Silt loam	ML	A-4	30-35	NP-5
	9-16	Silt loam, very fine sandy loam	ML	A-4	30-35	NP-5
	16-60	Gravelly loamy sand, gravelly sand, sand, loamy sand	SP-SM, SM, SP	A-1, A-2	0-0	NP
Typic Cryorthents-----	0-1	Gravelly slightly decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	1-33	Very fine sandy loam, silty clay loam, gravelly very fine sandy loam	SM, CL	A-2, A-1, A-6	25-40	NP-25
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	CL, GM	A-1, A-4, A-6	25-40	NP-25
592:						
Karluk-----	0-3	Highly decomposed plant material	PT	A-8	---	---
	3-10	Silt loam	ML	A-5, A-4	40-60	NP-10
	10-17	Silt loam	ML	A-5, A-4	40-60	NP-10
	17-60	Silt loam	ML	A-5, A-4	35-55	NP-10
593:						
Kashwitna -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam	ML	A-5	40-50	NP-10
	5-21	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-10
	21-60	Very gravelly sand, very gravelly loamy sand	GP, SM, SP	A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
594: Kashwitna -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam	ML	A-5	40-50	NP-10
	5-21	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-10
	21-60	Very gravelly loamy sand, very gravelly sand	GP, SM, SP	A-1	0-0	NP
595: Kashwitna -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam	ML	A-5	40-50	NP-10
	5-21	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-10
	21-60	Very gravelly sand, very gravelly loamy sand	GP, SM, SP	A-1	0-0	NP
596: Kashwitna, moderately steep -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam	ML	A-5	40-50	NP-10
	5-21	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-10
	21-60	Very gravelly loamy sand, very gravelly sand	GP, SM, SP	A-1	0-0	NP
Kashwitna, strongly sloping -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-5	Silt loam	ML	A-5	40-50	NP-10
	5-21	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-10
	21-60	Very gravelly sand, very gravelly loamy sand	GP, SM, SP	A-1	0-0	NP
597: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Silt loam, loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Silty clay loam, silt loam, gravelly loam	CL	A-6, A-4	30-40	10-30
598: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Loam, very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silty clay loam, silt loam	CL	A-6, A-4	30-40	10-30
599: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Loam, silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30
600: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Silt loam, loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Silt loam, gravelly loam, silty clay loam	CL	A-6, A-4	30-40	10-30
601: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Very fine sandy loam, silt loam, loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
602: Kenai, moderately steep--	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Silt loam, loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Silt loam, gravelly loam, silty clay loam	CL	A-6, A-4	30-40	10-30
Kenai, gently sloping -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Silt loam, loam, very fine sandy loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30
603: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Very fine sandy loam, loam, silt loam	ML, SM	A-4	25-35	NP-5
	25-60	Silt loam, silty clay loam, gravelly loam	CL	A-6, A-4	30-40	10-30
Starichkof-----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
604: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly loamy coarse sand, very gravelly sandy loam	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Very gravelly sand, extremely gravelly coarse sand, extremely gravelly loamy coarse sand, very gravelly loamy sand	GM, GP, GP-GM	A-1	0-0	NP
605: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand	GM, GP, GP-GM	A-1	0-0	NP
606: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GM, GP, GP-GM	A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
607: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GM, GP, GP-GM	A-1	0-0	NP
608: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand	GM, GP, GP-GM	A-1	0-0	NP
609: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly loamy coarse sand, very gravelly sandy loam	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Very gravelly sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly loamy sand	GM, GP, GP-GM	A-1	0-0	NP
Killey -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-6	Silt loam	ML	A-4	30-35	NP-5
	6-29	Stratified fine sand to silt loam	SM	A-4, A-2	0-15	NP
	29-60	Very gravelly sand, very gravelly coarse sand	SP-SM, GP	A-1	0-0	NP
610: Kidazqeni -----	0-4	Silt loam	ML	A-4	25-35	NP-10
	4-21	Stratified sand to silt loam	SM, ML, SP-SM	A-2, A-4	0-15	NP
	21-60	Very cobbly sand, extremely gravelly sand, very gravelly sand	SW, SW-SM	A-1	0-0	NP
611: Killey -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-6	Silt loam	ML	A-4	30-35	NP-5
	6-29	Stratified fine sand to silt loam	SM	A-4, A-2	0-15	NP
	29-60	Very gravelly sand, very gravelly coarse sand	SP-SM, GP	A-1	0-0	NP
Moose River -----	0-5	Slightly decomposed plant material	PT	A-8	---	---
	5-10	Silt loam	ML	A-4	30-40	NP-5
	10-39	Stratified gravelly fine sand to silt loam, stratified fine sand to silt loam to slightly decomposed plant material	SP-SM, SM, CL-ML	A-4, A-1	10-15	NP-5
	39-60	Very gravelly sand	SP-SM, SP	A-1	0-0	NP
612: Liten-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-8	Very fine sandy loam, fine sandy loam, silt loam	MH, ML	A-5, A-4	30-60	NP-5
	8-60	Sand, loamy sand	SM, SP-SM	A-3	0-5	NP-2

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
613: Lithic Haplocryands -----	0-2	Slightly decomposed plant material, moderately decomposed plant material, highly decomposed plant material	PT	A-8	---	---
	2-12	Gravelly silt loam, gravelly very fine sandy loam, silt loam, very gravelly silt loam	GM	A-5, A-1	40-60	NP-5
	12-60	Bedrock			---	---
Alic Haplocryands -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-21	Very gravelly very fine sandy loam, silt loam	GM, ML	A-1, A-5	40-60	NP-5
	21-31	Gravelly fine sandy loam, silt loam, very gravelly sandy loam	GM, ML	A-2-4, A-4, A-1	0-30	NP-5
	31-60	Bedrock			---	---
Rock outcrop-----	---	---	---	---	---	---
614: Lithic Haplocryands -----	0-2	Moderately decomposed plant material, highly decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	2-12	Silt loam, very gravelly silt loam, gravelly very fine sandy loam, gravelly silt loam	GM	A-5, A-1	40-60	NP-5
	12-60	Bedrock			---	---
Alic Haplocryands -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-21	Silt loam, very gravelly very fine sandy loam	GM, ML	A-1, A-5	40-60	NP-5
	21-31	Gravelly fine sandy loam, silt loam, very gravelly sandy loam	GM, ML	A-1, A-2-4, A-4	0-30	NP-5
	31-60	Bedrock			---	---
Rock outcrop-----	---	---	---	---	---	---
615: Longmare-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	6-18	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	18-29	Very fine sandy loam, silt loam	ML, MH, SM	A-4, A-5	40-60	NP-5
	29-60	Gravelly loamy sand, stratified gravelly sand to silt loam, sand, loamy sand	ML, SM, SP	A-1, A-4	0-25	NP-2
616: Longmare-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	4-6	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	6-18	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	18-29	Silt loam, very fine sandy loam	ML, MH, SM	A-4, A-5	40-60	NP-5
	29-60	Gravelly loamy sand, stratified gravelly sand to silt loam, sand, loamy sand	ML, SM, SP	A-1, A-4	0-25	NP-2
617: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Gravelly sandy loam, silt loam, cobbly fine sandy loam, very fine sandy loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
618: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Mucky silt loam, silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Silt loam, cobbly fine sandy loam, very fine sandy loam, gravelly sandy loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
619: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Cobbly fine sandy loam, silt loam, very fine sandy loam, gravelly sandy loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
620: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	MH, SM	A-5	50-70	NP-5
	7-23	Very fine sandy loam, silt loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Very fine sandy loam, cobbly fine sandy loam, gravelly sandy loam, silt loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
621: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
622: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
623: Mutnala-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	7-23	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	CL-ML, SM	A-2, A-4, A-1	0-25	NP-5
Starichkof-----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
Slikok -----	0-13	Peat	PT	A-8	---	---
	13-51	Mucky silt loam, silt loam	ML, OH, OL	A-5, A-4	40-60	NP-5
	51-60	Fine sandy loam, silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam	GM, ML	A-2, A-4	10-35	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
624: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Very cobbly silt loam, very gravelly sandy loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
625: Naptowne-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	3-14	Very fine sandy loam, silt loam	ML, MH, SM	A-5, A-4	40-60	NP-5
	13-20	Very fine sandy loam, silt loam	ML, SM	A-4	20-30	NP-5
	20-60	Very gravelly sandy loam, gravelly very fine sandy loam, gravelly loamy sand, very gravelly silt loam, very cobbly silt loam, very gravelly fine sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
626: Naptowne-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	3-14	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Very fine sandy loam, silt loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
627: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Very fine sandy loam, silt loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
628: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Very fine sandy loam, silt loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
629: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Very gravelly fine sandy loam, very cobbly silt loam, very gravelly sandy loam, gravelly loamy sand, very gravelly silt loam, gravelly very fine sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
630: Naptowne, moderately steep -----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly loamy sand, very gravelly silt loam, gravelly very fine sandy loam, very gravelly sandy loam, very cobbly silt loam, very gravelly fine sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
Naptowne, strongly sloping -----	0-3	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	3-14	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Very fine sandy loam, silt loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
631: Naptowne, strongly sloping -----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Very gravelly sandy loam, very cobbly silt loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
Naptowne, gently sloping -----	0-3	Moderately decomposed plant material, slightly decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand, gravelly very fine sandy loam	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
632: Niklason -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	ML, SM	A-4	25-35	NP-5
	6-23	Very fine sandy loam, fine sandy loam, stratified sand to silt loam, loamy sand, sandy loam, silt loam	SM, ML, SP-SM	A-4, A-3	0-15	NP
	23-60	Very gravelly sand, extremely gravelly sand, very gravelly loamy sand	GP, SM, GW	A-1	0-0	NP
633: Nikolaevsk -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-20	Silt loam, very fine sandy loam, mucky silt loam, mucky very fine sandy loam	MH	A-5	50-70	NP-5
	20-60	Very gravelly loamy sand, very gravelly sand, very cobbly loamy sand, gravelly sand, cobbly loamy fine sand	GP-GM, SP-SM	A-1	0-14	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
634: Nikolaevsk-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-20	Mucky very fine sandy loam, mucky silt loam, very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	20-60	Very gravelly loamy sand, cobbly loamy fine sand, gravelly sand, very cobbly loamy sand, very gravelly sand	GP-GM, SP-SM	A-1	0-14	NP-5
635: Nikolaevsk-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-20	Mucky very fine sandy loam, mucky silt loam, very fine sandy loam, silt loam	MH	A-5	50-70	NP-5
	20-60	Very cobbly loamy sand, very gravelly sand, very gravelly loamy sand, cobbly loamy fine sand, gravelly sand	GP-GM, SP-SM	A-1	0-14	NP-5
636: Nikolai -----	0-2	Peat	PT	A-8	---	---
	2-32	Muck	PT	A-8	---	---
	32-41	Silt loam, very fine sandy loam, fine sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	MH, ML, SM	A-2, A-5	0-60	NP-5
	41-60	Sand, gravelly sand, gravelly loamy sand, loamy sand, very gravelly loamy sand, very gravelly sand	SM	A-2, A-1	0-0	NP
637: Nikolai, somewhat poorly drained -----	0-2	Peat	PT	A-8	---	---
	2-32	Muck	PT	A-8	---	---
	32-41	Gravelly fine sandy loam, gravelly very fine sandy loam, fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam	MH, ML, SM	A-2, A-5	0-60	NP-5
	41-60	Loamy sand, sand, gravelly loamy sand, gravelly sand, very gravelly loamy sand, very gravelly sand	SM	A-2, A-1	0-0	NP
Tuxedni-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	24-36	Silt loam, gravelly sandy loam, sandy loam	ML, SM	A-4, A-2	20-35	NP-5
	36-60	Very gravelly loam, gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand	GP-GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
638: Puntilla -----	0-6	Slightly decomposed plant material	PT	A-8	---	---
	6-10	Silt loam, very fine sandy loam	ML	A-4	30-40	NP-10
	10-36	Very fine sandy loam, silt loam, mucky silt loam	MH	A-5	50-60	NP-10
	36-60	Loam, silt loam, gravelly loam, sandy loam	GM, CL-ML, SM	A-4, A-2	20-25	NP-5
639: Puntilla -----	0-6	Slightly decomposed plant material	PT	A-8	---	---
	6-10	Very fine sandy loam, silt loam	ML	A-4	30-40	NP-10
	10-36	Very fine sandy loam, silt loam, mucky silt loam	MH	A-5	50-60	NP-10
	36-60	Silt loam, gravelly loam, sandy loam, loam	GM, CL-ML, SM	A-4, A-2	20-25	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
640: Qutal-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-10	Very fine sandy loam, silt loam	ML	A-4, A-5	40-50	NP-5
	10-24	Fine sandy loam, silt loam, very fine sandy loam	ML, SM	A-5, A-2	40-50	NP-5
	24-48	Sandy loam, gravelly loam, silt loam, loam, gravelly sandy loam	ML, SM	A-4, A-2	10-35	NP-10
	48-60	Very gravelly sand, sand, gravelly sand, loamy sand	GP-GM, SM, GP	A-1	0-0	NP
641: Qutal-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-10	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-5
	10-24	Fine sandy loam, silt loam, very fine sandy loam	ML, SM	A-2, A-5	40-50	NP-5
	24-48	Silt loam, sandy loam, gravelly loam, loam, gravelly sandy loam	ML, SM	A-4, A-2	10-35	NP-10
	48-60	Gravelly sand, very gravelly sand, loamy sand, sand	GP-GM, SM, GP	A-1	0-0	NP
642: Qutal-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-10	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-5
	10-24	Fine sandy loam, silt loam, very fine sandy loam	ML, SM	A-5, A-2	40-50	NP-5
	24-48	Sandy loam, gravelly loam, silt loam, loam, gravelly sandy loam	ML, SM	A-4, A-2	10-35	NP-10
	48-60	Sand, very gravelly sand, loamy sand, gravelly sand	GP-GM, SM, GP	A-1	0-0	NP
643: Redoubt, terraces-----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	22-60	Gravelly sandy loam, sandy loam, loam, gravelly loam, gravelly silt loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
644: Redoubt-----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	22-60	Loam, gravelly loam, gravelly sandy loam, sandy loam, gravelly silt loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
645: Redoubt-----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Mucky silt loam, very fine sandy loam, silt loam	MH, SM	A-5	50-70	NP-5
	22-60	Gravelly sandy loam, sandy loam, gravelly silt loam, gravelly loam, loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
646: Redoubt, cool-----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	22-60	Gravelly sandy loam, sandy loam, loam, gravelly loam, gravelly silt loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
647: Redoubt, moderately steep -----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Silt loam, very fine sandy loam, mucky silt loam	MH, SM	A-5	50-70	NP-5
	22-60	Gravelly silt loam, loam, gravelly loam, sandy loam, gravelly sandy loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
Redoubt, gently sloping -----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Very fine sandy loam, silt loam, mucky silt loam	MH, SM	A-5	50-70	NP-5
	22-60	Loam, gravelly sandy loam, gravelly loam, gravelly silt loam, sandy loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
648: Redoubt, cool -----	0-2	Mucky peat	PT	A-8	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	MH, SM	A-5	50-70	NP-5
	22-60	Sandy loam, gravelly sandy loam, loam, gravelly loam, gravelly silt loam	SC-SM, SM, CL	A-4, A-2	20-30	NP-10
Tuxedni -----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	24-36	Silt loam, gravelly sandy loam, sandy loam	ML, SM	A-4, A-2	20-35	NP-5
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	GP-GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
649: Riverwash -----	---	---	---	---	---	---
650: Salamatof -----	0-4	Peat	PT	A-8	---	---
	4-60	Woody peat	PT	A-8	---	---
Doroshin -----	0-36	Mucky peat	PT	A-8	---	---
	36-60	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
651: Salamatof -----	0-4	Peat	PT	A-8	---	---
	4-60	Woody peat	PT	A-8	---	---
652: Slikok -----	0-13	Peat	PT	A-8	---	---
	13-51	Mucky silt loam, silt loam	ML, OH, OL	A-4, A-5	40-60	NP-5
	51-60	Fine sandy loam, silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam	GM, ML	A-2, A-4	10-35	NP-5
653: Slikok -----	0-13	Peat	PT	A-8	---	---
	13-51	Mucky silt loam, silt loam	ML, OH, OL	A-4, A-5	40-60	NP-5
	51-60	Very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, silt loam, fine sandy loam	GM, ML	A-4, A-2	10-35	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
654: Smithfha -----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-4	Silt loam, very fine sandy loam, loamy very fine sand	SM, ML	A-4, A-1	0-0	NP
	4-18	Very fine sandy loam, loamy very fine sand, silt loam, sandy loam	ML, SM	A-4, A-1	0-0	NP
	18-60	Sand, fine sand, loamy very fine sand	SM	A-4, A-2	0-0	NP
655: Smithfha -----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-4	Loamy very fine sand, very fine sandy loam, silt loam	SM, ML	A-4, A-1	0-0	NP
	4-18	Loamy very fine sand, very fine sandy loam, silt loam, sandy loam	ML, SM	A-4, A-1	0-0	NP
	18-60	Loamy very fine sand, fine sand, sand	SM	A-4, A-2	0-0	NP
656: Smokey Bay -----	0-2	Highly decomposed plant material	PT	A-8	---	---
	2-9	Silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-10
	9-55	Stratified silt loam to fine sandy loam, gravelly fine sandy loam	ML, SM	A-4, A-2	25-35	NP-10
	55-60	Fine sandy loam, loam, silt loam, gravelly fine sandy loam	ML, SM	A-4, A-2	15-35	NP-10
657: Smokey Bay -----	0-2	Highly decomposed plant material	PT	A-8	---	---
	2-9	Silt loam, very fine sandy loam	ML, SM	A-4	25-35	NP-10
	9-55	Gravelly fine sandy loam, stratified silt loam to fine sandy loam	ML, SM	A-4, A-2	25-35	NP-10
	55-60	Gravelly fine sandy loam, fine sandy loam, silt loam, loam	ML, SM	A-4, A-2	15-35	NP-10
658: Snowdance-----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	24-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly fine sandy loam	GM, SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
659: Soldotna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Gravelly silt loam, very fine sandy loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly loamy sand, very gravelly sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
660: Soldotna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
661: Soldotna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
662: Soldotna -----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Gravelly silt loam, very fine sandy loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly loamy sand, very gravelly sand, stratified very gravelly sand to silt loam	GP, SM, SP-SM	A-1, A-2	0-0	NP
663: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP
664: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP
665: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP
666: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
667: Soldotna, strongly sloping-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Silt loam, very fine sandy loam, gravelly silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
Soldotna, gently sloping-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	GM, ML	A-4, A-1	30-40	NP-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
668: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP
668: Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Very fine sandy loam, loam, silt loam	ML, SM	A-4	25-35	NP-5
	25-60	Silty clay loam, silt loam, gravelly loam	CL	A-6, A-4	30-40	10-30
669: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	7-22	Very fine sandy loam, silt loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Fine sand, gravelly loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2	0-0	NP
Kenai-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-6	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	6-19	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	19-24	Very fine sandy loam, loam, silt loam	ML, SM	A-4	25-35	NP-5
	25-60	Gravelly loam, silt loam, silty clay loam	CL	A-6, A-4	30-40	10-30
670: Soldotna-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	SM, SP-SM, GP	A-1, A-2	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
670: Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly coarse sand, extremely gravelly loamy coarse sand	GM, GP, GP-GM	A-1	0-0	NP
671: Soldotna-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	MH, SM, ML	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly loamy sand, very gravelly sand, stratified very gravelly sand to silt loam	GP, SM, SP-SM	A-1, A-2	0-0	NP
Kichatna-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Silt loam, very fine sandy loam	ML, MH	A-4, A-5	40-60	NP-5
	4-11	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	GM, SC-SM, GW-GM	A-1	0-15	NP-5
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	GM, GP, GP-GM	A-1	0-0	NP
672: Soldotna-----	0-4	Moderately decomposed plant material	PT	A-8	---	---
	4-7	Very fine sandy loam, silt loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	7-22	Silt loam, very fine sandy loam	SM, MH, ML	A-5, A-4	40-60	NP-5
	22-29	Gravelly silt loam, very fine sandy loam, silt loam	ML, GM	A-4, A-1	30-40	NP-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
Nikolai-----	0-2	Peat	PT	A-8	---	---
	2-32	Muck	PT	A-8	---	---
	32-41	Gravelly fine sandy loam, gravelly silt loam, gravelly very fine sandy loam, fine sandy loam, silt loam, very fine sandy loam	MH, ML, SM	A-2, A-5	0-60	NP-5
	41-60	Very gravelly loamy sand, very gravelly sand, loamy sand, sand, gravelly sand, gravelly loamy sand	SM	A-2, A-1	0-0	NP
673: Spenard-----	0-9	Peat, mucky peat	PT	A-8	---	---
	9-14	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-5
	14-25	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-5
	25-60	Silt loam, gravelly loam, loam, gravelly silty clay loam	ML, GC, SC-SM	A-4, A-7	25-45	5-15
674: Spenard-----	0-9	Mucky peat, peat	PT	A-8	---	---
	9-14	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-5
	14-25	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-5
	25-60	Loam, gravelly loam, gravelly silty clay loam, silt loam	ML, GC, SC-SM	A-4, A-7	25-45	5-15

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
675: Spenard -----	0-9	Mucky peat, peat	PT	A-8	---	---
	9-14	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-5
	14-25	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-5
	25-60	Loam, silt loam, gravelly silty clay loam, gravelly loam	ML, GC, SC-SM	A-4, A-7	25-45	5-15
676: Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
Doroshin -----	0-36	Mucky peat	PT	A-8	---	---
	36-60	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5
677: Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
678: Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
679: Starichkof, forested -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
680: Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
Slikok -----	0-13	Peat	PT	A-8	---	---
	13-51	Silt loam, mucky silt loam	ML, OH, OL	A-4, A-5	40-60	NP-5
	51-60	Silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, fine sandy loam	GM, ML	A-4, A-2	10-35	NP-5
Naptowne -----	0-3	Slightly decomposed plant material, moderately decomposed plant material	PT	A-8	---	---
	3-14	Silt loam, very fine sandy loam	MH, ML, SM	A-5, A-4	40-60	NP-5
	13-20	Silt loam, very fine sandy loam	ML, SM	A-4	20-30	NP-5
	20-60	Gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	GW-GM, GM, SM	A-4, A-1	0-30	NP-5
681: Starichkof -----	0-7	Peat	PT	A-8	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	PT	A-8	---	---
Spenard -----	0-9	Peat, mucky peat	PT	A-8	---	---
	9-14	Very fine sandy loam, silt loam	ML	A-5, A-4	40-50	NP-5
	14-25	Silt loam, very fine sandy loam	ML	A-5, A-4	40-50	NP-5
	25-60	Loam, silt loam, gravelly loam, gravelly silty clay loam	ML, GC, SC-SM	A-4, A-7	25-45	5-15

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plas- ticity index
			Unified	AASHTO		
	In.				Pct.	
689: Tlikakila -----	0-1	Moderately decomposed plant material	PT	A-8	---	---
	1-19	Silt loam, very fine sandy loam	MH, SM	A-5, A-4	40-65	NP-5
	19-34	Gravelly sandy loam, sandy loam, fine sandy loam	SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
	34-60	Gravelly loamy sand, very gravelly sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
690: Tlikakila -----	0-1	Moderately decomposed plant material	PT	A-8	---	---
	1-19	Very fine sandy loam, silt loam	MH, SM	A-5, A-4	40-65	NP-5
	19-34	Fine sandy loam, sandy loam, gravelly sandy loam	SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
	34-60	Very gravelly sand, gravelly loamy sand	SM, GP, SP-SM	A-1, A-2	0-0	NP
691: Tlikakila -----	0-1	Moderately decomposed plant material	PT	A-8	---	---
	1-19	Silt loam, very fine sandy loam	SM, MH	A-5, A-4	40-65	NP-5
	19-34	Sandy loam, fine sandy loam, gravelly sandy loam	SC-SM, SM	A-1, A-2, A-4	0-15	NP-5
	34-60	Very gravelly sand, gravelly loamy sand	GP, SM, SP-SM	A-1, A-2	0-0	NP
692: Tokositna -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	13-24	Silt loam, very fine sandy loam, sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	24-60	Very cobbly loam, very cobbly sandy loam, very gravelly loam	SC-SM, GM, SM	A-1, A-2, A-4	0-15	NP-5
693: Tokositna -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	ML, MH	A-5, A-4	40-60	NP-5
	13-24	Silt loam, very fine sandy loam, sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	24-60	Very cobbly sandy loam, very cobbly loam, very gravelly loam	GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
694: Tokositna -----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	13-24	Silt loam, very fine sandy loam, sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	24-60	Very cobbly sandy loam, very cobbly loam, very gravelly loam	SM, GM, SC-SM	A-1, A-2, A-4	0-15	NP-5
695: Truuli -----	0-9	Mucky peat, peat, muck	PT	A-8	---	---
	9-19	Mucky silt loam, silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-65	NP-5
	19-43	Fine sandy loam, silt loam	ML	A-4	25-35	NP-5
	43-60	Sandy loam, gravelly sandy loam, loamy sand	SC-SM, SM	A-4, A-1	0-15	NP-5
696: Tutka -----	0-7	Moderately decomposed plant material	PT	A-8	---	---
	7-13	Very fine sandy loam, silt loam, mucky silt loam	ML, SM, MH	A-5, A-4	40-60	NP-5
	13-21	Gravelly mucky silt loam, gravelly mucky very fine sandy loam, very gravelly mucky silt loam	GM, GP-GM	A-1, A-5	40-60	NP-5
	21-60	Bedrock			---	---

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
696:						
Kasitsna-----	0-3	Moderately decomposed plant material	PT	A-8	---	---
	3-18	Mucky silt loam, very fine sandy loam, gravelly very fine sandy loam, silt loam	MH, GM	A-5, A-1	50-70	NP-5
	18-31	Loam, sandy loam, gravelly sandy loam, very gravelly sandy loam	GM, SC-SM, ML	A-1, A-4	5-30	NP-10
	31-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly loam	GM, GC-GM	A-1, A-2	5-30	NP-10
Rock outcrop-----	---	---	---	---	---	---
697:						
Tutka-----	0-7	Moderately decomposed plant material	PT	A-8	---	---
	7-13	Silt loam, mucky silt loam, very fine sandy loam	ML, SM, MH	A-5, A-4	40-60	NP-5
	13-21	Gravelly mucky very fine sandy loam, gravelly mucky silt loam, very gravelly mucky silt loam	GM, GP-GM	A-1, A-5	40-60	NP-5
	21-60	Bedrock			---	---
Portgraham-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-4	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	4-27	Silt loam, mucky very fine sandy loam, gravelly silt loam, mucky silt loam	SM, MH, ML	A-5, A-1	40-60	NP-5
	27-60	Bedrock			---	---
698:						
Tuxedni-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Silt loam, very fine sandy loam	MH, SM	A-5, A-2	50-70	NP-5
	24-36	Silt loam, gravelly sandy loam, sandy loam	ML, SM	A-4, A-2	20-35	NP-5
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	GP-GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
699:						
Tuxedni-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, SM	A-5, A-2	50-70	NP-5
	24-36	Silt loam, gravelly sandy loam, sandy loam	ML, SM	A-4, A-2	20-35	NP-5
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	GP-GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
700:						
Tuxedni, warm-----	0-2	Moderately decomposed plant material	PT	A-8	---	---
	2-24	Very fine sandy loam, silt loam	MH, SM	A-5, A-2	50-70	NP-5
	24-36	Silt loam, gravelly sandy loam, sandy loam	ML, SM	A-4, A-2	20-35	NP-5
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, cobbly loamy sand	GP-GM, SM, SC-SM	A-1, A-2, A-4	0-15	NP-5
701:						
Typic Cryaquents-----	0-2	Slightly decomposed plant material	PT	A-8	---	---
	2-6	Very fine sandy loam, silt loam, silty clay loam	ML, SM	A-4	25-35	NP-10
	6-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly sand, silt loam, very gravelly loamy sand	GP, CL-ML, SP-SM	A-1, A-4	0-15	NP-5

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
702: Typic Cryopsamments ----	0-60	Loamy sand, sand, loamy fine sand	SM	A-2	0-0	NP
703: Typic Cryorthents-----	0-1	Slightly decomposed plant material, gravelly slightly decomposed plant material	PT	A-8	---	---
	1-33	Very fine sandy loam, gravelly very fine sandy loam, silty clay loam	CL, SM	A-2, A-1, A-6	25-40	NP-25
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	CL, GM	A-1, A-4, A-6	25-40	NP-25
704: Urban land-----	---	---	---	---	---	---
705: Water, fresh-----	---	---	---	---	---	---
706: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Gravelly fine sandy loam, stratified silt loam to fine sand, loam, sandy loam, very fine sandy loam, gravelly sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand	GW, GM, SP-SM	A-1	0-0	NP
707: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Gravelly fine sandy loam, gravelly sandy loam, loam, stratified silt loam to fine sand, sandy loam, very fine sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Extremely gravelly sand, very gravelly loamy sand, very gravelly coarse sand, gravelly sand	GW, GM, SP-SM	A-1	0-0	NP
708: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Very fine sandy loam, silt loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Very fine sandy loam, loam, gravelly sandy loam, gravelly fine sandy loam, stratified silt loam to fine sand, sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand, gravelly sand	GW, GM, SP-SM	A-1	0-0	NP
709: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Gravelly fine sandy loam, gravelly sandy loam, loam, stratified silt loam to fine sand, sandy loam, very fine sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Gravelly sand, very gravelly coarse sand, very gravelly loamy sand, extremely gravelly sand	GW, GM, SP-SM	A-1	0-0	NP

Table 8. Engineering Index Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Liquid limit	Plasticity index
			Unified	AASHTO		
	In.				Pct.	
710: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Loam, gravelly sandy loam, sandy loam, stratified silt loam to fine sand, gravelly fine sandy loam, very fine sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Extremely gravelly sand, very gravelly coarse sand, gravelly sand, very gravelly loamy sand	GW, GM, SP-SM	A-1	0-0	NP
711: Whitsol -----	0-3	Slightly decomposed plant material	PT	A-8	---	---
	3-29	Silt loam, very fine sandy loam	MH, ML	A-5, A-4	40-60	NP-5
	29-51	Sandy loam, stratified silt loam to fine sand, gravelly fine sandy loam, gravelly sandy loam, loam, very fine sandy loam	SM, ML	A-4, A-1	5-30	NP-5
	51-60	Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand	GW, GM, SP-SM	A-1	0-0	NP
Doroshin -----	0-36	Mucky peat	PT	A-8	---	---
	36-60	Silt loam, very fine sandy loam	MH	A-5	50-70	NP-5

Table 9. Engineering Sieve Data

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
501: Aquic Cryofluvents -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	85-95	60-85	20-50	45-75	0-10
	6-31	Silt loam, very fine sandy loam	0	0	100	100	85-95	60-85	20-50	45-75	0-10
	31-48	Stratified silt loam to fine sandy loam to sand	0	0	100	100	80-95	20-80	20-90	5-80	0-10
	48-60	Sand, gravelly sand, gravelly loamy sand	0	0-15	74-92	58-87	40-60	2-20	80-100	0-15	0-5
502: Aquic Cryofluvents, shallow -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	85-95	60-85	20-50	45-75	0-10
	6-19	Stratified silt loam to fine sandy loam to sand	0	0	100	100	80-95	20-80	20-90	5-80	0-10
	19-60	Gravelly loamy sand, gravelly sand, sand	0	0-15	74-92	58-87	40-60	2-20	80-100	0-15	0-5
503: Badland, sea cliffs -----	---	---	---	---	---	---	---	---	---	---	---
504: Badland, sea cliffs -----	---	---	---	---	---	---	---	---	---	---	---
Typic Cryorthents-----	0-1	Gravelly slightly decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-33	Silty clay loam, very fine sandy loam, gravelly very fine sandy loam	0-4	0-15	60-100	50-100	45-95	25-85	20-70	30-60	0-30
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	0-4	0-25	60-100	50-100	45-95	25-80	20-60	35-70	0-30
505: Beaches-----	---	---	---	---	---	---	---	---	---	---	---
506: Beluga-----	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Silt loam, very fine sandy loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Very fine sandy loam, clay loam, silty clay loam, silt loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35
507: Beluga-----	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Very fine sandy loam, silt loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Fine sandy loam, silty clay loam, very fine sandy loam, silt loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Fine sandy loam, silty clay loam, clay loam, silt loam, very fine sandy loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
508: Beluga-----	In.										
	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Very fine sandy loam, silt loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Fine sandy loam, clay loam, very fine sandy loam, silt loam, silty clay loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35
509: Beluga-----	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Very fine sandy loam, silt loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Silt loam, very fine sandy loam, silty clay loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Fine sandy loam, clay loam, very fine sandy loam, silt loam, silty clay loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35
Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Very fine sandy loam, silt loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Gravelly sandy loam, very fine sandy loam, silt loam, cobble fine sandy loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
510: Beluga-----	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Silt loam, very fine sandy loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Silty clay loam, fine sandy loam, very fine sandy loam, silt loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Very fine sandy loam, silty clay loam, silt loam, clay loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35
Smokey Bay -----	0-2	Highly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam, very fine sandy loam	0	0	80-100	75-100	70-95	45-80	25-70	25-65	5-10
	9-55	Gravelly fine sandy loam, stratified silt loam to fine sandy loam	0	0-8	65-95	55-90	50-85	30-75	20-55	40-75	0-5
	55-60	Fine sandy loam, gravelly fine sandy loam, loam, silt loam	0	0	70-100	65-100	60-95	35-70	35-60	30-50	10-25
511: Beluga-----	0-5	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	5-7	Silt loam, very fine sandy loam	0	0-5	85-100	80-100	65-90	40-80	25-60	35-65	5-10
	7-32	Silt loam, fine sandy loam, silty clay loam, very fine sandy loam	0	0-5	85-100	80-100	65-95	40-85	20-60	40-75	0-30
	32-60	Clay loam, silty clay loam, silt loam, very fine sandy loam, fine sandy loam	0	0-5	85-100	80-100	65-95	40-90	10-55	30-80	10-35

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
511: Smokey Bay -----	In.										
	0-2	Highly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Very fine sandy loam, silt loam	0	0	80-100	75-100	70-95	45-80	25-70	25-65	5-10
	9-55	Stratified silt loam to fine sandy loam, gravelly fine sandy loam	0	0-8	65-95	55-90	50-85	30-75	20-55	40-75	0-5
	55-60	Gravelly fine sandy loam, silt loam, loam, fine sandy loam	0	0	70-100	65-100	60-95	35-70	35-60	30-50	10-25
512: Benka -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
513: Benka -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Loamy sand, loamy fine sand, sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
514: Benka -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Loamy sand, sand, loamy fine sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
515: Benka -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Loamy sand, loamy fine sand, sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
516: Benka -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
517: Benka, strongly sloping -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Sand, loamy fine sand, loamy sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
In.	Pct.	Pct.					Pct.	Pct.	Pct.		
517: Benka, gently sloping--	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Very fine sandy loam, silt loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	5-30	Silt loam, very fine sandy loam	0	0	100	95-100	75-95	51-80	25-60	40-65	0-10
	30-60	Loamy fine sand, sand, loamy sand, stratified coarse sand to fine sand	0	0-5	85-100	80-100	35-50	6-20	75-95	5-20	0-5
518: Boxcar-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam, very fine sandy loam	0-3	0-5	95-100	90-100	75-90	45-80	25-60	35-70	0-5
	5-20	Very fine sandy loam, silt loam	0-3	0-3	90-100	85-100	80-95	40-80	25-60	35-70	0-5
	20-60	Very cobbly fine sandy loam, very gravelly sand, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly loamy sand	0-6	0-40	45-80	30-75	20-60	5-25	75-95	5-20	0-5
519: Boxcar-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam, very fine sandy loam	0-3	0-5	95-100	90-100	75-90	45-80	25-60	35-70	0-5
	5-20	Very fine sandy loam, silt loam	0-3	0-3	90-100	85-100	80-95	40-80	25-60	35-70	0-5
	20-60	Very cobbly fine sand, very cobbly fine sandy loam, very gravelly sand, very gravelly loamy sand, extremely cobbly loamy fine sand	0-6	0-40	45-80	30-75	20-60	5-25	75-95	5-20	0-5
520: Boxcar-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam, very fine sandy loam	0-3	0-5	95-100	90-100	75-90	45-80	25-60	35-70	0-5
	5-20	Very fine sandy loam, silt loam	0-3	0-3	90-100	85-100	80-95	40-80	25-60	35-70	0-5
	20-60	Very cobbly fine sandy loam, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly loamy sand, very gravelly sand	0-6	0-40	45-80	30-75	20-60	5-25	75-95	5-20	0-5
521: Boxcar, cool-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam, very fine sandy loam	0-3	0-5	95-100	90-100	75-90	45-80	25-60	35-70	0-5
	5-20	Silt loam, very fine sandy loam	0-3	0-3	90-100	85-100	80-95	40-80	25-60	35-70	0-5
	20-60	Very gravelly sand, very cobbly fine sandy loam, extremely cobbly loamy fine sand, very cobbly fine sand, very gravelly loamy sand	0-6	0-40	45-80	30-75	20-60	5-25	75-95	5-20	0-5
522: Boxcar, cool-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam, very fine sandy loam	0-3	0-5	95-100	90-100	75-90	45-80	25-60	35-70	0-5
	5-20	Silt loam, very fine sandy loam	0-3	0-3	90-100	85-100	80-95	40-80	25-60	35-70	0-5
	20-60	Very gravelly loamy sand, very cobbly fine sand, extremely cobbly loamy fine sand, very gravelly sand, very cobbly fine sandy loam	0-6	0-40	45-80	30-75	20-60	5-25	75-95	5-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
523: Chenega -----	In.										
	0-4	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	90-98	45-80	25-70	25-65	6-12
	7-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly sand	0	0-11	40-65	25-55	8-30	1-15	75-95	5-25	0-5
524: Chenega, cool -----	In.										
	0-4	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	90-98	45-80	25-70	25-65	6-12
	7-60	Extremely gravelly sand, very gravelly sand, very gravelly loamy sand	0	0-11	40-65	25-55	8-30	1-15	75-95	5-25	0-5
525: Chenega, occasionally flooded -----	In.										
	0-4	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	90-98	45-80	25-70	25-65	2-12
	7-60	Very gravelly sand, extremely gravelly sand, very gravelly loamy sand	0	0-11	40-65	25-55	8-30	1-15	75-95	5-25	0-5
526: Chulitna -----	In.										
	0-2	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-33	Silt loam, very fine sandy loam, mucky silt loam	0	0	100	100	90-97	55-85	22-60	35-75	3-7
	33-60	Loamy sand, fine sand, very gravelly loamy sand, gravelly sand, gravelly loamy fine sand	0	0-13	55-100	40-100	25-70	4-35	70-100	0-25	0-5
527: Chulitna -----	In.										
	0-2	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-33	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	90-97	55-85	22-60	35-75	3-7
	33-60	Gravelly sand, very gravelly loamy sand, loamy sand, gravelly loamy fine sand, fine sand	0	0-13	55-100	40-100	25-70	4-35	70-100	0-25	0-5
528: Chulitna -----	In.										
	0-2	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-33	Silt loam, very fine sandy loam, mucky silt loam	0	0	100	100	90-97	55-85	22-60	35-75	3-7
	33-60	Fine sand, gravelly loamy fine sand, loamy sand, very gravelly loamy sand, gravelly sand	0	0-13	55-100	40-100	25-70	4-35	70-100	0-25	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
529: Chulitna -----	0-2	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-33	Very fine sandy loam, silt loam, mucky silt loam	0	0	100	100	90-97	55-85	22-60	35-75	3-7
	33-60	Loamy sand, very gravelly loamy sand, gravelly sand, fine sand, gravelly loamy fine sand	0	0-13	55-100	40-100	25-70	4-35	70-100	0-25	0-5
530: Chunilna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-8	Mucky silt loam, silt loam	0	0	100	100	90-95	60-80	25-50	40-65	0-10
	8-18	Silt loam, very fine sandy loam	0	0-10	100	100	85-95	50-80	25-60	40-65	0-10
	18-60	Very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam	0	0-15	50-70	40-60	25-45	15-30	55-70	20-45	0-10
531: Chunilna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-8	Mucky silt loam, silt loam	0	0	100	100	90-95	60-80	25-50	40-65	0-10
	8-18	Silt loam, very fine sandy loam	0	0-10	100	100	85-95	50-80	25-60	40-65	0-10
	18-60	Very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam	0	0-15	50-70	40-60	25-45	15-30	55-70	20-45	0-10
532: Chunilna, cool -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-8	Silt loam, mucky silt loam	0	0	100	100	90-95	60-80	25-50	40-65	0-10
	8-18	Silt loam, very fine sandy loam	0	0-10	100	100	85-95	50-80	25-60	40-65	0-10
	18-60	Very gravelly fine sandy loam, gravelly fine sandy loam, very gravelly sandy loam	0	0-15	50-70	40-60	25-45	15-30	55-70	20-45	0-10
533: Chunilna, cool -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-8	Mucky silt loam, silt loam	0	0	100	100	90-95	60-80	25-50	40-65	0-10
	8-18	Silt loam, very fine sandy loam	0	0-10	100	100	85-95	50-80	25-60	40-65	0-10
	18-60	Gravelly fine sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	0	0-15	50-70	40-60	25-45	15-30	55-70	20-45	0-10
534: Clam Gulch-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-15	Silt loam	0	0	90-100	90-100	85-100	75-85	20-45	50-72	5-15
	15-60	Silt loam, clay loam, silty clay loam	0	0	90-100	85-100	85-100	75-100	5-25	45-80	15-35
535: Clunie-----	0-33	Peat, woody peat	---	---	---	---	---	---	---	---	---
	33-60	Silt loam, silty clay loam	0	0	100	100	90-99	70-95	5-45	50-70	5-30

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
536: Coal Creek -----	0-6	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	6-15	Silt loam	0	0	95-100	88-100	85-95	50-80	25-45	50-65	0-10
	15-23	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	70-95	45-85	20-60	40-75	0-10
	23-60	Very gravelly silt loam, gravelly silt loam	0	0-20	55-85	50-80	45-75	30-70	20-45	45-75	5-15
537: Coal Creek -----	0-6	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	6-15	Silt loam	0	0	95-100	88-100	85-95	50-80	25-45	50-65	0-10
	15-23	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	70-95	45-85	20-60	40-75	0-10
	23-60	Gravelly silt loam, very gravelly silt loam	0	0-20	55-85	50-80	45-75	30-70	20-45	45-75	5-15
538: Coal Creek -----	0-6	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	6-15	Silt loam	0	0	95-100	88-100	85-95	50-80	25-45	50-65	0-10
	15-23	Silt loam, very fine sandy loam	0	0-8	90-100	85-100	70-95	45-85	20-60	40-75	0-10
	23-60	Gravelly silt loam, very gravelly silt loam	0	0-20	55-85	50-80	45-75	30-70	20-45	45-75	5-15
539: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, gravelly sand, gravelly silt loam, gravelly loam, very gravelly sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
540: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, gravelly loam, gravelly silt loam, gravelly sand, very gravelly sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
541: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly loam, very gravelly sandy loam, sandy loam, gravelly sand, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
542: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly sand, gravelly loam, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
543: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Very gravelly sandy loam, sandy loam, gravelly sand, gravelly loam, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
544: Cohoe -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Very gravelly sandy loam, sandy loam, gravelly loam, gravelly sand, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
545: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly sand, gravelly silt loam, gravelly loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
546: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand, sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
547: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
548: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly silt loam, sandy loam, very gravelly sandy loam, gravelly loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
549: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
550: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly sand, gravelly silt loam, gravelly loam, sandy loam, very gravelly sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
551: Cohoe, moderately steep-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Cohoe, gently sloping -	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
552: Cohoe, dry, moderately steep -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Cohoe, dry, gently sloping-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly silt loam, gravelly sand, sandy loam, very gravelly sandy loam, gravelly loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
553: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Sandy loam, very gravelly sandy loam, gravelly loam, gravelly silt loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Silt loam, loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
554: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly silt loam, gravelly loam, very gravelly sandy loam, sandy loam, gravelly sand	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Loam, silt loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
555: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly silt loam, gravelly sand, gravelly loam, very gravelly sandy loam, sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Nikolai -----	0-2	Peat	---	---	---	---	---	---	---	---	---
	2-32	Muck	---	---	---	---	---	---	---	---	---
	32-41	Silt loam, very fine sandy loam, fine sandy loam, gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam	0	0-10	70-100	60-100	55-95	30-85	20-65	30-75	3-10
	41-60	Gravelly sand, loamy sand, sand, very gravelly loamy sand, gravelly loamy sand, very gravelly sand	0	0-15	55-100	45-100	30-75	5-35	75-100	0-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
In.		Pct.	Pct.					Pct.	Pct.	Pct.	
556: Cohoe, dry-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-85	20-60	35-75	3-10
	24-52	Very fine sandy loam, silt loam	0	0-8	90-100	85-100	75-95	45-85	20-60	35-75	3-10
	52-60	Gravelly sand, gravelly silt loam, gravelly loam, very gravelly sandy loam, sandy loam	0	0-10	55-100	45-100	35-90	13-70	35-86	14-60	0-15
Nikolai -----	0-2	Peat	---	---	---	---	---	---	---	---	---
	2-32	Muck	---	---	---	---	---	---	---	---	---
	32-41	Very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, silt loam, gravelly very fine sandy loam, fine sandy loam	0	0-10	70-100	60-100	55-95	30-85	20-65	30-75	3-10
	41-60	Sand, gravelly sand, loamy sand, gravelly loamy sand, very gravelly loamy sand, very gravelly sand	0	0-15	55-100	45-100	30-75	5-35	75-100	0-20	0-5
557: Cytex Creek-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-3	Very fine sandy loam, silt loam	0	0	100	100	85-95	70-85	25-50	40-65	3-10
	3-7	Silt loam, very fine sandy loam, fine sandy loam	0	0	100	100	80-90	45-75	35-70	25-60	3-10
	7-31	Silt loam, gravelly fine sandy loam, fine sandy loam, sandy loam	0	0-10	75-100	70-100	55-90	30-70	35-70	25-60	3-10
	31-60	Extremely gravelly loamy fine sand, very cobbly loamy sand	0-15	20-40	50-80	35-70	25-55	3-15	80-95	5-15	0-5
558: Doroshin -----	0-36	Mucky peat	---	---	---	---	---	---	---	---	---
	36-60	Silt loam, very fine sandy loam	0	0	100	90-100	85-90	70-85	25-55	35-75	0-5
559: Doroshin -----	0-36	Mucky peat	---	---	---	---	---	---	---	---	---
	36-60	Silt loam, very fine sandy loam	0	0	100	90-100	85-90	70-85	25-55	35-75	0-5
560: Dystrocryepts-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-7	Silt loam, gravelly sandy loam, very gravelly fine sandy loam, very fine sandy loam	0-5	0-5	40-95	25-90	20-80	9-65	30-75	20-65	0-5
	7-23	Extremely gravelly loamy sand, gravelly fine sandy loam, gravelly loamy sand	0-2	0-3	35-70	20-65	15-50	4-25	65-85	10-35	2-5
	23-60	Very gravelly fine sandy loam, very gravelly loamy sand, very cobbly loamy sand, gravelly fine sandy loam, extremely gravelly sand, extremely stony sand	0-25	0-35	30-70	15-65	9-50	1-25	65-100	0-35	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
563: Pits, gravel -----	In.	---	---	---	---	---	---	---	---	---	---
564: Iliamna-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-29	Fine sandy loam, very fine sandy loam, mucky silt loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	3-8
	29-60	Gravelly sand, sand, loamy fine sand, very gravelly sand	0	0-30	50-100	40-100	20-70	4-35	70-100	0-30	0-5
565: Iliamna-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-29	Silt loam, fine sandy loam, very fine sandy loam, mucky silt loam	0	0	100	100	80-95	50-80	25-60	35-65	3-8
	29-60	Very gravelly sand, sand, gravelly sand, loamy fine sand	0	0-30	50-100	40-100	20-70	4-35	70-100	0-30	0-5
566: Iliamna-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-29	Fine sandy loam, silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	3-8
	29-60	Very gravelly sand, loamy fine sand, sand, gravelly sand	0	0-30	50-100	40-100	20-70	4-35	70-100	0-30	0-5
567: Iliamna, cool -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-29	Very fine sandy loam, mucky silt loam, silt loam, fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	3-8
	29-60	Loamy fine sand, very gravelly sand, gravelly sand, sand	0	0-30	50-100	40-100	20-70	4-35	70-100	0-30	0-5
568: Island -----	0-1	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-13	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	13-24	Silt loam, very fine sandy loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	24-33	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	45-75	3-10
	33-60	Fine sandy loam, very fine sandy loam, gravelly sandy loam, gravelly loamy sand, silt loam	0	0-8	60-100	50-100	40-95	15-75	25-85	5-75	1-10

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
569: Island -----	In.										
	0-1	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-13	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	13-24	Silt loam, very fine sandy loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	24-33	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	45-75	3-10
	33-60	Gravelly sandy loam, gravelly loamy sand, silt loam, fine sandy loam, very fine sandy loam	0	0-8	60-100	50-100	40-95	15-75	25-85	5-75	1-10
570: Island -----	In.										
	0-1	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-13	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	13-24	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	24-33	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	45-75	3-10
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly sandy loam, gravelly loamy sand	0	0-8	60-100	50-100	40-95	15-75	25-85	5-75	1-10
571: Island -----	In.										
	0-1	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-13	Silt loam, very fine sandy loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	13-24	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	24-33	Silt loam, very fine sandy loam	0	0	100	100	90-98	55-85	25-65	45-75	3-10
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly loamy sand, gravelly sandy loam	0	0-8	60-100	50-100	40-95	15-75	25-85	5-75	1-10
572: Island, forested-----	In.										
	0-1	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-13	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	13-24	Very fine sandy loam, silt loam	0	0	100	100	90-98	55-85	25-65	40-72	3-10
	24-33	Silt loam, very fine sandy loam	0	0	100	100	90-98	55-85	25-65	45-75	3-10
	33-60	Very fine sandy loam, fine sandy loam, silt loam, gravelly loamy sand, gravelly sandy loam	0	0-8	60-100	50-100	40-95	15-75	25-85	5-75	1-10
573: Kachemak -----	In.										
	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Very fine sandy loam, silt loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Very fine sandy loam, silt loam, mucky silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, silt loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
574: Kachemak -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Silt loam, mucky silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
575: Kachemak -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly silt loam, gravelly fine sandy loam, gravelly very fine sandy loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
576: Kachemak -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Very fine sandy loam, mucky silt loam, silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Silt loam, very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
577: Kachemak -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Silt loam, very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
578: Kachemak, cool -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, very fine sandy loam, silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam, gravelly sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
579: Kachemak, cool -----	In.		Pct.	Pct.					Pct.	Pct.	Pct.
	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, silt loam, very fine sandy loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Silt loam, very fine sandy loam, mucky silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, silt loam, gravelly sandy loam, gravelly silt loam, very fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
580: Kachemak, cool -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, very fine sandy loam, silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
581: Kachemak, cool -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Very fine sandy loam, gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
582: Kachemak, cool -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, very fine sandy loam, silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
583: Kachemak, forested----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Very fine sandy loam, mucky silt loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly fine sandy loam, gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
584: Kachemak, forested----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
585: Kachemak, forested----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly silt loam, gravelly sandy loam, gravelly fine sandy loam, silt loam, very fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
586: Kachemak, cool-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, very fine sandy loam, mucky silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Mucky silt loam, silt loam, very fine sandy loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, gravelly very fine sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
Snowdance-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	0	0	100	100	85-95	60-80	25-55	45-65	0-10
	8-24	Gravelly silt loam, silt loam, cobbly silt loam	0	0-25	70-100	65-100	55-95	40-80	25-50	50-65	0-10
	24-60	Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam	0-6	15-45	50-80	35-75	25-60	15-40	50-70	25-45	0-5
587: Kachemak, cool-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, very fine sandy loam, silt loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Silt loam, very fine sandy loam, mucky silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly fine sandy loam, gravelly silt loam, gravelly sandy loam, very fine sandy loam, silt loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
587: Snowdance-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	85-95	60-80	25-55	45-65	0-10
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	0	0-25	70-100	65-100	55-95	40-80	25-50	50-65	0-10
	24-60	Very cobbly sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	0-6	15-45	50-80	35-75	25-60	15-40	50-70	25-45	0-5
588: Kachemak, cool-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	0	0	95-100	90-100	75-95	40-80	25-65	30-65	0-10
	8-30	Very fine sandy loam, silt loam, mucky silt loam	0	0-6	75-100	70-100	60-95	30-80	25-65	30-65	0-10
	30-60	Gravelly very fine sandy loam, gravelly sandy loam, very fine sandy loam, silt loam, gravelly silt loam, gravelly fine sandy loam	0	0-15	65-100	55-100	45-95	20-80	25-75	20-65	0-15
Snowdance-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Mucky silt loam, silt loam, very fine sandy loam	0	0	100	100	85-95	60-80	25-55	45-65	0-10
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	0	0-25	70-100	65-100	55-95	40-80	25-50	50-65	0-10
	24-60	Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam	0-6	15-45	50-80	35-75	25-60	15-40	50-70	25-45	0-5
589: Kalifonsky-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam	0	0	80-100	75-100	70-98	50-90	20-45	50-72	5-10
	9-16	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-98	50-90	20-60	45-72	5-10
	16-60	Gravelly sand, gravelly loamy sand, sand, loamy sand	0	0-15	65-95	60-90	40-70	2-20	80-100	0-15	0-5
590: Kalifonsky-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam	0	0	80-100	75-100	70-98	50-90	20-45	50-72	5-10
	9-16	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-98	50-90	20-60	45-72	5-10
	16-60	Gravelly sand, loamy sand, gravelly loamy sand, sand	0	0-15	65-95	60-90	40-70	2-20	80-100	0-15	0-5
591: Kalifonsky-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam	0	0	80-100	75-100	70-98	50-90	20-45	50-72	5-10
	9-16	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-98	50-90	20-60	45-72	5-10
	16-60	Gravelly loamy sand, gravelly sand, sand, loamy sand	0	0-15	65-95	60-90	40-70	2-20	80-100	0-15	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
591: Typic Cryorthents-----	0-1	Gravelly slightly decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-33	Very fine sandy loam, silty clay loam, gravelly very fine sandy loam	0-4	0-15	60-100	50-100	45-95	25-85	20-70	30-60	0-30
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	0-4	0-25	60-100	50-100	45-95	25-80	20-60	35-70	0-30
592: Karluk-----	0-3	Highly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-10	Silt loam	0	0	100	100	90-100	80-100	7-15	65-78	12-20
	10-17	Silt loam	0	0	100	100	90-100	80-100	5-15	60-80	15-25
	17-60	Silt loam	0	0	100	100	92-100	85-100	2-15	60-80	18-25
593: Kashwitna -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam	0	0	100	100	90-100	75-85	25-50	50-65	0-10
	5-21	Very fine sandy loam, silt loam	0	0	100	90-100	80-95	65-80	35-55	40-65	0-10
	21-60	Very gravelly sand, very gravelly loamy sand	0	0-20	45-65	30-55	20-40	1-15	80-100	0-15	0-5
594: Kashwitna -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam	0	0	100	100	90-100	75-85	25-50	50-65	0-10
	5-21	Very fine sandy loam, silt loam	0	0	100	90-100	80-95	65-80	35-55	40-65	0-10
	21-60	Very gravelly loamy sand, very gravelly sand	0	0-20	45-65	30-55	20-40	1-15	80-100	0-15	0-5
595: Kashwitna -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam	0	0	100	100	90-100	75-85	25-50	50-65	0-10
	5-21	Very fine sandy loam, silt loam	0	0	100	90-100	80-95	65-80	35-55	40-65	0-10
	21-60	Very gravelly sand, very gravelly loamy sand	0	0-20	45-65	30-55	20-40	1-15	80-100	0-15	0-5
596: Kashwitna, moderately steep-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam	0	0	100	100	90-100	75-85	25-50	50-65	0-10
	5-21	Very fine sandy loam, silt loam	0	0	100	90-100	80-95	65-80	35-55	40-65	0-10
	21-60	Very gravelly loamy sand, very gravelly sand	0	0-20	45-65	30-55	20-40	1-15	80-100	0-15	0-5
Kashwitna, strongly sloping-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-5	Silt loam	0	0	100	100	90-100	75-85	25-50	50-65	0-10
	5-21	Silt loam, very fine sandy loam	0	0	100	90-100	80-95	65-80	35-55	40-65	0-10
	21-60	Very gravelly sand, very gravelly loamy sand	0	0-20	45-65	30-55	20-40	1-15	80-100	0-15	0-5
597: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Silt loam, loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Silty clay loam, silt loam, gravelly loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
598: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Loam, very fine sandy loam, silt loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silty clay loam, silt loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
599: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Loam, silt loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
600: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Silt loam, loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Silt loam, gravelly loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
601: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Very fine sandy loam, silt loam, loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
602: Kenai, moderately steep-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Silt loam, loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Silt loam, gravelly loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
Kenai, gently sloping---	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Silt loam, loam, very fine sandy loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
603: Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Very fine sandy loam, loam, silt loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Silt loam, silty clay loam, gravelly loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
Starichkof-----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
604: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly loamy coarse sand, very gravelly sandy loam	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Very gravelly sand, extremely gravelly coarse sand, extremely gravelly loamy coarse sand, very gravelly loamy sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
605: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
606: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
607: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
In.	Pct.	Pct.						Pct.	Pct.	Pct.	
608: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
609: Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly loamy coarse sand, very gravelly sandy loam	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Very gravelly sand, extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly loamy sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
Killey-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam	0	0	100	100	90-100	70-90	25-50	40-65	5-10
	6-29	Stratified fine sand to silt loam	0	0	100	90-100	70-80	30-45	25-100	0-70	0-5
	29-60	Very gravelly sand, very gravelly coarse sand	0	0-12	45-70	30-60	15-40	3-10	85-100	0-15	0-5
610: Kidazqeni-----	0-4	Silt loam	0	0	100	100	85-100	65-80	20-50	50-70	0-10
	4-21	Stratified sand to silt loam	0	0	90-100	75-100	60-85	12-80	20-95	5-80	0-5
	21-60	Very cobbly sand, extremely gravelly sand, very gravelly sand	0	15-30	60-75	30-75	10-25	0-5	85-100	0-10	0-5
611: Killey-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam	0	0	100	100	90-100	70-90	25-50	40-65	5-10
	6-29	Stratified fine sand to silt loam	0	0	100	90-100	70-80	30-45	25-100	0-70	0-5
	29-60	Very gravelly sand, very gravelly coarse sand	0	0-12	45-70	30-60	15-40	3-10	85-100	0-15	0-5
Moose River-----	0-5	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	5-10	Silt loam	0	0	100	100	90-100	70-90	25-45	50-70	3-7
	10-39	Stratified gravelly fine sand to silt loam, stratified fine sand to silt loam to slightly decomposed plant material	0	0	70-100	50-100	37-95	11-65	40-95	10-55	3-8
	39-60	Very gravelly sand	0	15-25	60-85	40-75	30-50	3-9	90-96	2-10	0-2
612: Liten-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-8	Very fine sandy loam, fine sandy loam, silt loam	0	0	100	100	90-100	65-85	20-60	40-75	0-10
	8-60	Sand, loamy sand	0	0-6	100	100	65-75	7-20	80-95	5-15	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
613: Lithic Haplocryands ----	0-2	Slightly decomposed plant material, moderately decomposed plant material, highly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-12	Gravelly silt loam, gravelly very fine sandy loam, silt loam, very gravelly silt loam	0	0-15	35-75	20-70	15-60	13-50	30-55	45-65	0-10
	12-60	Bedrock	---	---	---	---	---	---	---	---	---
Alic Haplocryands -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-21	Very gravelly very fine sandy loam, silt loam	0	0-10	50-100	35-100	30-95	20-85	25-65	30-65	0-10
	21-31	Gravelly fine sandy loam, silt loam, very gravelly sandy loam	0-6	0-10	50-90	35-85	25-70	20-65	40-65	30-55	0-10
	31-60	Bedrock	---	---	---	---	---	---	---	---	---
Rock outcrop-----	---	---	---	---	---	---	---	---	---	---	---
614: Lithic Haplocryands ----	0-2	Moderately decomposed plant material, highly decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-12	Silt loam, very gravelly silt loam, gravelly very fine sandy loam, gravelly silt loam	0	0-15	35-75	20-70	15-60	13-50	30-55	45-65	0-10
	12-60	Bedrock	---	---	---	---	---	---	---	---	---
Alic Haplocryands -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-21	Silt loam, very gravelly very fine sandy loam	0	0-10	50-100	35-100	30-95	20-85	25-65	30-65	0-10
	21-31	Gravelly fine sandy loam, silt loam, very gravelly sandy loam	0-6	0-10	50-90	35-85	25-70	20-65	40-65	30-55	0-10
	31-60	Bedrock	---	---	---	---	---	---	---	---	---
Rock outcrop-----	---	---	---	---	---	---	---	---	---	---	---
615: Longmare-----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-6	Silt loam, very fine sandy loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	6-18	Very fine sandy loam, silt loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	18-29	Very fine sandy loam, silt loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	29-60	Gravelly loamy sand, stratified gravelly sand to silt loam, sand, loamy sand	0	0-15	65-100	55-100	35-80	4-55	45-95	5-55	0-5
616: Longmare-----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-6	Silt loam, very fine sandy loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	6-18	Silt loam, very fine sandy loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	18-29	Silt loam, very fine sandy loam	0	0	100	100	80-90	45-75	30-65	35-65	0-5
	29-60	Gravelly loamy sand, stratified gravelly sand to silt loam, sand, loamy sand	0	0-15	65-100	55-100	35-80	4-55	45-95	5-55	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
617: Mutnala-----	In.										
	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Gravelly sandy loam, silt loam, cobbly fine sandy loam, very fine sandy loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
618: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Mucky silt loam, silt loam, very fine sandy loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Silt loam, cobbly fine sandy loam, very fine sandy loam, gravelly sandy loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
619: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Cobbly fine sandy loam, silt loam, very fine sandy loam, gravelly sandy loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
620: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Very fine sandy loam, silt loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Very fine sandy loam, cobbly fine sandy loam, gravelly sandy loam, silt loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
621: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
622: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
623: Mutnala-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	85-95	45-80	25-65	35-65	0-10
	7-23	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	25-80	25-65	35-65	0-10
	23-60	Gravelly sandy loam, very fine sandy loam, cobbly fine sandy loam, silt loam	0	0-15	65-95	50-90	40-80	20-65	30-65	30-65	5-15
Starichkof-----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
Slikok-----	0-13	Peat	---	---	---	---	---	---	---	---	---
	13-51	Mucky silt loam, silt loam	0	0	100	100	90-97	70-85	20-45	50-75	5-10
	51-60	Fine sandy loam, silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam	0	0-15	55-90	50-85	50-80	30-70	20-55	40-70	0-10
624: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Very cobbly silt loam, very gravelly sandy loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
625: Naptowne-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Very gravelly sandy loam, gravelly very fine sandy loam, gravelly loamy sand, very gravelly silt loam, very cobbly silt loam, very gravelly fine sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
626: Naptowne-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
627: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
628: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
629: Naptowne-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Very gravelly fine sandy loam, very cobbly silt loam, very gravelly sandy loam, gravelly loamy sand, very gravelly silt loam, gravelly very fine sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
630: Naptowne, moderately steep-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly loamy sand, very gravelly silt loam, gravelly very fine sandy loam, very gravelly sandy loam, very cobbly silt loam, very gravelly fine sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
Naptowne, strongly sloping-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Very fine sandy loam, silt loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly loamy sand, very gravelly silt loam, very gravelly fine sandy loam, gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
631: Naptowne, strongly sloping-----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Very gravelly sandy loam, very cobbly silt loam, gravelly very fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
Naptowne, gently sloping-----	0-3	Moderately decomposed plant material, slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand, gravelly very fine sandy loam	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
632: Niklason-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	85-95	45-75	30-60	35-70	0-7
	6-23	Very fine sandy loam, fine sandy loam, stratified sand to silt loam, loamy sand, sandy loam, silt loam	0	0	100	100	60-90	9-80	20-100	0-80	0-5
	23-60	Very gravelly sand, extremely gravelly sand, very gravelly loamy sand	0	0-30	35-65	20-50	15-45	1-15	80-95	5-15	0-5
633: Nikolaevsk-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-20	Silt loam, very fine sandy loam, mucky silt loam, mucky very fine sandy loam	0	0	100	90-100	85-95	70-85	25-50	40-65	3-10
	20-60	Very gravelly loamy sand, very gravelly sand, very cobbly loamy sand, gravelly sand, cobbly loamy fine sand	0-15	15-35	40-75	35-65	20-45	5-15	80-95	5-15	0-5
634: Nikolaevsk-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-20	Mucky very fine sandy loam, mucky silt loam, very fine sandy loam, silt loam	0	0	100	90-100	85-95	70-85	25-50	40-65	3-10
	20-60	Very gravelly loamy sand, cobbly loamy fine sand, gravelly sand, very cobbly loamy sand, very gravelly sand	0-15	15-35	40-75	35-65	20-45	5-15	80-95	5-15	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
635: Nikolaevsk-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-20	Mucky very fine sandy loam, mucky silt loam, very fine sandy loam, silt loam	0	0	100	90-100	85-95	70-85	25-50	40-65	3-10
	20-60	Very cobbly loamy sand, very gravelly sand, very gravelly loamy sand, cobbly loamy fine sand, gravelly sand	0-15	15-35	40-75	35-65	20-45	5-15	80-95	5-15	0-5
636: Nikolai-----	0-2	Peat	---	---	---	---	---	---	---	---	---
	2-32	Muck	---	---	---	---	---	---	---	---	---
	32-41	Silt loam, very fine sandy loam, fine sandy loam, gravelly silt loam, gravelly very fine sandy loam, gravelly fine sandy loam	0	0-10	70-100	60-100	55-95	30-85	20-65	30-75	3-10
	41-60	Sand, gravelly sand, gravelly loamy sand, loamy sand, very gravelly loamy sand, very gravelly sand	0	0-15	55-100	45-100	30-75	5-35	75-100	0-20	0-5
637: Nikolai, somewhat poorly drained-----	0-2	Peat	---	---	---	---	---	---	---	---	---
	2-32	Muck	---	---	---	---	---	---	---	---	---
	32-41	Gravelly fine sandy loam, gravelly very fine sandy loam, fine sandy loam, gravelly silt loam, silt loam, very fine sandy loam	0	0-10	70-100	60-100	55-95	30-85	20-65	30-75	3-10
	41-60	Loamy sand, sand, gravelly loamy sand, gravelly sand, very gravelly loamy sand, very gravelly sand	0	0-15	55-100	45-100	30-75	5-35	75-100	0-20	0-5
Tuxedni-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	35-80	25-55	40-65	0-10
	24-36	Silt loam, gravelly sandy loam, sandy loam	0	0-10	70-100	65-100	55-90	35-85	20-55	40-75	3-10
	36-60	Very gravelly loam, gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand	0	0-30	50-80	40-75	24-60	10-40	50-80	10-50	0-10
638: Puntilla-----	0-6	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	6-10	Silt loam, very fine sandy loam	0	0	100	100	85-95	60-80	25-50	40-65	0-10
	10-36	Very fine sandy loam, silt loam, mucky silt loam	0	0	100	80-100	70-95	50-80	25-50	40-65	0-10
	36-60	Loam, silt loam, gravelly loam, sandy loam	0	0-15	65-100	55-100	50-90	30-70	35-55	30-65	5-15
639: Puntilla-----	0-6	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	6-10	Very fine sandy loam, silt loam	0	0	100	100	85-95	60-80	25-50	40-65	0-10
	10-36	Very fine sandy loam, silt loam, mucky silt loam	0	0	100	80-100	70-95	50-80	25-50	40-65	0-10
	36-60	Silt loam, gravelly loam, sandy loam, loam	0	0-15	65-100	55-100	50-90	30-70	35-55	30-65	5-15

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
640: Qutal -----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-10	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-60	30-65	4-10
	10-24	Fine sandy loam, silt loam, very fine sandy loam	0	0	75-100	70-100	55-95	35-80	25-60	30-65	5-10
	24-48	Sandy loam, gravelly loam, silt loam, loam, gravelly sandy loam	0	0-7	75-100	70-100	55-95	35-80	25-60	30-65	2-25
	48-60	Very gravelly sand, sand, gravelly sand, loamy sand	0	0-10	40-90	30-85	15-40	2-20	80-95	5-15	0-5
641: Qutal -----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-10	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-60	30-65	4-10
	10-24	Fine sandy loam, silt loam, very fine sandy loam	0	0	75-100	70-100	55-95	35-80	25-60	30-65	5-10
	24-48	Silt loam, sandy loam, gravelly loam, loam, gravelly sandy loam	0	0-7	75-100	70-100	55-95	35-80	25-60	30-65	2-25
	48-60	Gravelly sand, very gravelly sand, loamy sand, sand	0	0-10	40-90	30-85	15-40	2-20	80-95	5-15	0-5
642: Qutal -----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-10	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-60	30-65	4-10
	10-24	Fine sandy loam, silt loam, very fine sandy loam	0	0	75-100	70-100	55-95	35-80	25-60	30-65	5-10
	24-48	Sandy loam, gravelly loam, silt loam, loam, gravelly sandy loam	0	0-7	75-100	70-100	55-95	35-80	25-60	30-65	2-25
	48-60	Sand, very gravelly sand, loamy sand, gravelly sand	0	0-10	40-90	30-85	15-40	2-20	80-95	5-15	0-5
643: Redoubt, terraces -----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Gravelly sandy loam, sandy loam, loam, gravelly loam, gravelly silt loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
644: Redoubt-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Loam, gravelly loam, gravelly sandy loam, sandy loam, gravelly silt loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
645: Redoubt-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Mucky silt loam, very fine sandy loam, silt loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Gravelly sandy loam, sandy loam, gravelly silt loam, gravelly loam, loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
In.			Pct.	Pct.					Pct.	Pct.	Pct.
646: Redoubt, cool-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Gravelly sandy loam, sandy loam, loam, gravelly loam, gravelly silt loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
647: Redoubt, moderately steep-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Silt loam, very fine sandy loam, mucky silt loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Gravelly silt loam, loam, gravelly loam, sandy loam, gravelly sandy loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
Redoubt, gently sloping-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Very fine sandy loam, silt loam, mucky silt loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Loam, gravelly sandy loam, gravelly loam, gravelly silt loam, sandy loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
648: Redoubt, cool-----	0-2	Mucky peat	---	---	---	---	---	---	---	---	---
	2-22	Silt loam, mucky silt loam, very fine sandy loam	0	0	75-100	65-100	60-95	40-80	25-50	40-65	3-10
	22-60	Sandy loam, gravelly sandy loam, loam, gravelly loam, gravelly silt loam	0	0-7	70-100	60-100	50-90	30-70	35-60	30-60	0-10
Tuxedni-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	35-80	25-55	40-65	0-10
	24-36	Silt loam, gravelly sandy loam, sandy loam	0	0-10	70-100	65-100	55-90	35-85	20-55	40-75	3-10
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	0	0-30	50-80	40-75	24-60	10-40	50-80	10-50	0-10
649: Riverwash-----	---	---	---	---	---	---	---	---	---	---	---
650: Salamatof-----	0-4	Peat	---	---	---	---	---	---	---	---	---
	4-60	Woody peat	---	---	---	---	---	---	---	---	---
Doroshin-----	0-36	Mucky peat	---	---	---	---	---	---	---	---	---
	36-60	Silt loam, very fine sandy loam	0	0	100	90-100	85-90	70-85	25-55	35-75	0-5
651: Salamatof-----	0-4	Peat	---	---	---	---	---	---	---	---	---
	4-60	Woody peat	---	---	---	---	---	---	---	---	---
652: Slikok-----	0-13	Peat	---	---	---	---	---	---	---	---	---
	13-51	Mucky silt loam, silt loam	0	0	100	100	90-97	70-85	20-45	50-75	5-10
	51-60	Fine sandy loam, silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam	0	0-15	55-90	50-85	50-80	30-70	20-55	40-70	0-10

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
653: Slikok -----	0-13	Peat	---	---	---	---	---	---	---	---	---
	13-51	Mucky silt loam, silt loam	0	0	100	100	90-97	70-85	20-45	50-75	5-10
	51-60	Very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, silt loam, fine sandy loam	0	0-15	55-90	50-85	50-80	30-70	20-55	40-70	0-10
654: Smithfha -----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-4	Silt loam, very fine sandy loam, loamy very fine sand	0	0	95-100	90-100	45-80	25-70	35-85	15-60	0-5
	4-18	Very fine sandy loam, loamy very fine sand, silt loam, sandy loam	0	0	95-100	90-100	45-80	25-70	35-90	10-60	0-5
	18-60	Sand, fine sand, loamy very fine sand	0	0	95-100	90-100	65-80	20-40	70-90	10-20	0-5
655: Smithfha -----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-4	Loamy very fine sand, very fine sandy loam, silt loam	0	0	95-100	90-100	45-80	25-70	35-85	15-60	0-5
	4-18	Loamy very fine sand, very fine sandy loam, silt loam, sandy loam	0	0	95-100	90-100	45-80	25-70	35-90	10-60	0-5
	18-60	Loamy very fine sand, fine sand, sand	0	0	95-100	90-100	65-80	20-40	70-90	10-20	0-5
656: Smokey Bay -----	0-2	Highly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam, very fine sandy loam	0	0	80-100	75-100	70-95	45-80	25-70	25-65	5-10
	9-55	Stratified silt loam to fine sandy loam, gravelly fine sandy loam	0	0-8	65-95	55-90	50-85	30-75	20-55	40-75	0-5
	55-60	Fine sandy loam, loam, silt loam, gravelly fine sandy loam	0	0	70-100	65-100	60-95	35-70	35-60	30-50	10-25
657: Smokey Bay -----	0-2	Highly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-9	Silt loam, very fine sandy loam	0	0	80-100	75-100	70-95	45-80	25-70	25-65	5-10
	9-55	Gravelly fine sandy loam, stratified silt loam to fine sandy loam	0	0-8	65-95	55-90	50-85	30-75	20-55	40-75	0-5
	55-60	Gravelly fine sandy loam, fine sandy loam, silt loam, loam	0	0	70-100	65-100	60-95	35-70	35-60	30-50	10-25
658: Snowdance-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-8	Silt loam, mucky silt loam, very fine sandy loam	0	0	100	100	85-95	60-80	25-55	45-65	0-10
	8-24	Gravelly silt loam, cobbly silt loam, silt loam	0	0-25	70-100	65-100	55-95	40-80	25-50	50-65	0-10
	24-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly fine sandy loam	0-6	15-45	50-80	35-75	25-60	15-40	50-70	25-45	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
659: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Gravelly silt loam, very fine sandy loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly loamy sand, very gravelly sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
660: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
661: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
662: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Gravelly silt loam, very fine sandy loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Very gravelly loamy sand, very gravelly sand, stratified very gravelly sand to silt loam	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
663: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5
664: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
665: Soldotna, sandy substratum-----	In.										
	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5
666: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5
667: Soldotna, strongly sloping-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Silt loam, very fine sandy loam, gravelly silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Stratified very gravelly sand to silt loam, very gravelly sand, very gravelly loamy sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
Soldotna, gently sloping-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
668: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5
Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Very fine sandy loam, loam, silt loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Silty clay loam, silt loam, gravelly loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
669: Soldotna, sandy substratum-----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Fine sand, gravelly loamy sand, sand	0	0-8	80-100	75-100	30-55	6-30	75-95	5-20	0-5
Kenai-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Silt loam, very fine sandy loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	6-19	Very fine sandy loam, silt loam	0	0	100	100	80-95	50-80	25-60	35-65	5-10
	19-24	Very fine sandy loam, loam, silt loam	0	0	90-100	85-100	75-97	40-85	20-70	25-75	3-10
	25-60	Gravelly loam, silt loam, silty clay loam	0	0	85-100	80-100	75-99	50-95	5-45	35-75	20-35
670: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Silt loam, gravelly silt loam, very fine sandy loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Very gravelly sand, stratified very gravelly sand to silt loam, very gravelly loamy sand	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Very gravelly loamy sand, very gravelly sand, extremely gravelly coarse sand, extremely gravelly loamy coarse sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5
671: Soldotna -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-7	Very fine sandy loam, silt loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	7-22	Silt loam, very fine sandy loam	0	0	100	100	80-95	45-75	30-65	40-65	0-5
	22-29	Very fine sandy loam, gravelly silt loam, silt loam	0	0	60-100	45-100	40-90	20-75	30-65	40-65	0-5
	29-60	Very gravelly loamy sand, very gravelly sand, stratified very gravelly sand to silt loam	0	0-15	50-70	40-60	20-55	4-35	45-95	5-55	0-5
Kichatna-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Silt loam, very fine sandy loam	0	0-10	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	4-11	Silt loam, very fine sandy loam	0	0-5	90-100	85-100	80-100	70-90	20-60	30-70	5-15
	11-14	Very gravelly sandy loam, very gravelly loamy coarse sand	0-5	0-15	40-75	35-70	20-40	10-20	65-85	12-25	3-10
	14-60	Extremely gravelly loamy coarse sand, extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	0-5	10-25	15-55	10-50	10-30	0-15	80-98	2-20	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
679: Starichkof, forested ----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
680: Starichkof -----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
Slikok -----	0-13	Peat	---	---	---	---	---	---	---	---	---
	13-51	Silt loam, mucky silt loam	0	0	100	100	90-97	70-85	20-45	50-75	5-10
	51-60	Silt loam, very gravelly sandy loam, gravelly silt loam, gravelly fine sandy loam, fine sandy loam	0	0-15	55-90	50-85	50-80	30-70	20-55	40-70	0-10
Naptowne -----	0-3	Slightly decomposed plant material, moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-14	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	40-75	20-50	45-75	3-10
	13-20	Silt loam, very fine sandy loam	0	0	85-100	80-100	75-95	45-75	20-50	45-75	3-10
	20-60	Gravelly very fine sandy loam, very cobbly silt loam, very gravelly sandy loam, very gravelly fine sandy loam, very gravelly silt loam, gravelly loamy sand	0-15	0-40	50-85	35-75	30-70	10-45	40-85	10-55	0-5
681: Starichkof -----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
Spenard -----	0-9	Peat, mucky peat	---	---	---	---	---	---	---	---	---
	9-14	Very fine sandy loam, silt loam	0	0	100	100	85-95	55-80	25-55	40-65	5-10
	14-25	Silt loam, very fine sandy loam	0	0	100	100	85-95	55-80	25-55	40-65	5-10
	25-60	Loam, silt loam, gravelly loam, gravelly silty clay loam	0	0-15	75-95	65-90	60-85	45-80	15-40	45-75	5-30
682: Susitna -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-3	Fine sandy loam, silt loam	0	0	100	100	85-95	65-75	30-55	45-70	0-10
	3-45	Stratified fine sand to silt loam	0	0	100	100	80-95	30-90	10-85	5-80	0-10
	45-60	Extremely gravelly coarse sand, very gravelly sand, very gravelly loamy sand	0	0-20	40-60	20-55	10-30	2-15	80-98	0-15	0-5
Riverwash -----	---	---	---	---	---	---	---	---	---	---	---
683: Susitna -----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-3	Fine sandy loam, silt loam	0	0	100	100	85-95	65-75	30-55	45-70	0-10
	3-45	Stratified fine sand to silt loam	0	0	100	100	80-95	30-90	10-85	5-80	0-10
	45-60	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly sand	0	0-20	40-60	20-55	10-30	2-15	80-98	0-15	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
684: Talkeetna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-7	Silt loam, mucky silt loam, very fine sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	7-19	Mucky very fine sandy loam, loam, mucky silt loam, silt loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	19-60	Very gravelly fine sandy loam, very cobbly sandy loam, very gravelly sandy loam	0	7-30	45-70	30-65	20-50	10-30	55-75	20-40	0-5
685: Talkeetna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	7-19	Mucky silt loam, loam, mucky very fine sandy loam, silt loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	19-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly fine sandy loam	0	7-30	45-70	30-65	20-50	10-30	55-75	20-40	0-5
686: Talkeetna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-7	Very fine sandy loam, mucky silt loam, silt loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	7-19	Mucky very fine sandy loam, loam, mucky silt loam, silt loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	19-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly fine sandy loam	0	7-30	45-70	30-65	20-50	10-30	55-75	20-40	0-5
Starichkof -----	0-7	Peat	---	---	---	---	---	---	---	---	---
	7-60	Stratified mucky peat to silt loam to ashy sand	---	---	---	---	---	---	---	---	---
687: Tangerra -----	0-4	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	4-8	Very fine sandy loam, silt loam	0	0	100	100	80-90	50-80	25-60	35-65	5-10
	8-16	Silt loam, sandy loam, loam	0	0	100	100	65-85	30-75	25-75	20-65	5-10
	16-46	Gravelly sand, sand, loamy sand	0	0-8	75-100	70-100	45-75	6-35	70-100	0-30	0-5
	46-60	Very gravelly sand, very gravelly loamy sand	0	0-6	45-65	30-55	20-40	3-15	80-100	0-15	0-5
688: Beaches, tidal flats -----	---	---	---	---	---	---	---	---	---	---	---
689: Tiikakila -----	0-1	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	1-19	Silt loam, very fine sandy loam	0	0	100	85-100	70-95	45-80	25-55	40-70	0-5
	19-34	Gravelly sandy loam, sandy loam, fine sandy loam	0	0-10	75-100	70-100	45-75	20-50	55-80	10-45	0-10
	34-60	Gravelly loamy sand, very gravelly sand	0	0-15	50-75	35-75	20-55	3-15	80-95	5-15	0-5

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
In.			Pct.	Pct.					Pct.	Pct.	Pct.
690: Tiikakila -----	0-1	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	1-19	Very fine sandy loam, silt loam	0	0	100	85-100	70-95	45-80	25-55	40-70	0-5
	19-34	Fine sandy loam, sandy loam, gravelly sandy loam	0	0-10	75-100	70-100	45-75	20-50	55-80	10-45	0-10
	34-60	Very gravelly sand, gravelly loamy sand	0	0-15	50-75	35-75	20-55	3-15	80-95	5-15	0-5
691: Tiikakila -----	0-1	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	1-19	Silt loam, very fine sandy loam	0	0	100	85-100	70-95	45-80	25-55	40-70	0-5
	19-34	Sandy loam, fine sandy loam, gravelly sandy loam	0	0-10	75-100	70-100	45-75	20-50	55-80	10-45	0-10
	34-60	Very gravelly sand, gravelly loamy sand	0	0-15	50-75	35-75	20-55	3-15	80-95	5-15	0-5
692: Tokositna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	13-24	Silt loam, very fine sandy loam, sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	24-60	Very cobbly loam, very cobbly sandy loam, very gravelly loam	0-6	0-35	50-80	30-75	25-65	15-50	40-70	25-40	0-10
693: Tokositna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	13-24	Silt loam, very fine sandy loam, sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	24-60	Very cobbly sandy loam, very cobbly loam, very gravelly loam	0-6	0-35	50-80	30-75	25-65	15-50	40-70	25-40	0-10
694: Tokositna -----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-13	Mucky silt loam, silt loam, very fine sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	13-24	Silt loam, very fine sandy loam, sandy loam	0	0	90-100	85-100	75-95	55-80	25-55	40-65	0-10
	24-60	Very cobbly sandy loam, very cobbly loam, very gravelly loam	0-6	0-35	50-80	30-75	25-65	15-50	40-70	25-40	0-10
695: Truuli-----	0-9	Mucky peat, peat, muck	---	---	---	---	---	---	---	---	---
	9-19	Mucky silt loam, silt loam, very fine sandy loam	0	0	100	85-100	80-95	55-85	25-70	30-70	0-5
	19-43	Fine sandy loam, silt loam	0	0-10	85-100	80-100	75-95	55-85	20-50	45-75	3-10
	43-60	Sandy loam, gravelly sandy loam, loamy sand	0	0-8	60-90	55-85	35-70	15-40	50-80	10-50	0-10

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
696: Tutka-----	0-7	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	7-13	Very fine sandy loam, silt loam, mucky silt loam	0	0	80-100	70-100	65-95	40-80	25-55	45-75	0-5
	13-21	Gravelly mucky silt loam, gravelly mucky very fine sandy loam, very gravelly mucky silt loam	0	0-25	35-70	20-60	15-60	10-45	25-55	35-70	0-10
	21-60	Bedrock	---	---	---	---	---	---	---	---	---
Kasitsna-----	0-3	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	3-18	Mucky silt loam, very fine sandy loam, gravelly very fine sandy loam, silt loam	0	0-5	50-100	40-100	30-95	20-80	25-60	30-65	3-10
	18-31	Loam, sandy loam, gravelly sandy loam, very gravelly sandy loam	0	0-15	50-90	35-90	30-75	15-55	40-60	30-50	0-10
	31-60	Very gravelly sandy loam, very cobbly sandy loam, very gravelly loam	0	5-25	50-70	40-60	30-50	15-35	40-70	20-50	0-10
Rock outcrop-----	---	---	---	---	---	---	---	---	---	---	---
697: Tutka-----	0-7	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	7-13	Silt loam, mucky silt loam, very fine sandy loam	0	0	80-100	70-100	65-95	40-80	25-55	45-75	0-5
	13-21	Gravelly mucky very fine sandy loam, gravelly mucky silt loam, very gravelly mucky silt loam	0	0-25	35-70	20-60	15-60	10-45	25-55	35-70	0-10
	21-60	Bedrock	---	---	---	---	---	---	---	---	---
Portgraham-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-4	Very fine sandy loam, silt loam	0	0	100	100	90-100	55-85	25-55	45-70	0-5
	4-27	Silt loam, mucky very fine sandy loam, gravelly silt loam, mucky silt loam	0	0-10	65-100	45-100	45-90	25-80	25-50	40-70	0-10
	27-60	Bedrock	---	---	---	---	---	---	---	---	---
698: Tuxedni-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Silt loam, very fine sandy loam	0	0	70-100	60-100	55-95	35-80	25-55	40-65	0-10
	24-36	Silt loam, gravelly sandy loam, sandy loam	0	0-10	70-100	65-100	55-90	35-85	20-55	40-75	3-10
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	0	0-30	50-80	40-75	24-60	10-40	50-80	10-50	0-10
699: Tuxedni-----	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	70-100	60-100	55-95	35-80	25-55	40-65	0-10
	24-36	Silt loam, gravelly sandy loam, sandy loam	0	0-10	70-100	65-100	55-90	35-85	20-55	40-75	3-10
	36-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly loam	0	0-30	50-80	40-75	24-60	10-40	50-80	10-50	0-10

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
700: Tuxedni, warm-----	In.		---	---	---	---	---	---	---	---	---
	0-2	Moderately decomposed plant material	---	---	---	---	---	---	---	---	---
	2-24	Very fine sandy loam, silt loam	0	0	70-100	60-100	55-95	35-80	25-55	40-65	0-10
	24-36	Silt loam, gravelly sandy loam, sandy loam	0	0-10	70-100	65-100	55-90	35-85	20-55	40-75	3-10
	36-60	Gravelly sandy loam, very gravelly sandy loam, very gravelly loam, very cobbly loamy sand	0	0-30	50-80	40-75	24-60	10-40	50-80	10-50	0-10
701: Typic Cryaquents-----	0-2	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	2-6	Very fine sandy loam, silt loam, silty clay loam	0	0	100	100	85-95	45-75	20-65	35-65	0-30
	6-60	Gravelly sandy loam, very gravelly sandy loam, very cobbly loamy sand, very gravelly sand, silt loam, very gravelly loamy sand	0	0-15	50-100	35-100	20-90	3-75	20-100	0-60	0-25
702: Typic Cryopsamments-	0-60	Loamy sand, sand, loamy fine sand	0	0	100	100	75-85	15-30	80-95	5-20	0-3
703: Typic Cryorthents-----	0-1	Slightly decomposed plant material, gravelly slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	1-33	Very fine sandy loam, gravelly very fine sandy loam, silty clay loam	0-4	0-15	60-100	50-100	45-95	25-85	20-70	30-60	0-30
	33-60	Very fine sandy loam, very gravelly silt loam, cobbly silty clay loam	0-4	0-25	60-100	50-100	45-95	25-80	20-60	35-70	0-30
704: Urban land-----	---	---	---	---	---	---	---	---	---	---	---
705: Water, fresh-----	---	---	---	---	---	---	---	---	---	---	---
706: Whitsol-----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Gravelly fine sandy loam, stratified silt loam to fine sand, loam, sandy loam, very fine sandy loam, gravelly sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10 inches	3-10 inches	4	10	40	200			
			Pct.	Pct.							
707: Whitsol -----	In.		---	---	---	---	---	---	---	---	---
	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Gravelly fine sandy loam, gravelly sandy loam, loam, stratified silt loam to fine sand, sandy loam, very fine sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Extremely gravelly sand, very gravelly loamy sand, very gravelly coarse sand, gravelly sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3
708: Whitsol -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Very fine sandy loam, silt loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Very fine sandy loam, loam, gravelly sandy loam, gravelly fine sandy loam, stratified silt loam to fine sand, sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand, gravelly sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3
709: Whitsol -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Silt loam, very fine sandy loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Gravelly fine sandy loam, gravelly sandy loam, loam, stratified silt loam to fine sand, sandy loam, very fine sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Gravelly sand, very gravelly coarse sand, very gravelly loamy sand, extremely gravelly sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3
710: Whitsol -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Silt loam, very fine sandy loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Loam, gravelly sandy loam, sandy loam, stratified silt loam to fine sand, gravelly fine sandy loam, very fine sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Extremely gravelly sand, very gravelly coarse sand, gravelly sand, very gravelly loamy sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3

Table 9. Engineering Sieve Data—Continued

Map symbol and soil name	Depth	USDA texture	Fragments		Percentage passing sieve number--				Sand	Silt	Clay
			>10	3-10	4	10	40	200			
			inches	inches							
	In.		Pct.	Pct.					Pct.	Pct.	Pct.
711: Whitsol -----	0-3	Slightly decomposed plant material	---	---	---	---	---	---	---	---	---
	3-29	Silt loam, very fine sandy loam	0	0	100	100	80-95	55-80	25-55	40-65	5-10
	29-51	Sandy loam, stratified silt loam to fine sand, gravelly fine sandy loam, gravelly sandy loam, loam, very fine sandy loam	0	0-15	65-100	55-100	40-80	20-55	50-75	20-45	0-10
	51-60	Gravelly sand, very gravelly coarse sand, extremely gravelly sand, very gravelly loamy sand	0	0-15	40-65	25-60	15-40	2-20	75-100	0-25	0-3
Doroshin -----	0-36	Mucky peat	---	---	---	---	---	---	---	---	---
	36-60	Silt loam, very fine sandy loam	0	0	100	90-100	85-90	70-85	25-55	35-75	0-5

Table 10. Physical Properties of the Soils

(See text for definitions of terms used in this table. Entries under "Erosion factors--T" 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 soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
501: Aquic Cryofluvents -----	0-2	0.05-0.10	6-100	0.05-0.35	---	85-95	---	---	1	1	160
	2-6	0.80-0.90	2-6	0.25-0.27	0.0-2.9	2.0-5.0	.37	.37			
	6-31	0.90-1.10	2-6	0.20-0.24	0.0-2.9	0.3-2.2	.49	.49			
	31-48	1.00-1.20	2-6	0.13-0.22	0.0-2.9	0.0-2.0	.49	.49			
	48-60	1.50-1.60	6-100	0.04-0.06	0.0-2.9	0.0-0.5	.10	.10			
502: Aquic Cryofluvents, shallow ---	0-2	0.05-0.10	6-100	0.05-0.35	---	85-95	---	---	1	1	160
	2-6	0.80-0.90	2-6	0.25-0.27	0.0-2.9	2.0-5.0	.37	.37			
	6-19	1.00-1.20	2-6	0.13-0.22	0.0-2.9	0.0-2.0	.49	.49			
	19-60	1.50-1.60	6-100	0.04-0.06	0.0-2.9	0.0-0.5	.10	.10			
503: Badland, sea cliffs -----	---	---	---	---	---	---	---	---	-	---	---
504: Badland, sea cliffs -----	---	---	---	---	---	---	---	---	-	---	---
Typic Cryorthents -----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	3	86
	1-33	1.25-1.70	0.06-6	0.16-0.27	0.0-5.9	0.1-0.5	.37	.49			
	33-60	1.35-1.80	0.06-6	0.12-0.27	0.0-5.0	0.0-0.2	.32	.43			
505: Beaches -----	---	---	---	---	---	---	---	---	-	---	---
506: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
507: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
508: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
509: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
Mutnala -----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
510: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
Smokey Bay -----	0-2	0.20-0.30	0.003-0.06	0.40-0.55	---	60-85	---	---	5	2	134
	2-9	1.10-1.20	0.7-2	0.21-0.24	0.0-2.9	4.0-10	.28	.37			
	9-55	1.20-1.40	0.7-2	0.22-0.25	0.0-2.9	0.2-1.0	.28	.37			
	55-60	1.20-1.50	0.7-2	0.18-0.22	0.0-2.9	0.2-2.0	.28	.37			
511: Beluga -----	0-5	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	5-7	1.10-1.20	0.6-2	0.21-0.24	0.0-2.9	4.0-10	.20	.20			
	7-32	1.10-1.50	0.2-2	0.15-0.22	0.0-5.9	0.2-1.0	.64	.64			
	32-60	1.20-1.60	0.003-0.2	0.19-0.22	2.0-5.9	0.2-2.0	.43	.43			
Smokey Bay -----	0-2	0.20-0.30	0.003-0.06	0.40-0.55	---	60-85	---	---	5	2	134
	2-9	1.10-1.20	0.7-2	0.21-0.24	0.0-2.9	4.0-10	.28	.37			
	9-55	1.20-1.40	0.7-2	0.22-0.25	0.0-2.9	0.2-1.0	.28	.37			
	55-60	1.20-1.50	0.7-2	0.18-0.22	0.0-2.9	0.2-2.0	.28	.37			
512: Benka -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
513: Benka -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
514: Benka -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
515: Benka -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
516: Benka -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
517: Benka, strongly sloping -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
Benka, gently sloping-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	3.0-7.0	.20	.20			
	5-30	0.75-0.90	0.6-2	0.30-0.32	0.0-2.9	4.0-9.0	.37	.37			
	30-60	1.30-1.45	2-14	0.04-0.08	0.0-2.9	0.2-2.0	.10	.10			
518: Boxcar-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	3-5	0.70-1.10	2-6	0.30-0.35	0.0-2.9	6.0-10	.15	.15			
	5-20	0.70-1.10	2-6	0.30-0.35	0.0-2.9	3.0-5.0	.37	.37			
	20-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
519: Boxcar-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	3-5	0.70-1.10	2-6	0.30-0.35	0.0-2.9	6.0-10	.15	.15			
	5-20	0.70-1.10	2-6	0.30-0.35	0.0-2.9	3.0-5.0	.37	.37			
	20-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
520: Boxcar-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	3-5	0.70-1.10	2-6	0.30-0.35	0.0-2.9	6.0-10	.15	.15			
	5-20	0.70-1.10	2-6	0.30-0.35	0.0-2.9	3.0-5.0	.37	.37			
	20-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
521: Boxcar, cool-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	3-5	0.70-1.10	2-6	0.30-0.35	0.0-2.9	6.0-10	.15	.15			
	5-20	0.70-1.10	2-6	0.30-0.35	0.0-2.9	3.0-5.0	.37	.37			
	20-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
522: Boxcar, cool-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	3-5	0.70-1.10	2-6	0.30-0.35	0.0-2.9	6.0-10	.15	.15			
	5-20	0.70-1.10	2-6	0.30-0.35	0.0-2.9	3.0-5.0	.37	.37			
	20-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
523: Chenega-----	0-4	0.10-0.30	6-20	0.20-0.30	---	35-90	---	---	1	5	56
	4-7	0.60-0.90	0.6-6	0.25-0.30	0.0-2.9	6.0-10	.43	.43			
	7-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
524: Chenega, cool-----	0-4	0.10-0.30	6-20	0.20-0.30	---	35-90	---	---	1	5	56
	4-7	0.60-0.90	0.6-6	0.25-0.30	0.0-2.9	6.0-10	.43	.43			
	7-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
525: Chenega, occasionally flooded-----	0-4	0.10-0.30	6-20	0.20-0.30	---	35-90	---	---	1	5	56
	4-7	0.60-0.90	0.6-6	0.25-0.30	0.0-2.9	6.0-10	.43	.43			
	7-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
526: Chulitna-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-33	0.70-1.10	2-6	0.30-0.35	0.0-2.9	5.0-20	.43	.43			
	33-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.2-2.0	.05	.24			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
527: Chulitna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-33	0.70-1.10	2-6	0.30-0.35	0.0-2.9	5.0-20	.43	.43			
	33-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.2-2.0	.05	.24			
528: Chulitna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-33	0.70-1.10	2-6	0.30-0.35	0.0-2.9	5.0-20	.43	.43			
	33-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.2-2.0	.05	.24			
529: Chulitna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-33	0.70-1.10	2-6	0.30-0.35	0.0-2.9	5.0-20	.43	.43			
	33-60	1.30-1.60	6-20	0.03-0.05	0.0-2.9	0.2-2.0	.05	.24			
530: Chunilna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	1	8	0
	4-8	0.75-0.90	2-6	0.34-0.36	0.0-2.9	10-20	.37	.37			
	8-18	0.90-1.20	2-6	0.32-0.34	0.0-2.9	8.0-15	.43	.43			
	18-60	1.50-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.49			
531: Chunilna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	1	8	0
	4-8	0.75-0.90	2-6	0.34-0.36	0.0-2.9	10-20	.37	.37			
	8-18	0.90-1.20	2-6	0.32-0.34	0.0-2.9	8.0-15	.43	.43			
	18-60	1.50-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.49			
532: Chunilna, cool -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	1	8	0
	4-8	0.75-0.90	2-6	0.34-0.36	0.0-2.9	10-20	.37	.37			
	8-18	0.90-1.20	2-6	0.32-0.34	0.0-2.9	8.0-15	.43	.43			
	18-60	1.50-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.49			
533: Chunilna, cool -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	1	8	0
	4-8	0.75-0.90	2-6	0.34-0.36	0.0-2.9	10-20	.37	.37			
	8-18	0.90-1.20	2-6	0.32-0.34	0.0-2.9	8.0-15	.43	.43			
	18-60	1.50-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.49			
534: Clam Gulch-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	3-15	0.65-1.00	2-6	0.32-0.34	0.0-2.9	2.0-10	.37	.37			
	15-60	1.20-1.90	0.06-0.2	0.25-0.28	0.0-5.9	0.2-2.0	.32	.32			
535: Clunie-----	0-33	0.05-0.10	6-20	0.19-0.21	---	80-90	---	---	2	8	0
	33-60	1.50-1.80	0.003-0.06	0.20-0.30	3.0-5.9	0.2-2.0	.24	.24			
536: Coal Creek -----	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	6-15	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-10	.37	.37			
	15-23	1.20-1.80	0.2-0.6	0.32-0.35	0.0-2.9	0.3-2.2	.43	.49			
	23-60	1.20-1.70	0.2-0.6	0.20-0.30	0.0-2.9	0.2-2.0	.24	.49			
537: Coal Creek -----	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	6-15	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-10	.37	.37			
	15-23	1.20-1.80	0.2-0.6	0.32-0.35	0.0-2.9	0.3-2.2	.43	.49			
	23-60	1.20-1.70	0.2-0.6	0.20-0.30	0.0-2.9	0.2-2.0	.24	.49			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
538: Coal Creek -----	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	6-15	1.10-1.20	0.6-2	0.20-0.25	0.0-2.9	2.0-10	.37	.37			
	15-23	1.20-1.80	0.2-0.6	0.32-0.35	0.0-2.9	0.3-2.2	.43	.49			
	23-60	1.20-1.70	0.2-0.6	0.20-0.30	0.0-2.9	0.2-2.0	.24	.49			
539: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	5	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
540: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
541: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
542: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
543: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
544: Cohoe -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
545: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
546: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
547: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
548: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
549: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
550: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
551: Cohoe, moderately steep-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Cohoe, gently sloping -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
552: Cohoe, dry, moderately steep -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Cohoe, dry, gently sloping -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
553: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Kenai-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
554: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Kenai-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
555: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Nikolai -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	2-32	0.20-0.30	0.2-0.6	0.40-0.55	---	60-85	---	---			
	32-41	1.20-1.60	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.55	.55			
	41-60	1.50-1.70	6-20	0.03-0.10	0.0-0.0	0.0-0.5	.24	.24			
556: Cohoe, dry-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-24	0.70-1.00	2-6	0.32-0.35	0.0-2.9	5.0-10	.37	.37			
	24-52	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.43	.49			
	52-60	1.50-1.90	2-13	0.08-0.22	0.0-2.9	0.1-0.5	.24	.43			
Nikolai -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	2-32	0.20-0.30	0.2-0.6	0.40-0.55	---	60-85	---	---			
	32-41	1.20-1.60	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.55	.55			
	41-60	1.50-1.70	6-20	0.03-0.10	0.0-0.0	0.0-0.5	.24	.24			
557: Cytex Creek-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-3	0.50-0.90	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	3-7	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-10	.28	.28			
	7-31	0.80-1.20	2-6	0.15-0.22	0.0-2.9	1.0-3.0	.43	.43			
	31-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
558: Doroshin -----	0-36	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	36-60	1.30-1.40	0.7-2	0.18-0.22	0.0-2.9	0.3-2.2	.43	.43			
559: Doroshin -----	0-36	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	36-60	1.30-1.40	0.7-2	0.18-0.22	0.0-2.9	0.3-2.2	.43	.43			
560: Dystrocryepts-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	2-7	1.20-1.30	2-6	0.06-0.22	0.0-2.9	4.0-8.0	.10	.24			
	7-23	1.40-1.70	6-20	0.03-0.14	0.0-2.9	0.0-1.0	.10	.24			
	23-60	1.50-1.60	6-20	0.03-0.14	0.0-2.9	0.0-0.1	.10	.10			
Typic Cryorthents-----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	3	86
	1-33	1.25-1.70	0.06-6	0.16-0.27	0.0-5.9	0.1-0.5	.37	.49			
	33-60	1.35-1.80	0.06-6	0.12-0.27	0.0-5.0	0.0-0.2	.32	.43			
Iliamna, cool -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-29	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-20	.43	.43			
	29-60	1.30-1.60	4-14	0.04-0.08	0.0-2.9	0.2-2.0	.05	.05			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
561: Foreland -----	0-13	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	13-19	1.15-1.40	6-20	0.04-0.17	0.0-2.9	1.0-3.0	.10	.10			
	19-60	1.40-1.50	6-20	0.02-0.12	0.0-2.9	0.2-1.0	.10	.15			
562: Foreland -----	0-13	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	8	0
	13-19	1.15-1.40	6-20	0.04-0.17	0.0-2.9	1.0-3.0	.10	.10			
	19-60	1.40-1.50	6-20	0.02-0.12	0.0-2.9	0.2-1.0	.10	.15			
Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
563: Pits, gravel -----	---	---	---	---	---	---	---	---	-	---	---
564: Iliamna -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-29	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-20	.43	.43			
	29-60	1.30-1.60	4-14	0.04-0.08	0.0-2.9	0.2-2.0	.05	.05			
565: Iliamna -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-29	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-20	.43	.43			
	29-60	1.30-1.60	4-14	0.04-0.08	0.0-2.9	0.2-2.0	.05	.05			
566: Iliamna -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-29	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-20	.43	.43			
	29-60	1.30-1.60	4-14	0.04-0.08	0.0-2.9	0.2-2.0	.05	.05			
567: Iliamna, cool -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-29	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-20	.43	.43			
	29-60	1.30-1.60	4-14	0.04-0.08	0.0-2.9	0.2-2.0	.05	.05			
568: Island -----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-13	0.55-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.37	.43			
	13-24	0.60-0.75	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.37	.43			
	24-33	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.37	.49			
	33-60	1.10-1.20	6-20	0.12-0.30	0.0-2.9	0.1-1.0	.37	.43			
569: Island -----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-13	0.55-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.37	.43			
	13-24	0.60-0.75	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.37	.43			
	24-33	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.37	.49			
	33-60	1.10-1.20	6-20	0.12-0.30	0.0-2.9	0.1-1.0	.37	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
570: Island -----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-13	0.55-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.37	.43			
	13-24	0.60-0.75	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.37	.43			
	24-33	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.37	.49			
	33-60	1.10-1.20	6-20	0.12-0.30	0.0-2.9	0.1-1.0	.37	.43			
571: Island -----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-13	0.55-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.37	.43			
	13-24	0.60-0.75	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.37	.43			
	24-33	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.37	.49			
	33-60	1.10-1.20	6-20	0.12-0.30	0.0-2.9	0.1-1.0	.37	.43			
572: Island, forested-----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	1-13	0.55-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.37	.43			
	13-24	0.60-0.75	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.37	.43			
	24-33	1.20-1.60	0.7-2	0.32-0.35	0.0-2.9	0.1-1.0	.37	.49			
	33-60	1.10-1.20	6-20	0.12-0.30	0.0-2.9	0.1-1.0	.37	.43			
573: Kachemak -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
574: Kachemak -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
575: Kachemak -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
576: Kachemak -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
577: Kachemak -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
578: Kachemak, cool-----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
579: Kachemak, cool-----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
580: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
581: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
582: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
583: Kachemak, forested -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
584: Kachemak, forested -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
585: Kachemak, forested -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
586: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
Snowdance-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-8	0.75-0.90	2-6	0.32-0.34	0.0-2.9	6.0-20	.37	.43			
	8-24	0.75-0.90	2-6	0.32-0.34	0.0-2.9	2.0-8.0	.43	.49			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.05	.15			
587: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
Snowdance-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-8	0.75-0.90	2-6	0.32-0.34	0.0-2.9	6.0-20	.37	.43			
	8-24	0.75-0.90	2-6	0.32-0.34	0.0-2.9	2.0-8.0	.43	.49			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.05	.15			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
588: Kachemak, cool -----	0-3	0.05-0.10	6-20	0.15-0.35	---	85-95	---	---	5	2	134
	3-8	0.55-0.85	2-6	0.25-0.36	0.0-2.9	8.0-14	.15	.15			
	8-30	0.55-0.85	2-6	0.25-0.36	0.0-2.9	2.0-15	.37	.37			
	30-60	1.15-1.50	0.2-2	0.12-0.25	0.0-2.9	0.0-0.5	.49	.49			
Snowdance-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-8	0.75-0.90	2-6	0.32-0.34	0.0-2.9	6.0-20	.37	.43			
	8-24	0.75-0.90	2-6	0.32-0.34	0.0-2.9	2.0-8.0	.43	.49			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.05	.15			
589: Kalifonsky-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	1	8	0
	2-9	0.70-0.90	2-6	0.28-0.32	0.0-2.9	2.0-10	.37	.37			
	9-16	0.90-1.10	2-6	0.22-0.26	0.0-2.9	0.2-2.0	.43	.43			
	16-60	1.40-1.60	6-20	0.05-0.07	0.0-2.9	0.2-1.0	.10	.10			
590: Kalifonsky-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	1	8	0
	2-9	0.70-0.90	2-6	0.28-0.32	0.0-2.9	2.0-10	.37	.37			
	9-16	0.90-1.10	2-6	0.22-0.26	0.0-2.9	0.2-2.0	.43	.43			
	16-60	1.40-1.60	6-20	0.05-0.07	0.0-2.9	0.2-1.0	.10	.10			
591: Kalifonsky-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	1	8	0
	2-9	0.70-0.90	2-6	0.28-0.32	0.0-2.9	2.0-10	.37	.37			
	9-16	0.90-1.10	2-6	0.22-0.26	0.0-2.9	0.2-2.0	.43	.43			
	16-60	1.40-1.60	6-20	0.05-0.07	0.0-2.9	0.2-1.0	.10	.10			
Typic Cryorthents-----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	3	86
	1-33	1.25-1.70	0.06-6	0.16-0.27	0.0-5.9	0.1-0.5	.37	.49			
	33-60	1.35-1.80	0.06-6	0.12-0.27	0.0-5.0	0.0-0.2	.32	.43			
592: Karluk-----	0-3	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	5	2	134
	3-10	0.40-0.80	0.2-2	0.20-0.26	0.0-2.9	2.0-10	.32	.32			
	10-17	1.10-1.45	0.2-2	0.20-0.26	0.0-2.9	1.0-4.0	.37	.37			
	17-60	1.60-1.90	0.2-2	0.20-0.26	0.0-2.8	0.0-1.0	.37	.37			
593: Kashwitna -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.80-0.90	2-6	0.30-0.34	0.0-2.9	2.0-10	.37	.37			
	5-21	0.80-0.90	2-6	0.30-0.34	0.0-2.9	4.0-10	.43	.49			
	21-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-1.0	.05	.24			
594: Kashwitna -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.80-0.90	2-6	0.30-0.34	0.0-2.9	2.0-10	.37	.37			
	5-21	0.80-0.90	2-6	0.30-0.34	0.0-2.9	4.0-10	.43	.49			
	21-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-1.0	.05	.24			
595: Kashwitna -----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.80-0.90	2-6	0.30-0.34	0.0-2.9	2.0-10	.37	.37			
	5-21	0.80-0.90	2-6	0.30-0.34	0.0-2.9	4.0-10	.43	.49			
	21-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-1.0	.05	.24			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
596:											
Kashwitna, moderately steep	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.80-0.90	2-6	0.30-0.34	0.0-2.9	2.0-10	.37	.37			
	5-21	0.80-0.90	2-6	0.30-0.34	0.0-2.9	4.0-10	.43	.49			
	21-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-1.0	.05	.24			
Kashwitna, strongly sloping	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	3-5	0.80-0.90	2-6	0.30-0.34	0.0-2.9	2.0-10	.37	.37			
	5-21	0.80-0.90	2-6	0.30-0.34	0.0-2.9	4.0-10	.43	.49			
	21-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-1.0	.05	.24			
597:											
Kenai	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
598:											
Kenai	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
599:											
Kenai	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
600:											
Kenai	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
601:											
Kenai	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
602:											
Kenai, moderately steep	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
Kenai, gently sloping	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
603: Kenai-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
Starichkof-----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
604: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
605: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
606: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
607: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
608: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
609: Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
Killey-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	1	160
	2-6	0.80-0.90	0.6-2	0.25-0.27	0.0-2.9	4.0-8.0	.37	.37			
	6-29	0.90-1.00	0.6-2	0.17-0.20	0.0-2.9	0.2-2.0	.28	.28			
	29-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.2-2.0	.05	.17			
610: Kidazqeni-----	0-4	0.80-1.00	0.6-2	0.23-0.25	0.0-2.9	2.0-4.0	.37	.37	2	1	160
	4-21	0.90-1.10	2-6	0.15-0.18	0.0-2.9	0.5-3.0	.32	.37			
	21-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.5	.05	.24			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
611: Killey -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	1	160
	2-6	0.80-0.90	0.6-2	0.25-0.27	0.0-2.9	4.0-8.0	.37	.37			
	6-29	0.90-1.00	0.6-2	0.17-0.20	0.0-2.9	0.2-2.0	.28	.28			
	29-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.2-2.0	.05	.17			
Moose River -----	0-5	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	5-10	0.80-0.90	0.6-2	0.25-0.27	0.0-2.9	4.0-10	.43	.43			
	10-39	0.90-1.30	0.6-2	0.11-0.15	0.0-2.9	0.2-2.0	.15	.24			
	39-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.2-2.0	.05	.24			
612: Liten -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	1	160
	2-8	0.90-1.00	2-6	0.32-0.35	0.0-2.9	5.0-9.0	.28	.28			
	8-60	1.20-1.30	6-20	0.04-0.08	0.0-2.9	0.0-0.2	.10	.10			
613: Lithic Haplocryands -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-12	0.60-0.70	0.6-2	0.30-0.35	0.0-2.9	8.0-15	.15	.28			
	12-60	---	0.000-0.001	---	---	---	---	---			
Alic Haplocryands -----	0-4	0.07-0.18	6-100	0.35-0.50	---	75-90	---	---	2	2	134
	4-21	0.75-0.90	2-6	0.34-0.36	0.0-2.9	4.0-10	.05	.28			
	21-31	1.60-1.80	2-6	0.06-0.08	0.0-2.9	0.2-2.0	.10	.24			
	31-60	---	0.000-0.001	---	---	---	---	---			
Rock outcrop -----	---	---	---	---	---	---	---	---	-	---	---
614: Lithic Haplocryands -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-12	0.60-0.70	0.6-2	0.30-0.35	0.0-2.9	8.0-15	.15	.28			
	12-60	---	0.000-0.001	---	---	---	---	---			
Alic Haplocryands -----	0-4	0.07-0.18	6-100	0.35-0.50	---	75-90	---	---	2	2	134
	4-21	0.75-0.90	2-6	0.34-0.36	0.0-2.9	4.0-10	.05	.28			
	21-31	1.60-1.80	2-6	0.06-0.08	0.0-2.9	0.2-2.0	.10	.24			
	31-60	---	0.000-0.001	---	---	---	---	---			
Rock outcrop -----	---	---	---	---	---	---	---	---	-	---	---
615: Longmare -----	0-3	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-6	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	6-18	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	18-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
616: Longmare -----	0-3	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-6	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	6-18	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	18-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
617: Mutnala -----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
618: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
619: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
620: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
621: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
622: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
623: Mutnala-----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.60-0.70	2-6	0.30-0.35	0.0-2.9	5.0-20	.37	.37			
	7-23	0.60-0.70	2-6	0.30-0.35	0.0-2.9	2.0-8.0	.43	.43			
	23-60	1.20-1.30	0.7-2	0.15-0.18	0.0-2.9	0.0-0.1	.24	.43			
Starichkof-----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
Slikok-----	0-13	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	2	8	0
	13-51	0.40-0.60	2-6	0.28-0.30	0.0-2.9	8.0-20	.28	.37			
	51-60	1.50-1.80	0.2-0.6	0.25-0.27	0.0-2.9	0.2-2.0	.28	.64			
624: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
625: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
626: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
627: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
628: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
629: Naptowne-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
630: Naptowne, moderately steep--	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
Naptowne, strongly sloping----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
631: Naptowne, strongly sloping----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
Naptowne, gently sloping-----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
632: Niklason-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	1	160
	2-6	0.80-1.20	0.6-2	0.23-0.25	0.0-2.9	2.0-4.0	.37	.37			
	6-23	0.90-1.10	2-6	0.15-0.18	0.0-2.9	0.2-2.0	.37	.37			
	23-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-0.1	.05	.24			
633: Nikolaevsk-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	2-20	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	20-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
634: Nikolaevsk-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	2-20	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	20-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
635: Nikolaevsk-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	2-20	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	20-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
636: Nikolai -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	2-32	0.20-0.30	0.2-0.6	0.40-0.55	---	60-85	---	---			
	32-41	1.20-1.60	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.55	.55			
	41-60	1.50-1.70	6-20	0.03-0.10	0.0-0.0	0.0-0.5	.24	.24			
637: Nikolai, somewhat poorly drained -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	2-32	0.20-0.30	0.2-0.6	0.40-0.55	---	60-85	---	---			
	32-41	1.20-1.60	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.55	.55			
	41-60	1.50-1.70	6-20	0.03-0.10	0.0-0.0	0.0-0.5	.24	.24			
Tuxedni-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-24	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.24	.24			
	24-36	1.20-1.80	0.7-2	0.32-0.35	0.0-2.9	0.2-2.0	.43	.49			
	36-60	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.17	.32			
638: Puntilla -----	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	6-10	0.70-0.80	2-6	0.25-0.27	0.0-2.9	4.0-10	.37	.37			
	10-36	0.50-0.70	2-6	0.25-0.27	0.0-2.9	2.0-15	.43	.43			
	36-60	1.60-1.70	0.2-0.6	0.20-0.23	0.0-2.9	0.2-0.5	.32	.49			
639: Puntilla -----	0-6	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	6-10	0.70-0.80	2-6	0.25-0.27	0.0-2.9	4.0-10	.37	.37			
	10-36	0.50-0.70	2-6	0.25-0.27	0.0-2.9	2.0-15	.43	.43			
	36-60	1.60-1.70	0.2-0.6	0.20-0.23	0.0-2.9	0.2-0.5	.32	.49			
640: Qutal -----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	3-10	0.60-0.70	2-6	0.25-0.30	0.0-2.9	4.0-10	.37	.37			
	10-24	0.60-0.70	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	24-48	1.20-1.70	0.7-2	0.20-0.35	3.0-5.9	0.2-2.0	.32	.55			
	48-60	1.30-1.80	6-20	0.02-0.06	0.0-2.9	0.1-1.0	.05	.20			
641: Qutal -----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	3-10	0.60-0.70	2-6	0.25-0.30	0.0-2.9	4.0-10	.37	.37			
	10-24	0.60-0.70	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	24-48	1.20-1.70	0.7-2	0.20-0.35	3.0-5.9	0.2-2.0	.32	.55			
	48-60	1.30-1.80	6-20	0.02-0.06	0.0-2.9	0.1-1.0	.05	.20			
642: Qutal -----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	3	2	134
	3-10	0.60-0.70	2-6	0.25-0.30	0.0-2.9	4.0-10	.37	.37			
	10-24	0.60-0.70	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	24-48	1.20-1.70	0.7-2	0.20-0.35	3.0-5.9	0.2-2.0	.32	.55			
	48-60	1.30-1.80	6-20	0.02-0.06	0.0-2.9	0.1-1.0	.05	.20			
643: Redoubt, terraces -----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
644: Redoubt -----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
645: Redoubt -----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
646: Redoubt, cool-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
647: Redoubt, moderately steep----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
Redoubt, gently sloping-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
648: Redoubt, cool-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-22	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-20	.43	.43			
	22-60	1.40-1.85	0.7-2	0.10-0.13	0.0-2.9	0.2-2.0	.24	.43			
Tuxedni-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-24	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.24	.24			
	24-36	1.20-1.80	0.7-2	0.32-0.35	0.0-2.9	0.2-2.0	.43	.49			
	36-60	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.17	.32			
649: Riverwash -----	---	---	---	---	---	---	---	---	-	---	---
650: Salamatof-----	0-4	0.05-0.10	6-20	0.25-0.30	---	80-99	---	---	5	8	0
	4-60	0.05-0.10	6-20	0.25-0.30	---	80-99	---	---			
Doroshin -----	0-36	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	36-60	1.30-1.40	0.7-2	0.18-0.22	0.0-2.9	0.3-2.2	.43	.43			
651: Salamatof-----	0-4	0.05-0.10	6-20	0.25-0.30	---	80-99	---	---	5	8	0
	4-60	0.05-0.10	6-20	0.25-0.30	---	80-99	---	---			
652: Slikok -----	0-13	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	2	8	0
	13-51	0.40-0.60	2-6	0.28-0.30	0.0-2.9	8.0-20	.28	.37			
	51-60	1.50-1.80	0.2-0.6	0.25-0.27	0.0-2.9	0.2-2.0	.28	.64			
653: Slikok -----	0-13	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	2	8	0
	13-51	0.40-0.60	2-6	0.28-0.30	0.0-2.9	8.0-20	.28	.37			
	51-60	1.50-1.80	0.2-0.6	0.25-0.27	0.0-2.9	0.2-2.0	.28	.64			
654: Smithfha -----	0-3	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	5	2	134
	3-4	0.90-1.30	2-6	0.10-0.15	0.0-2.9	2.0-8.0	.32	.32			
	4-18	0.90-1.30	2-6	0.10-0.15	0.0-2.9	5.0-10	.32	.32			
	18-60	0.90-1.30	2-6	0.10-0.15	0.0-2.9	0.5-1.5	.32	.32			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
655: Smithfha -----	0-3	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	5	2	134
	3-4	0.90-1.30	2-6	0.10-0.15	0.0-2.9	2.0-8.0	.32	.32			
	4-18	0.90-1.30	2-6	0.10-0.15	0.0-2.9	5.0-10	.32	.32			
	18-60	0.90-1.30	2-6	0.10-0.15	0.0-2.9	0.5-1.5	.32	.32			
656: Smokey Bay -----	0-2	0.20-0.30	0.003-0.06	0.40-0.55	---	60-85	---	---	5	2	134
	2-9	1.10-1.20	0.7-2	0.21-0.24	0.0-2.9	4.0-10	.28	.37			
	9-55	1.20-1.40	0.7-2	0.22-0.25	0.0-2.9	0.2-1.0	.28	.37			
	55-60	1.20-1.50	0.7-2	0.18-0.22	0.0-2.9	0.2-2.0	.28	.37			
657: Smokey Bay -----	0-2	0.20-0.30	0.003-0.06	0.40-0.55	---	60-85	---	---	5	2	134
	2-9	1.10-1.20	0.7-2	0.21-0.24	0.0-2.9	4.0-10	.28	.37			
	9-55	1.20-1.40	0.7-2	0.22-0.25	0.0-2.9	0.2-1.0	.28	.37			
	55-60	1.20-1.50	0.7-2	0.18-0.22	0.0-2.9	0.2-2.0	.28	.37			
658: Snowdance-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	3-8	0.75-0.90	2-6	0.32-0.34	0.0-2.9	6.0-20	.37	.43			
	8-24	0.75-0.90	2-6	0.32-0.34	0.0-2.9	2.0-8.0	.43	.49			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.05	.15			
659: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
660: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
661: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
662: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
663: Soldotna, sandy substratum ---	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
664: Soldotna, sandy substratum-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			
665: Soldotna, sandy substratum-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			
666: Soldotna, sandy substratum-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			
667: Soldotna, strongly sloping-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
Soldotna, gently sloping -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
668: Soldotna, sandy substratum-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			
Kenai-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			
669: Soldotna, sandy substratum-----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.04-0.08	0.0-2.9	0.1-0.6	.10	.10			
Kenai-----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-6	0.70-0.80	2-6	0.33-0.35	0.0-2.9	2.0-10	.37	.37			
	6-19	0.70-1.10	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	19-24	1.20-1.80	2-6	0.33-0.35	0.0-2.9	0.3-1.5	.43	.49			
	25-60	1.50-1.80	0.06-0.2	0.25-0.27	3.0-5.9	0.2-1.0	.43	.49			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
670: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
671: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
Kichatna-----	0-2	0.07-0.18	2-6	0.32-0.35	---	40-70	---	---	1	2	134
	2-4	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	2.0-8.0	.37	.37			
	4-11	0.65-0.90	0.6-2	0.31-0.37	0.0-2.9	4.0-10	.37	.37			
	11-14	1.50-1.60	2-6	0.04-0.08	0.0-2.9	2.0-6.0	.10	.24			
	14-60	1.50-1.80	6-20	0.03-0.05	0.0-2.9	0.3-0.9	.05	.24			
672: Soldotna -----	0-4	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	4-7	0.80-0.90	2-6	0.33-0.35	0.0-2.9	4.0-10	.43	.43			
	7-22	0.80-0.90	2-6	0.33-0.35	0.0-2.9	1.0-6.0	.43	.43			
	22-29	0.90-1.20	2-6	0.30-0.33	0.0-2.9	0.1-0.6	.55	.49			
	29-60	1.40-1.60	6-20	0.02-0.04	0.0-2.9	0.1-0.6	.10	.10			
Nikolai -----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	2-32	0.20-0.30	0.2-0.6	0.40-0.55	---	60-85	---	---			
	32-41	1.20-1.60	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.55	.55			
	41-60	1.50-1.70	6-20	0.03-0.10	0.0-0.0	0.0-0.5	.24	.24			
673: Spenard -----	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-14	0.60-0.90	2-6	0.25-0.30	0.0-2.9	6.0-10	.37	.37			
	14-25	0.60-0.90	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	25-60	1.20-1.70	0.7-2	0.15-0.20	3.0-5.9	0.1-0.5	.43	.55			
674: Spenard -----	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-14	0.60-0.90	2-6	0.25-0.30	0.0-2.9	6.0-10	.37	.37			
	14-25	0.60-0.90	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	25-60	1.20-1.70	0.7-2	0.15-0.20	3.0-5.9	0.1-0.5	.43	.55			
675: Spenard -----	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-14	0.60-0.90	2-6	0.25-0.30	0.0-2.9	6.0-10	.37	.37			
	14-25	0.60-0.90	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	25-60	1.20-1.70	0.7-2	0.15-0.20	3.0-5.9	0.1-0.5	.43	.55			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
676:											
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
Doroshin -----	0-36	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	36-60	1.30-1.40	0.7-2	0.18-0.22	0.0-2.9	0.3-2.2	.43	.43			
677:											
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
678:											
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
679:											
Starichkof, forested -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
680:											
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
Slikok -----	0-13	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	2	8	0
	13-51	0.40-0.60	2-6	0.28-0.30	0.0-2.9	8.0-20	.28	.37			
	51-60	1.50-1.80	0.2-0.6	0.25-0.27	0.0-2.9	0.2-2.0	.28	.64			
Naptowne -----	0-3	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-14	0.70-1.17	2-6	0.32-0.35	0.0-2.9	2.0-6.0	.37	.37			
	13-20	1.10-1.30	2-6	0.20-0.30	0.0-2.9	0.5-1.5	.37	.37			
	20-60	1.40-1.90	0.6-6	0.05-0.25	0.0-2.9	0.1-0.5	.10	.37			
681:											
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
Spenard -----	0-9	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	8	0
	9-14	0.60-0.90	2-6	0.25-0.30	0.0-2.9	6.0-10	.37	.37			
	14-25	0.60-0.90	2-6	0.25-0.30	0.0-2.9	2.0-8.0	.43	.43			
	25-60	1.20-1.70	0.7-2	0.15-0.20	3.0-5.9	0.1-0.5	.43	.55			
682:											
Susitna -----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-3	0.80-0.90	0.7-2	0.19-0.23	0.0-2.9	2.0-5.0	.37	.37			
	3-45	0.90-1.00	0.7-2	0.15-0.17	0.0-2.9	0.0-2.0	.32	.37			
	45-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20			
Riverwash -----	---	---	---	---	---	---	---	---	-	---	---
683:											
Susitna -----	0-2	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	3	2	134
	2-3	0.80-0.90	0.7-2	0.19-0.23	0.0-2.9	2.0-5.0	.37	.37			
	3-45	0.90-1.00	0.7-2	0.15-0.17	0.0-2.9	0.0-2.0	.32	.37			
	45-60	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20			
684:											
Talkeetna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-7	0.75-0.90	2-6	0.32-0.36	0.0-2.9	4.0-20	.37	.37			
	7-19	0.75-0.90	2-6	0.32-0.36	0.0-2.9	7.0-20	.37	.37			
	19-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.10	.32			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
685: Talkeetna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-7	0.75-0.90	2-6	0.32-0.36	0.0-2.9	4.0-20	.37	.37			
	7-19	0.75-0.90	2-6	0.32-0.36	0.0-2.9	7.0-20	.37	.37			
	19-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.10	.32			
686: Talkeetna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	1	2	134
	2-7	0.75-0.90	2-6	0.32-0.36	0.0-2.9	4.0-20	.37	.37			
	7-19	0.75-0.90	2-6	0.32-0.36	0.0-2.9	7.0-20	.37	.37			
	19-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.2-2.0	.10	.32			
Starichkof -----	0-7	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	8	0
	7-60	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---			
687: Tangerra -----	0-4	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	1	1	160
	4-8	0.80-1.10	0.6-2	0.25-0.27	0.0-2.9	6.0-10	.20	.20			
	8-16	1.20-1.30	2-6	0.20-0.23	0.0-2.9	2.0-5.0	.15	.15			
	16-46	1.30-1.60	6-20	0.05-0.08	0.0-2.9	0.1-1.0	.24	.24			
	46-60	1.40-1.60	6-20	0.03-0.06	0.0-2.9	0.1-1.0	.10	.24			
688: Beaches, tidal flats -----	---	---	---	---	---	---	---	---	-	---	---
689: Tlikakila -----	0-1	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	8	0
	1-19	0.60-0.70	2-6	0.30-0.35	0.0-2.9	4.0-10	.37	.37			
	19-34	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.15	.24			
	34-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
690: Tlikakila -----	0-1	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	8	0
	1-19	0.60-0.70	2-6	0.30-0.35	0.0-2.9	4.0-10	.37	.37			
	19-34	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.15	.24			
	34-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
691: Tlikakila -----	0-1	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	8	0
	1-19	0.60-0.70	2-6	0.30-0.35	0.0-2.9	4.0-10	.37	.37			
	19-34	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.15	.24			
	34-60	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.05	.24			
692: Tokositna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-13	0.75-0.90	2-6	0.30-0.34	0.0-2.9	5.0-15	.32	.32			
	13-24	0.75-0.90	2-6	0.30-0.34	0.0-2.9	1.0-6.0	.43	.43			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-1.0	.10	.37			
693: Tokositna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-13	0.75-0.90	2-6	0.30-0.34	0.0-2.9	5.0-15	.32	.32			
	13-24	0.75-0.90	2-6	0.30-0.34	0.0-2.9	1.0-6.0	.43	.43			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-1.0	.10	.37			
694: Tokositna -----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-13	0.75-0.90	2-6	0.30-0.34	0.0-2.9	5.0-15	.32	.32			
	13-24	0.75-0.90	2-6	0.30-0.34	0.0-2.9	1.0-6.0	.43	.43			
	24-60	1.60-1.80	0.2-2	0.06-0.08	0.0-2.9	0.0-1.0	.10	.37			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
695:											
Truuli-----	0-9	0.20-0.30	0.001-0.06	0.40-0.55	---	60-85	---	---	2	8	0
	9-19	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-15	.20	.20			
	19-43	1.10-1.30	2-6	0.32-0.35	0.0-2.9	0.3-2.2	.43	.43			
	43-60	1.20-1.40	2-6	0.10-0.13	0.0-2.9	0.0-1.0	.15	.24			
696:											
Tutka-----	0-7	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	7-13	0.50-0.70	2-6	0.32-0.36	0.0-2.9	6.0-20	.28	.28			
	13-21	0.70-0.90	2-6	0.18-0.24	0.0-2.9	10-20	.10	.28			
	21-60	---	0.001-0.001	---	---	---	---	---			
Kasitsna-----	0-3	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	3-18	0.50-0.90	2-6	0.30-0.35	0.0-2.9	4.0-10	.43	.32			
	18-31	1.20-1.30	0.7-6	0.15-0.22	0.0-2.9	3.0-6.0	.24	.49			
	31-60	1.60-1.80	0.7-6	0.06-0.15	0.0-2.9	0.0-0.5	.15	.49			
Rock outcrop-----	---	---	---	---	---	---	---	---	-	---	---
697:											
Tutka-----	0-7	0.07-0.18	0.7-2	0.35-0.50	---	75-90	---	---	2	2	134
	7-13	0.50-0.70	2-6	0.32-0.36	0.0-2.9	6.0-20	.28	.28			
	13-21	0.70-0.90	2-6	0.18-0.24	0.0-2.9	10-20	.10	.28			
	21-60	---	0.001-0.001	---	---	---	---	---			
Portgraham-----	0-2	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	2	2	134
	2-4	0.50-0.70	2-6	0.30-0.34	0.0-2.9	2.0-8.0	.37	.37			
	4-27	0.50-0.70	2-6	0.27-0.34	0.0-2.9	6.0-20	.32	.37			
	27-60	---	0.000-0.1	---	---	0.0-0.0	---	---			
698:											
Tuxedni-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-24	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.24	.24			
	24-36	1.20-1.80	0.7-2	0.32-0.35	0.0-2.9	0.2-2.0	.43	.49			
	36-60	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.17	.32			
699:											
Tuxedni-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-24	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.24	.24			
	24-36	1.20-1.80	0.7-2	0.32-0.35	0.0-2.9	0.2-2.0	.43	.49			
	36-60	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.17	.32			
700:											
Tuxedni, warm-----	0-2	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	2	134
	2-24	0.60-0.70	2-6	0.30-0.35	0.0-2.9	6.0-10	.24	.24			
	24-36	1.20-1.80	0.7-2	0.32-0.35	0.0-2.9	0.2-2.0	.43	.49			
	36-60	1.20-1.30	2-6	0.10-0.13	0.0-2.9	0.2-2.0	.17	.32			
701:											
Typic Cryaquents-----	0-2	0.10-0.18	1-2	0.35-0.50	---	75-90	---	---	1	8	0
	2-6	1.20-1.40	0.06-2	0.20-0.27	0.0-5.0	0.5-3.0	.43	.43			
	6-60	1.40-1.70	0.6-20	0.02-0.20	0.0-2.9	0.0-1.0	.10	.20			
702:											
Typic Cryopsamments-----	0-60	1.30-1.45	6-20	0.04-0.08	0.0-2.9	0.0-0.2	.10	.10	1	1	160
703:											
Typic Cryorthents-----	0-1	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	5	3	86
	1-33	1.25-1.70	0.06-6	0.16-0.27	0.0-5.9	0.1-0.5	.37	.49			
	33-60	1.35-1.80	0.06-6	0.12-0.27	0.0-5.0	0.0-0.2	.32	.43			

Table 10. Physical Properties of the Soils—Continued

Map symbol and soil name	Depth	Moist bulk density	Permeability	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
							Kw	Kf	T		
	In.	g/cc	In/Hr	In/In	Pct.	Pct.					
704: Urban land-----	---	---	---	---	---	---	---	---	-	---	---
705: Water, fresh-----	---	---	---	---	---	---	---	---	-	---	---
706: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
707: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
708: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
709: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
710: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
711: Whitsol-----	0-3	0.05-0.10	6-20	0.05-0.35	---	85-95	---	---	3	2	134
	3-29	0.70-0.80	2-6	0.30-0.32	0.0-2.9	5.0-10	.37	.37			
	29-51	1.00-1.50	0.6-2	0.30-0.32	0.0-2.9	0.2-2.0	.43	.43			
	51-60	1.30-1.40	6-20	0.02-0.03	0.0-2.9	0.1-0.6	.10	.15			
Doroshin-----	0-36	0.07-0.18	0.6-2	0.35-0.50	---	75-90	---	---	2	8	0
	36-60	1.30-1.40	0.7-2	0.18-0.22	0.0-2.9	0.3-2.2	.43	.43			

Table 11. Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
501: Aquic Cryofluvents-----	0-2	---	20-60	4.0-5.5
	2-6	15-25	3-15	5.0-6.0
	6-31	10-20	2-5	5.0-6.0
	31-48	5-15	1-5	5.1-6.0
	48-60	2-10	1-3	5.1-6.0
502: Aquic Cryofluvents, shallow-----	0-2	---	20-60	4.0-5.5
	2-6	15-25	3-15	5.0-6.0
	6-19	5-15	1-5	5.1-6.0
	19-60	2-10	1-3	5.1-6.0
503: Badland, sea cliffs -----	---	---	---	---
504: Badland, sea cliffs -----	---	---	---	---
Typic Cryorthents -----	0-1	---	20-60	4.0-5.5
	1-33	---	3-15	4.8-7.3
	33-60	---	3-15	4.8-8.0
505: Beaches -----	---	---	---	---
506: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
507: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
508: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
509: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
Mutnala-----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
510: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
Smokey Bay-----	0-2	---	25-110	4.0-5.5
	2-9	20-50	---	5.6-6.5
	9-55	5-15	---	5.6-6.5
	55-60	5-15	---	5.6-7.0
511: Beluga -----	0-5	---	15-70	5.1-5.5
	5-7	---	5-15	5.1-6.5
	7-32	2-7	---	5.6-6.8
	32-60	14-20	---	5.6-6.8
Smokey Bay-----	0-2	---	25-110	4.0-5.5
	2-9	20-50	---	5.6-6.5
	9-55	5-15	---	5.6-6.5
	55-60	5-15	---	5.6-7.0
512: Benka -----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
513: Benka -----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
514: Benka -----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
515: Benka -----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
516: Benka -----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
517: Benka, strongly sloping-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
Benka, gently sloping-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-5.5
	5-30	20-50	---	5.1-6.0
	30-60	1-5	---	5.6-6.5
518: Boxcar-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-6.0
	5-20	---	5-25	4.5-6.0
	20-60	2-10	---	5.6-6.5
519: Boxcar-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-6.0
	5-20	---	5-25	4.5-6.0
	20-60	2-10	---	5.6-6.5
520: Boxcar-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-6.0
	5-20	---	5-25	4.5-6.0
	20-60	2-10	---	5.6-6.5
521: Boxcar, cool-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-6.0
	5-20	---	5-25	4.5-6.0
	20-60	2-10	---	5.6-6.5
522: Boxcar, cool-----	0-3	---	20-60	4.0-5.5
	3-5	---	5-15	4.5-6.0
	5-20	---	5-25	4.5-6.0
	20-60	2-10	---	5.6-6.5
523: Chenega-----	0-4	---	15-50	4.0-5.5
	4-7	---	5-25	4.5-6.0
	7-60	---	1-3	4.5-6.0
524: Chenega, cool-----	0-4	---	15-50	4.0-5.5
	4-7	---	5-25	4.5-6.0
	7-60	---	1-3	4.5-6.0
525: Chenega, occasionally flooded-----	0-4	---	15-50	4.0-5.5
	4-7	---	5-25	4.5-6.0
	7-60	---	1-3	4.5-6.0
526: Chulitna-----	0-2	---	20-60	3.5-5.5
	2-33	---	5-20	4.5-5.5
	33-60	---	1-5	4.5-5.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
527: Chulitna-----	0-2	---	20-60	3.5-5.5
	2-33	---	5-20	4.5-5.5
	33-60	---	1-5	4.5-5.5
528: Chulitna-----	0-2	---	20-60	3.5-5.5
	2-33	---	5-20	4.5-5.5
	33-60	---	1-5	4.5-5.5
529: Chulitna-----	0-2	---	20-60	3.5-5.5
	2-33	---	5-20	4.5-5.5
	33-60	---	1-5	4.5-5.5
530: Chunilna-----	0-4	---	15-70	4.0-5.5
	4-8	---	5-15	4.5-5.5
	8-18	---	5-15	4.5-5.5
	18-60	---	1-5	4.5-5.5
531: Chunilna-----	0-4	---	15-70	4.0-5.5
	4-8	---	5-15	4.5-5.5
	8-18	---	5-15	4.5-5.5
	18-60	---	1-5	4.5-5.5
532: Chunilna, cool-----	0-4	---	15-70	4.0-5.5
	4-8	---	5-15	4.5-5.5
	8-18	---	5-15	4.5-5.5
	18-60	---	1-5	4.5-5.5
533: Chunilna, cool-----	0-4	---	15-70	4.0-5.5
	4-8	---	5-15	4.5-5.5
	8-18	---	5-15	4.5-5.5
	18-60	---	1-5	4.5-5.5
534: Clam Gulch-----	0-3	---	20-60	4.0-5.5
	3-15	---	5-30	4.5-5.5
	15-60	10-33	---	5.6-6.0
535: Clunie-----	0-33	---	20-60	4.0-6.5
	33-60	14-20	---	5.6-7.3
536: Coal Creek-----	0-6	---	20-60	4.0-5.5
	6-15	---	5-25	4.5-5.5
	15-23	---	5-15	4.5-5.5
	23-60	---	5-15	4.5-5.5
537: Coal Creek-----	0-6	---	20-60	4.0-5.5
	6-15	---	5-25	4.5-5.5
	15-23	---	5-15	4.5-5.5
	23-60	---	5-15	4.5-5.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
538: Coal Creek-----	0-6	---	20-60	4.0-5.5
	6-15	---	5-25	4.5-5.5
	15-23	---	5-15	4.5-5.5
	23-60	---	5-15	4.5-5.5
539: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
540: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
541: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
542: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
543: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
544: Cohoe-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
545: Cohoe, dry-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
546: Cohoe, dry-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
547: Cohoe, dry-----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
548: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
549: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
550: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
551: Cohoe, moderately steep -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Cohoe, gently sloping -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
552: Cohoe, dry, moderately steep -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Cohoe, dry, gently sloping -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
553: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
554: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
555: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Nikolai -----	0-2	---	15-70	4.0-6.0
	2-32	---	25-110	4.0-5.5
	32-41	---	2-5	4.5-5.5
	41-60	---	1-3	4.8-6.2
556: Cohoe, dry -----	0-2	---	15-70	4.0-6.0
	2-24	---	10-40	4.5-6.0
	24-52	5-15	---	5.6-6.2
	52-60	1-15	---	5.6-6.5
Nikolai -----	0-2	---	15-70	4.0-6.0
	2-32	---	25-110	4.0-5.5
	32-41	---	2-5	4.5-5.5
	41-60	---	1-3	4.8-6.2
557: Cytex Creek -----	0-2	---	20-60	4.0-5.5
	2-3	---	5-15	4.5-5.5
	3-7	---	5-20	4.5-5.6
	7-31	---	3-10	4.5-5.6
	31-60	2-8	1-4	5.4-6.0
558: Doroshin -----	0-36	---	15-70	4.0-6.0
	36-60	---	---	4.5-5.5
559: Doroshin -----	0-36	---	15-70	4.0-6.0
	36-60	---	---	4.5-5.5
560: Dystrocryepts -----	0-2	---	20-60	4.0-5.5
	2-7	---	1-5	4.5-5.5
	7-23	---	1-6	4.5-5.5
	23-60	---	2-9	4.5-5.5
Typic Cryorthents -----	0-1	---	20-60	4.0-5.5
	1-33	---	3-15	4.8-7.3
	33-60	---	3-15	4.8-8.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
560: Iliamna, cool-----	0-2	---	15-70	4.0-6.0
	2-29	---	5-25	5.1-6.0
	29-60	2-10	---	5.6-6.0
561: Foreland-----	0-13	---	20-60	4.0-5.5
	13-19	2-15	---	5.5-7.0
	19-60	2-15	---	5.5-7.0
562: Foreland-----	0-13	---	20-60	4.0-5.5
	13-19	2-15	---	5.5-7.0
	19-60	2-15	---	5.5-7.0
Soldotna-----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Starichkof-----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
563: Pits, gravel-----	---	---	---	---
564: Iliamna-----	0-2	---	15-70	4.0-6.0
	2-29	---	5-25	5.1-6.0
	29-60	2-10	---	5.6-6.0
565: Iliamna-----	0-2	---	15-70	4.0-6.0
	2-29	---	5-25	5.1-6.0
	29-60	2-10	---	5.6-6.0
566: Iliamna-----	0-2	---	15-70	4.0-6.0
	2-29	---	5-25	5.1-6.0
	29-60	2-10	---	5.6-6.0
567: Iliamna, cool-----	0-2	---	15-70	4.0-6.0
	2-29	---	5-25	5.1-6.0
	29-60	2-10	---	5.6-6.0
568: Island-----	0-1	---	20-60	4.0-5.5
	1-13	---	5-15	5.1-5.5
	13-24	---	5-15	5.1-5.5
	24-33	2-9	---	5.6-6.2
	33-60	2-9	---	5.6-6.0
569: Island-----	0-1	---	20-60	4.0-5.5
	1-13	---	5-15	5.1-5.5
	13-24	---	5-15	5.1-5.5
	24-33	2-9	---	5.6-6.2
	33-60	2-9	---	5.6-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
570: Island-----	0-1	---	20-60	4.0-5.5
	1-13	---	5-15	5.1-5.5
	13-24	---	5-15	5.1-5.5
	24-33	2-9	---	5.6-6.2
	33-60	2-9	---	5.6-6.0
571: Island-----	0-1	---	20-60	4.0-5.5
	1-13	---	5-15	5.1-5.5
	13-24	---	5-15	5.1-5.5
	24-33	2-9	---	5.6-6.2
	33-60	2-9	---	5.6-6.0
572: Island, forested-----	0-1	---	20-60	4.0-5.5
	1-13	---	5-15	5.1-5.5
	13-24	---	5-15	5.1-5.5
	24-33	2-9	---	5.6-6.2
	33-60	2-9	---	5.6-6.0
573: Kachemak-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
574: Kachemak-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
575: Kachemak-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
576: Kachemak-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
577: Kachemak-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
578: Kachemak, cool-----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
579: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
580: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
581: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
582: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
583: Kachemak, forested -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
584: Kachemak, forested -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
585: Kachemak, forested -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
586: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
Snowdance -----	0-3	---	20-60	4.0-5.5
	3-8	---	5-15	4.5-5.5
	8-24	---	5-10	4.5-5.5
	24-60	4-15	2-5	5.1-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
587: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
Snowdance -----	0-3	---	20-60	4.0-5.5
	3-8	---	5-15	4.5-5.5
	8-24	---	5-10	4.5-5.5
	24-60	4-15	2-5	5.1-6.0
588: Kachemak, cool -----	0-3	---	20-60	3.5-5.5
	3-8	---	5-15	4.0-6.0
	8-30	---	5-15	4.0-6.0
	30-60	---	2-5	4.5-6.0
Snowdance -----	0-3	---	20-60	4.0-5.5
	3-8	---	5-15	4.5-5.5
	8-24	---	5-10	4.5-5.5
	24-60	4-15	2-5	5.1-6.0
589: Kalifonsky -----	0-2	---	15-70	4.0-5.5
	2-9	---	5-15	4.5-5.5
	9-16	---	1-5	4.5-5.5
	16-60	---	1-3	5.1-6.0
590: Kalifonsky -----	0-2	---	15-70	4.0-5.5
	2-9	---	5-15	4.5-5.5
	9-16	---	1-5	4.5-5.5
	16-60	---	1-3	5.1-6.0
591: Kalifonsky -----	0-2	---	15-70	4.0-5.5
	2-9	---	5-15	4.5-5.5
	9-16	---	1-5	4.5-5.5
	16-60	---	1-3	5.1-6.0
Typic Cryorthents -----	0-1	---	20-60	4.0-5.5
	1-33	---	3-15	4.8-7.3
	33-60	---	3-15	4.8-8.0
592: Karluk -----	0-3	---	25-110	4.0-5.5
	3-10	---	5-30	4.5-5.5
	10-17	---	5-30	4.5-5.5
	17-60	---	5-30	4.5-5.5
593: Kashwitna -----	0-3	---	20-60	3.6-5.5
	3-5	---	5-15	3.6-5.5
	5-21	---	5-25	4.5-5.5
	21-60	---	1-5	5.0-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
594: Kashwitna -----	0-3	---	20-60	3.6-5.5
	3-5	---	5-15	3.6-5.5
	5-21	---	5-25	4.5-5.5
	21-60	---	1-5	5.0-6.0
595: Kashwitna -----	0-3	---	20-60	3.6-5.5
	3-5	---	5-15	3.6-5.5
	5-21	---	5-25	4.5-5.5
	21-60	---	1-5	5.0-6.0
596: Kashwitna, moderately steep -----	0-3	---	20-60	3.6-5.5
	3-5	---	5-15	3.6-5.5
	5-21	---	5-25	4.5-5.5
	21-60	---	1-5	5.0-6.0
Kashwitna, strongly sloping -----	0-3	---	20-60	3.6-5.5
	3-5	---	5-15	3.6-5.5
	5-21	---	5-25	4.5-5.5
	21-60	---	1-5	5.0-6.0
597: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
598: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
599: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
600: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
601: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
602: Kenai, moderately steep -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
Kenai, gently sloping -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
603: Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
604: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
605: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
606: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
607: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
608: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
609: Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
Killey-----	0-2	---	20-60	4.0-5.5
	2-6	---	5-15	4.5-5.5
	6-29	---	1-5	4.5-5.5
	29-60	---	1-5	4.5-5.5
610: Kidazqeni-----	0-4	---	15-25	4.5-5.5
	4-21	5-15	---	5.1-6.0
	21-60	2-7	---	5.1-6.0
611: Killey-----	0-2	---	20-60	4.0-5.5
	2-6	---	5-15	4.5-5.5
	6-29	---	1-5	4.5-5.5
	29-60	---	1-5	4.5-5.5
Moose River-----	0-5	---	20-60	4.0-5.5
	5-10	30-60	---	5.6-6.0
	10-39	2-7	---	5.6-6.0
	39-60	---	---	4.5-5.5
612: Liten -----	0-2	---	20-60	4.0-5.5
	2-8	---	5-25	4.5-6.0
	8-60	1-5	---	5.6-6.5
613: Lithic Haplocryands -----	0-2	---	20-60	4.0-5.5
	2-12	---	5-15	4.5-5.5
	12-60	---	---	---
Alic Haplocryands-----	0-4	---	15-70	4.0-6.0
	4-21	---	5-15	4.5-5.5
	21-31	5-15	2-5	5.1-6.0
	31-60	---	---	---
Rock outcrop-----	---	---	---	---
614: Lithic Haplocryands -----	0-2	---	20-60	4.0-5.5
	2-12	---	5-15	4.5-5.5
	12-60	---	---	---
Alic Haplocryands-----	0-4	---	15-70	4.0-6.0
	4-21	---	5-15	4.5-5.5
	21-31	5-15	2-5	5.1-6.0
	31-60	---	---	---
Rock outcrop-----	---	---	---	---

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
615: Longmare -----	0-3	---	15-70	4.0-5.0
	4-6	---	3-15	4.5-5.3
	6-18	---	3-15	4.9-5.7
	18-29	10-25	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
616: Longmare -----	0-3	---	15-70	4.0-5.0
	4-6	---	3-15	4.5-5.3
	6-18	---	3-15	4.9-5.7
	18-29	10-25	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
617: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
618: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
619: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
620: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
621: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
622: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
623: Mutnala -----	0-4	---	15-70	4.0-6.0
	4-7	---	5-25	4.5-5.0
	7-23	---	2-8	5.1-5.5
	23-60	---	---	5.1-6.0
Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
Slikok -----	0-13	---	25-110	4.0-5.5
	13-51	---	5-15	5.1-5.5
	51-60	---	1-5	5.1-5.5
624: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
625: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
626: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
627: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
628: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
629: Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
630: Naptowne, moderately steep -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
Naptowne, moderately steep -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
631: Naptowne, moderately steep -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
Naptowne, gently sloping -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5
632: Niklason -----	0-2	---	15-50	4.0-6.0
	2-6	---	5-25	4.5-6.0
	6-23	2-7	2-5	5.1-6.5
	23-60	2-7	1-3	5.1-6.5
633: Nikolaevsk -----	0-2	---	20-60	4.0-5.5
	2-20	---	5-22	4.5-5.5
	20-60	2-8	1-4	5.4-6.0
634: Nikolaevsk -----	0-2	---	20-60	4.0-5.5
	2-20	---	5-22	4.5-5.5
	20-60	2-8	1-4	5.4-6.0
635: Nikolaevsk -----	0-2	---	20-60	4.0-5.5
	2-20	---	5-22	4.5-5.5
	20-60	2-8	1-4	5.4-6.0
636: Nikolai -----	0-2	---	15-70	4.0-6.0
	2-32	---	25-110	4.0-5.5
	32-41	---	2-5	4.5-5.5
	41-60	---	1-3	4.8-6.2
637: Nikolai, somewhat poorly drained -----	0-2	---	15-70	4.0-6.0
	2-32	---	25-110	4.0-5.5
	32-41	---	2-5	4.5-5.5
	41-60	---	1-3	4.8-6.2
Tuxedni -----	0-2	---	15-70	3.5-5.0
	2-24	---	5-15	4.2-5.5
	24-36	5-20	---	5.6-6.5
	36-60	4-12	---	5.6-6.5
638: Puntilla -----	0-6	---	20-60	3.6-5.5
	6-10	---	5-15	3.6-5.5
	10-36	---	5-25	3.6-5.5
	36-60	---	2-5	4.5-5.5
639: Puntilla -----	0-6	---	20-60	3.6-5.5
	6-10	---	5-15	3.6-5.5
	10-36	---	5-25	3.6-5.5
	36-60	---	2-5	4.5-5.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
640: Qutal-----	0-3	---	15-70	4.0-6.0
	3-10	---	5-15	4.5-5.5
	10-24	---	2-8	4.5-5.5
	24-48	5-15	---	5.2-6.0
	48-60	2-7	---	5.5-6.0
641: Qutal-----	0-3	---	15-70	4.0-6.0
	3-10	---	5-15	4.5-5.5
	10-24	---	2-8	4.5-5.5
	24-48	5-15	---	5.2-6.0
	48-60	2-7	---	5.5-6.0
642: Qutal-----	0-3	---	15-70	4.0-6.0
	3-10	---	5-15	4.5-5.5
	10-24	---	2-8	4.5-5.5
	24-48	5-15	---	5.2-6.0
	48-60	2-7	---	5.5-6.0
643: Redoubt, terraces-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
644: Redoubt-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
645: Redoubt-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
646: Redoubt, cool-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
647: Redoubt, moderately steep-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
Redoubt, gently sloping-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
648: Redoubt, cool-----	0-2	---	15-70	4.0-5.0
	2-22	---	5-23	4.0-5.7
	22-60	2-9	1-5	4.5-5.7
Tuxedni-----	0-2	---	15-70	3.5-5.0
	2-24	---	5-15	4.2-5.5
	24-36	5-20	---	5.6-6.5
	36-60	4-12	---	5.6-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
649: Riverwash-----	---	---	---	---
650: Salamatof-----	0-4 4-60	--- ---	20-60 20-60	3.0-5.0 3.0-5.0
Doroshin-----	0-36 36-60	--- ---	15-70 ---	4.0-6.0 4.5-5.5
651: Salamatof-----	0-4 4-60	--- ---	20-60 20-60	3.0-5.0 3.0-5.0
652: Slikok-----	0-13 13-51 51-60	--- --- ---	25-110 5-15 1-5	4.0-5.5 5.1-5.5 5.1-5.5
653: Slikok-----	0-13 13-51 51-60	--- --- ---	25-110 5-15 1-5	4.0-5.5 5.1-5.5 5.1-5.5
654: Smithfha-----	0-3 3-4 4-18 18-60	--- 10-20 10-20 1-5	15-25 --- --- ---	4.5-5.5 5.6-6.5 5.6-6.5 5.6-6.5
655: Smithfha-----	0-3 3-4 4-18 18-60	--- 10-20 10-20 1-5	15-25 --- --- ---	4.5-5.5 5.6-6.5 5.6-6.5 5.6-6.5
656: Smokey Bay-----	0-2 2-9 9-55 55-60	--- 20-50 5-15 5-15	25-110 --- --- ---	4.0-5.5 5.6-6.5 5.6-6.5 5.6-7.0
657: Smokey Bay-----	0-2 2-9 9-55 55-60	--- 20-50 5-15 5-15	25-110 --- --- ---	4.0-5.5 5.6-6.5 5.6-6.5 5.6-7.0
658: Snowdance-----	0-3 3-8 8-24 24-60	--- --- --- 4-15	20-60 5-15 5-10 2-5	4.0-5.5 4.5-5.5 4.5-5.5 5.1-6.0
659: Soldotna-----	0-4 4-7 7-22 22-29 29-60	--- --- --- 5-15 2-9	15-70 3-15 3-15 3-7 1-3	4.0-5.0 4.5-5.7 4.5-5.7 5.0-6.0 5.3-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
660: Soldotna -----	In.			
	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
661: Soldotna -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
662: Soldotna -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
663: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
664: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
665: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
666: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
667: Soldotna, strongly sloping -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Soldotna, gently sloping -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
668: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
669: Soldotna, sandy substratum -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Kenai -----	0-2	---	15-70	4.0-6.0
	2-6	---	5-15	4.3-5.5
	6-19	4-20	---	4.8-6.0
	19-24	4-15	---	5.5-6.5
	25-60	10-33	---	6.0-7.0
670: Soldotna -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5
671: Soldotna -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Kichatna -----	0-2	---	15-25	4.0-5.5
	2-4	---	5-15	5.1-6.0
	4-11	---	5-15	5.1-6.0
	11-14	4-8	---	5.6-6.0
	14-60	3-5	---	5.6-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
672: Soldotna -----	0-4	---	15-70	4.0-5.0
	4-7	---	3-15	4.5-5.7
	7-22	---	3-15	4.5-5.7
	22-29	5-15	3-7	5.0-6.0
	29-60	2-9	1-3	5.3-6.5
Nikolai -----	0-2	---	15-70	4.0-6.0
	2-32	---	25-110	4.0-5.5
	32-41	---	2-5	4.5-5.5
	41-60	---	1-3	4.8-6.2
673: Spenard -----	0-9	---	20-60	4.0-5.0
	9-14	---	5-15	4.5-5.5
	14-25	---	2-10	4.5-5.8
	25-60	---	1-8	4.5-5.8
674: Spenard -----	0-9	---	20-60	4.0-5.0
	9-14	---	5-15	4.5-5.5
	14-25	---	2-10	4.5-5.8
	25-60	---	1-8	4.5-5.8
675: Spenard -----	0-9	---	20-60	4.0-5.0
	9-14	---	5-15	4.5-5.5
	14-25	---	2-10	4.5-5.8
	25-60	---	1-8	4.5-5.8
676: Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
Doroshin -----	0-36	---	15-70	4.0-6.0
	36-60	---	---	4.5-5.5
677: Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
678: Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
679: Starichkof, forested -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
680: Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
Slikok -----	0-13	---	25-110	4.0-5.5
	13-51	---	5-15	5.1-5.5
	51-60	---	1-5	5.1-5.5
Naptowne -----	0-3	---	15-50	4.0-6.0
	3-14	---	3-15	4.0-6.0
	13-20	---	3-15	4.5-6.5
	20-60	2-30	2-15	5.3-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
681: Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
Spenard -----	0-9	---	20-60	4.0-5.0
	9-14	---	5-15	4.5-5.5
	14-25	---	2-10	4.5-5.8
	25-60	---	1-8	4.5-5.8
682: Susitna -----	0-2	---	15-70	4.0-6.0
	2-3	---	8-20	4.5-5.5
	3-45	4-9	2-5	5.1-6.0
	45-60	2-8	1-3	5.1-6.0
Riverwash -----	---	---	---	---
683: Susitna -----	0-2	---	15-70	4.0-6.0
	2-3	---	8-20	4.5-5.5
	3-45	4-9	2-5	5.1-6.0
	45-60	2-8	1-3	5.1-6.0
684: Talkeetna -----	0-2	---	15-60	4.0-5.5
	2-7	---	5-25	3.6-5.0
	7-19	---	20-30	3.6-5.0
	19-60	---	1-5	4.5-6.0
685: Talkeetna -----	0-2	---	15-60	4.0-5.5
	2-7	---	5-25	3.6-5.0
	7-19	---	20-30	3.6-5.0
	19-60	---	1-5	4.5-6.0
686: Talkeetna -----	0-2	---	15-60	4.0-5.5
	2-7	---	5-25	3.6-5.0
	7-19	---	20-30	3.6-5.0
	19-60	---	1-5	4.5-6.0
Starichkof -----	0-7	---	20-60	4.0-5.0
	7-60	---	20-60	4.0-5.0
687: Tangerra -----	0-4	---	15-50	4.0-5.0
	4-8	---	5-15	4.2-5.5
	8-16	---	3-5	4.2-5.5
	16-46	2-7	---	5.6-6.8
	46-60	2-7	---	5.6-6.8
688: Beaches, tidal flats -----	---	---	---	---
689: Tliikakila -----	0-1	---	15-50	3.5-5.0
	1-19	---	5-15	4.0-5.0
	19-34	---	2-9	4.0-5.5
	34-60	---	2-9	4.5-5.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
690: Tliikakila -----	0-1	---	15-50	3.5-5.0
	1-19	---	5-15	4.0-5.0
	19-34	---	2-9	4.0-5.5
	34-60	---	2-9	4.5-5.5
691: Tliikakila -----	0-1	---	15-50	3.5-5.0
	1-19	---	5-15	4.0-5.0
	19-34	---	2-9	4.0-5.5
	34-60	---	2-9	4.5-5.5
692: Tokositna -----	0-2	---	20-60	4.0-5.5
	2-13	---	5-25	4.0-6.0
	13-24	---	2-8	4.5-6.0
	24-60	2-7	---	5.6-6.5
693: Tokositna -----	0-2	---	20-60	4.0-5.5
	2-13	---	5-25	4.0-6.0
	13-24	---	2-8	4.5-6.0
	24-60	2-7	---	5.6-6.5
694: Tokositna -----	0-2	---	20-60	4.0-5.5
	2-13	---	5-25	4.0-6.0
	13-24	---	2-8	4.5-6.0
	24-60	2-7	---	5.6-6.5
695: Truuli -----	0-9	---	10-60	3.5-5.5
	9-19	---	5-15	3.5-5.5
	19-43	---	3-10	3.5-5.5
	43-60	5-15	2-5	3.5-6.0
696: Tutka -----	0-7	---	15-50	4.0-5.5
	7-13	---	5-25	4.2-5.5
	13-21	---	8-25	4.2-5.5
	21-60	---	---	---
Kasitsna -----	0-3	---	15-70	4.0-6.0
	3-18	---	5-22	4.5-6.0
	18-31	---	2-8	4.5-5.5
	31-60	2-7	---	5.6-6.0
Rock outcrop -----	---	---	---	---
697: Tutka -----	0-7	---	15-50	4.0-5.5
	7-13	---	5-25	4.2-5.5
	13-21	---	8-25	4.2-5.5
	21-60	---	---	---
Portgraham -----	0-2	---	20-60	4.0-5.5
	2-4	---	5-15	4.0-5.0
	4-27	---	5-25	4.5-6.0
	27-60	---	---	---

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
		meq/100 g	meq/100 g	pH
698:				
Tuxedni -----	0-2	---	15-70	3.5-5.0
	2-24	---	5-15	4.2-5.5
	24-36	5-20	---	5.6-6.5
	36-60	4-12	---	5.6-6.5
699:				
Tuxedni -----	0-2	---	15-70	3.5-5.0
	2-24	---	5-15	4.2-5.5
	24-36	5-20	---	5.6-6.5
	36-60	4-12	---	5.6-6.5
700:				
Tuxedni, warm -----	0-2	---	15-70	3.5-5.0
	2-24	---	5-15	4.2-5.5
	24-36	5-20	---	5.6-6.5
	36-60	4-12	---	5.6-6.5
701:				
Typic Cryaquents -----	0-2	50-150	---	6.0-7.0
	2-6	5-30	---	6.6-8.4
	6-60	2-20	---	7.4-8.4
702:				
Typic Cryopsamments -----	0-60	1-5	---	6.1-7.3
703:				
Typic Cryorthents -----	0-1	---	20-60	4.0-5.5
	1-33	---	3-15	4.8-7.3
	33-60	---	3-15	4.8-8.0
704:				
Urban land -----	---	---	---	---
705:				
Water, fresh -----	---	---	---	---
706:				
Whitsol -----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5
707:				
Whitsol -----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5
708:				
Whitsol -----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5
709:				
Whitsol -----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5

Table 11. Chemical Properties of the Soils—Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In.	meq/100 g	meq/100 g	pH
710: Whitsol-----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5
711: Whitsol-----	0-3	---	10-30	4.0-5.5
	3-29	---	5-15	4.5-6.0
	29-51	---	2-8	5.1-6.5
	51-60	---	1-3	5.1-6.5
Doroshin-----	0-36	---	15-70	4.0-6.0
	36-60	---	---	4.5-5.5

Table 12. Water Features

(See text for definitions of terms used in this table. Upper limit, Lower limit, and Surface water depth are in feet. 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 soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
501: Aquic Cryofluvents -----	C	Apr-May	1.6-3.3	5.0-5.0	Apparent	---	---	None	Brief	Occasional
		Jun-Jul	---	---	---	---	---	None	Brief	Occasional
		Aug-Sep	1.6-3.3	5.0-5.0	Apparent	---	---	None	Brief	Occasional
502: Aquic Cryofluvents, shallow -----	C	Apr-May	1.6-3.3	5.0-5.0	Apparent	---	---	None	Brief	Occasional
		Jun-Jul	---	---	---	---	---	None	Brief	Occasional
		Aug-Sep	1.6-3.3	5.0-5.0	Apparent	---	---	None	Brief	Occasional
503: Badland, sea cliffs -----	---	Apr-Sep	---	---	---	---	---	None	---	None
504: Badland, sea cliffs -----	---	Apr-Sep	---	---	---	---	---	None	---	None
Typic Cryorthents -----	B	Apr-Sep	---	---	---	---	---	None	---	None
505: Beaches -----	---	Apr-Sep	---	---	---	---	---	None	Very brief	Very frequent
506: Beluga -----	D	Apr-May	0.0-1.3	5.0-5.0	Apparent	0.2-0.7	---	Rare	---	None
		Jun-Aug	0.5-2.0	5.0-5.0	Apparent	0.1-0.7	---	Rare	---	None
		Sep	0.0-1.3	5.0-5.0	Apparent	0.2-0.7	---	Rare	---	None
507: Beluga -----	D	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
508: Beluga -----	D	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
509: Beluga -----	D	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
510: Beluga -----	D	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
Smokey Bay -----	C	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
511: Beluga -----	D	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
Smokey Bay -----	C	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
512: Benka -----	B	Apr-Sep	---	---	---	---	---	None	---	None
513: Benka -----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
514: Benka-----	B	Apr-Sep	---	---	---	---	---	None	---	None
515: Benka-----	B	Apr-Sep	---	---	---	---	---	None	---	None
516: Benka-----	B	Apr-Sep	---	---	---	---	---	None	---	None
517: Benka, strongly sloping ---	B	Apr-Sep	---	---	---	---	---	None	---	None
Benka, gently sloping-----	B	Apr-Sep	---	---	---	---	---	None	---	None
518: Boxcar-----	B	Apr-Sep	---	---	---	---	---	None	---	None
519: Boxcar-----	B	Apr-Sep	---	---	---	---	---	None	---	None
520: Boxcar-----	B	Apr-Sep	---	---	---	---	---	None	---	None
521: Boxcar, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
522: Boxcar, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
523: Chenega-----	A	Apr-Sep	---	---	---	---	---	None	Brief	Frequent
524: Chenega, cool-----	A	Apr-Sep	---	---	---	---	---	None	Brief	Frequent
525: Chenega, occasionally flooded-----	A	Apr-Sep	---	---	---	---	---	None	Brief	Occasional
526: Chulitna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
527: Chulitna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
528: Chulitna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
529: Chulitna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
530: Chuniina-----	D	Apr-Sep	0.0-1.5	5.0-5.0	Apparent	---	---	None	---	None
531: Chuniina-----	D	Apr-Sep	0.0-1.5	5.0-5.0	Apparent	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
532: Chunilna, cool -----	D	Apr-Sep	0.0-1.5	5.0-5.0	Apparent	---	---	None	---	None
533: Chunilna, cool -----	D	Apr-Sep	0.0-2.3	5.0-5.0	Apparent	---	---	None	---	None
534: Clam Gulch-----	D	Apr-May	0.0-1.0	5.0-5.0	Apparent	0.0-0.7	---	Rare	---	None
		Jun-Aug	0.0-1.0	5.0-5.0	Apparent	---	---	---	---	None
		Sep	0.0-1.0	5.0-5.0	Apparent	0.0-0.7	---	Rare	---	None
535: Clunie-----	D	Apr-Sep	0.0	5.0-6.0	Apparent	0.0-1.0	Long	Frequent	Brief	Frequent
536: Coal Creek -----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	Brief	Rare
537: Coal Creek -----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
538: Coal Creek -----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
539: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
540: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
541: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
542: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
543: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
544: Cohoe -----	B	Apr-Sep	---	---	---	---	---	None	---	None
545: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
546: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
547: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
548: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
549: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
550: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
551: Cohoe, moderately steep -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Cohoe, gently sloping ----	B	Apr-Sep	---	---	---	---	---	None	---	None
552: Cohoe, dry, moderately steep -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Cohoe, dry, gently sloping -----	B	Apr-Sep	---	---	---	---	---	None	---	None
553: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kenai-----	C	Apr-Sep	---	---	---	---	---	None	---	None
554: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kenai-----	C	Apr-Sep	---	---	---	---	---	None	---	None
555: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Nikolai -----	D	Apr-May Jun-Aug Sep	0.0-1.5 0.0-1.5 0.0-1.5	5.0-6.0 5.0-6.0 5.0-6.0	Apparent Apparent Apparent	0.1-0.3 --- 0.1-0.3	--- --- ---	Rare --- Rare	--- --- ---	None None None
556: Cohoe, dry-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Nikolai -----	D	Apr-May Jun-Aug Sep	0.0-1.5 0.0-1.5 0.0-1.5	5.0-6.0 5.0-6.0 5.0-6.0	Apparent Apparent Apparent	0.1-0.3 --- 0.1-0.3	--- --- ---	Rare --- Rare	--- --- ---	None None None
557: Cytex Creek-----	C	Apr May-Sep	1.6-2.5 0.8-1.6	5.0-5.0 5.0-5.0	Apparent Apparent	--- ---	--- ---	None None	--- ---	None None
558: Doroshin -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.1-0.8	---	Rare	---	None
559: Doroshin -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.1-0.8	---	Rare	---	None
560: Dystrocryepts-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Typic Cryorthents-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Iliamna, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
561: Foreland -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.2-0.8	---	Rare	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
562: Foreland -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.2-0.8	---	Rare	---	None
Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Starichkof -----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
563: Pits, gravel -----	---	---	---	---	---	---	---	---	---	---
564: Iliamna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
565: Iliamna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
566: Iliamna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
567: Iliamna, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
568: Island -----	B	Apr-Sep	---	---	---	---	---	None	---	None
569: Island -----	B	Apr-Sep	---	---	---	---	---	None	---	None
570: Island -----	B	Apr-Sep	---	---	---	---	---	None	---	None
571: Island -----	B	Apr-Sep	---	---	---	---	---	None	---	None
572: Island, forested -----	B	Apr-Sep	---	---	---	---	---	None	---	None
573: Kachemak -----	B	Apr-Sep	---	---	---	---	---	None	---	None
574: Kachemak -----	B	Apr-Sep	---	---	---	---	---	None	---	None
575: Kachemak -----	B	Apr-Sep	---	---	---	---	---	None	---	None
576: Kachemak -----	B	Apr-Sep	---	---	---	---	---	None	---	None
577: Kachemak -----	B	Apr-Sep	---	---	---	---	---	None	---	None
578: Kachemak, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
579: Kachemak, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
580: Kachemak, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
581: Kachemak, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
582: Kachemak, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
583: Kachemak, forested -----	B	Apr-Sep	---	---	---	---	---	None	---	None
584: Kachemak, forested -----	B	Apr-Sep	---	---	---	---	---	None	---	None
585: Kachemak, forested -----	B	Apr-Sep	---	---	---	---	---	None	---	None
586: Kachemak, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Snowdance-----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
587: Kachemak, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Snowdance-----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
588: Kachemak, cool-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Snowdance-----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
589: Kalifonsky-----	D	Apr-Sep	0.0-1.0	5.0-5.0	Apparent	0.2-0.8	---	Rare	---	None
590: Kalifonsky-----	D	Apr-Sep	0.0-1.0	5.0-5.0	Apparent	0.2-0.8	---	Rare	---	None
591: Kalifonsky-----	D	Apr-Sep	0.0-1.0	5.0-5.0	Apparent	0.2-0.8	---	Rare	---	None
Typic Cryorthents-----	B	Apr-Sep	---	---	---	---	---	None	---	None
592: Karluk-----	C	Apr-May	0.8-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Jun-Jul	1.2-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Aug	0.9-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Sep	0.8-2.0	5.0-6.0	Apparent	---	---	None	---	None
593: Kashwitna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
594: Kashwitna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
595: Kashwitna -----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
596: Kashwitna, moderately steep -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kashwitna, strongly sloping -----	B	Apr-Sep	---	---	---	---	---	None	---	None
597: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
598: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
599: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
600: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
601: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
602: Kenai, moderately steep -----	C	Apr-Sep	---	---	---	---	---	None	---	None
Kenai, gently sloping -----	C	Apr-Sep	---	---	---	---	---	None	---	None
603: Kenai -----	C	Apr-Sep	---	---	---	---	---	None	---	None
Starichkof -----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.5	Long	Occasional	---	None
604: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
605: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
606: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
607: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
608: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
609: Kichatna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Killey -----	C	Apr May-Sep	2.0-3.0 1.0-2.0	5.0-6.0 5.0-5.0	Apparent Apparent	---	---	None None	---	---
610: Kidazqeni -----	A	Apr-Sep	---	---	---	---	---	None	---	Rare

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
611: Killey -----	C	Apr	2.0-3.0	5.0-6.0	Apparent	---	---	None	---	---
		May-Sep	1.0-2.0	5.0-5.0	Apparent	---	---	None	Brief	Frequent
Moose River -----	D	Apr	0.0-1.6	5.0-5.0	Apparent	---	---	None	---	---
		May-Sep	0.0-1.6	5.0-5.0	Apparent	---	---	None	Brief	Frequent
612: Liten -----	A	Apr-Sep	---	---	---	---	---	None	---	None
613: Lithic Haplocryands -----	D	Apr-Sep	---	---	---	---	---	None	---	None
Alic Haplocryands -----	C	Apr-Sep	---	---	---	---	---	None	---	None
Rock outcrop -----	---	Apr-Sep	---	---	---	---	---	None	---	None
614: Lithic Haplocryands -----	D	Apr-Sep	---	---	---	---	---	None	---	None
Alic Haplocryands -----	C	Apr-Sep	---	---	---	---	---	None	---	None
Rock outcrop -----	---	Apr-Sep	---	---	---	---	---	None	---	None
615: Longmare -----	C	Apr-May	2.0-2.5	5.0-5.0	Apparent	---	---	None	---	None
		Jun-Aug	---	---	---	---	---	None	---	None
		Sep	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
616: Longmare -----	C	Apr-May	2.0-2.5	5.0-5.0	Apparent	---	---	None	---	None
		Jun-Aug	---	---	---	---	---	None	---	None
		Sep	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
617: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
618: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
619: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
620: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
621: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
622: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
623: Mutnala -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Starichkof -----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
Slikok -----	D	Apr-Aug	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	Brief	Occasional
		Sep	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	---	---

Table 12. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
624: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
625: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
626: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
627: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
628: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
629: Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
630: Naptowne, moderately steep -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Naptowne, strongly sloping -----	B	Apr-Sep	---	---	---	---	---	None	---	None
631: Naptowne, strongly sloping -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Naptowne, gently sloping -----	B	Apr-Sep	---	---	---	---	---	None	---	None
632: Niklason-----	B	Apr-Sep	---	---	---	---	---	None	Brief	Occasional
633: Nikolaevsk-----	D	Apr-Sep	0.8-1.6	5.0-5.0	Apparent	---	---	None	---	None
634: Nikolaevsk-----	D	Apr-Sep	0.8-1.6	5.0-5.0	Apparent	---	---	None	---	None
635: Nikolaevsk-----	D	Apr-Sep	0.8-1.6	5.0-5.0	Apparent	---	---	None	---	None
636: Nikolai -----	D	Apr-May	0.0-1.5	5.0-6.0	Apparent	0.1-0.3	---	Rare	---	None
		Jun-Aug	0.0-1.5	5.0-6.0	Apparent	---	---	---	---	None
		Sep	0.0-1.5	5.0-6.0	Apparent	0.1-0.3	---	Rare	---	None
637: Nikolai, somewhat poorly drained -----	D	Apr-Sep	1.6-2.5	5.0-6.0	Apparent	---	---	None	---	None
Tuxedni-----	C	Apr-Sep	1.1-2.5	5.0-5.0	Apparent	---	---	None	---	None
638: Puntilla -----	B	Apr-Sep	---	---	---	---	---	None	---	None
639: Puntilla -----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
640: Qutal -----	C	Apr-May	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
		Jun-Aug	---	---	---	---	---	None	---	None
		Sep	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
641: Qutal -----	C	Apr-May	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
		Jun-Aug	---	---	---	---	---	None	---	None
		Sep	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
642: Qutal -----	C	Apr-May	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
		Jun-Aug	---	---	---	---	---	None	---	None
		Sep	1.6-2.5	5.0-5.0	Apparent	---	---	None	---	None
643: Redoubt, terraces -----	B	Apr-Sep	---	---	---	---	---	None	---	None
644: Redoubt -----	B	Apr-Sep	---	---	---	---	---	None	---	None
645: Redoubt -----	B	Apr-Sep	---	---	---	---	---	None	---	None
646: Redoubt, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
647: Redoubt, moderately steep -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Redoubt, gently sloping---	B	Apr-Sep	---	---	---	---	---	None	---	None
648: Redoubt, cool -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Tuxedni -----	C	Apr-Sep	1.1-2.5	5.0-5.0	Apparent	---	---	None	---	None
649: Riverwash -----	---	Apr-Sep	---	---	---	---	---	None	Long	Very frequent
650: Salamatof -----	D	Apr-Sep	0.0	5.0-6.0	Apparent	0.0-1.0	Very long	Occasional	---	None
Doroshin -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.1-0.8	---	Rare	---	None
651: Salamatof -----	D	Apr-Sep	0.0	5.0-6.0	Apparent	0.0-1.0	Very long	Occasional	---	None
652: Slikok -----	D	Apr-Aug	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	Brief	Occasional
		Sep	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	---	---
653: Slikok -----	D	Apr-Aug	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	Brief	Occasional
		Sep	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	---	---
654: Smithfha -----	B	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
655: Smithfha -----	B	Apr-Sep	---	---	---	---	---	None	---	None
656: Smokey Bay -----	C	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
657: Smokey Bay -----	C	Apr-Sep	0.5-2.0	5.0-5.0	Apparent	---	---	None	---	None
658: Snowdance-----	D	Apr-Sep	0.5-2.0	5.0-6.0	Apparent	---	---	None	---	None
659: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
660: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
661: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
662: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
663: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
664: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
665: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
666: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
667: Soldotna, strongly sloping-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Soldotna, gently sloping-----	B	Apr-Sep	---	---	---	---	---	None	---	None
668: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kenai-----	C	Apr-Sep	---	---	---	---	---	None	---	None
669: Soldotna, sandy substratum-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kenai-----	C	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
670: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kichatna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
671: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Kichatna-----	B	Apr-Sep	---	---	---	---	---	None	---	None
672: Soldotna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Nikolai -----	D	Apr-May	0.0-1.5	5.0-6.0	Apparent	0.1-0.3	---	Rare	---	None
		Jun-Aug	0.0-1.5	5.0-6.0	Apparent	---	---	---	---	None
		Sep	0.0-1.5	5.0-6.0	Apparent	0.1-0.3	---	Rare	---	None
673: Spenard -----	D	Apr-May	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Jun-Jul	1.0-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Aug-Sep	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
674: Spenard -----	D	Apr-May	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Jun-Jul	1.0-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Aug-Sep	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
675: Spenard -----	D	Apr-May	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Jun-Jul	1.0-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Aug-Sep	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
676: Starichkof-----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
Doroshin -----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.1-0.8	---	Rare	---	None
677: Starichkof-----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
678: Starichkof-----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
679: Starichkof, forested -----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
680: Starichkof-----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.5	Long	Occasional	---	None
Slikok -----	D	Apr-Aug	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	Brief	Occasional
		Sep	0.0-0.3	5.0-5.0	Apparent	0.0-1.0	Long	Occasional	---	---
Naptowne-----	B	Apr-Sep	---	---	---	---	---	None	---	None
681: Starichkof-----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
Spenard -----	D	Apr-May	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Jun-Jul	1.0-2.0	5.0-6.0	Apparent	---	---	None	---	None
		Aug-Sep	0.7-2.0	5.0-6.0	Apparent	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro-logic group	Month	Wet soil			Ponding			Flooding	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.		Ft.				
682: Susitna -----	B	Apr-Sep	---	---	---	---	---	None	---	Rare
Riverwash -----	---	Apr-Sep	---	---	---	---	---	None	Long	Very frequent
683: Susitna -----	B	Apr-Sep	---	---	---	---	---	None	---	Rare
684: Talkeetna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
685: Talkeetna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
686: Talkeetna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Starichkof -----	D	Apr-Sep	0.0-0.8	5.0-5.0	Apparent	0.0-0.3	Brief	Occasional	---	None
687: Tangerra -----	D	Apr	0.8-1.6	5.0-5.0	Apparent	---	---	None	---	None
		May-Sep	0.0-1.0	5.0-5.0	Apparent	---	---	None	---	None
688: Beaches, tidal flats -----	---	Apr-Sep	---	---	---	---	---	None	Very brief	Very frequent
689: Tlikakila -----	C	Apr-Sep	1.1-2.0	5.0-5.0	Apparent	---	---	None	---	None
690: Tlikakila -----	C	Apr-Sep	1.1-2.0	5.0-5.0	Apparent	---	---	None	---	None
691: Tlikakila -----	C	Apr-Sep	1.1-2.0	5.0-5.0	Apparent	---	---	None	---	None
692: Tokositna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
693: Tokositna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
694: Tokositna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
695: Truuli -----	C	Apr-Jun	0.7-1.5	5.0-5.0	Apparent	---	---	None	---	None
		Jul-Aug	---	---	---	---	---	None	---	None
		Sep	0.7-1.5	5.0-5.0	Apparent	---	---	None	---	None
696: Tutka -----	D	Apr-Sep	---	---	---	---	---	None	---	None
Kasitsna -----	B	Apr-Sep	---	---	---	---	---	None	---	None
Rock outcrop -----	---	Apr-Sep	---	---	---	---	---	None	---	None

Table 12. Water Features—Continued

Map symbol and soil name	Hydro- logic group	Month	Wet soil		Ponding	Flooding		Duration	Frequency	
			Upper limit	Lower limit	Water table kind	Surface water depth	Duration			Frequency
			Ft.	Ft.		Ft.				
697: Tutka-----	D	Apr-Sep	---	---	---	---	---	None	---	None
Portgraham-----	C	Apr-Sep	---	---	---	---	---	None	---	None
698: Tuxedni-----	C	Apr-Sep	1.1-2.5	5.0-5.0	Apparent	---	---	None	---	None
699: Tuxedni-----	C	Apr-Sep	1.1-2.5	5.0-5.0	Apparent	---	---	None	---	None
700: Tuxedni, warm-----	B	Apr-Sep	1.1-2.5	5.0-5.0	Apparent	---	---	None	---	None
701: Typic Cryaquents-----	D	Apr-Sep	0.3-2.0	5.0-6.0	Apparent	---	---	None	Very brief	Frequent
702: Typic Cryopsamments---	A	Apr-Sep	---	---	---	---	---	None	---	None
703: Typic Cryorthents-----	B	Apr-Sep	---	---	---	---	---	None	---	None
704: Urban land-----	---	---	---	---	---	---	---	---	---	---
705: Water, fresh-----	---	---	---	---	---	---	---	---	---	---
706: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
707: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
708: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
709: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
710: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
711: Whitsol-----	B	Apr-Sep	---	---	---	---	---	None	---	None
Doroshin-----	D	Apr-Sep	0.0-1.0	5.0-6.0	Apparent	0.1-0.8	---	Rare	---	None

Table 13. 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 soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
501: Aquic Cryofluvents -----	none	---	---	0	0	High	Moderate	Moderate
502: Aquic Cryofluvents, shallow -----	none	---	---	0	0	High	Moderate	Moderate
503: Badland, sea cliffs -----	none	---	---	---	---	---	---	---
504: Badland, sea cliffs -----	none	---	---	---	---	---	---	---
Typic Cryorthents -----	none	---	---	0	0	Moderate	Moderate	Moderate
505: Beaches -----	none	---	---	---	---	---	---	---
506: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
507: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
508: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
509: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
Mutnala -----	none	---	---	0	0	High	High	High
510: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
Smokey Bay -----	none	---	---	0	0	High	Moderate	Moderate
511: Beluga -----	none	---	---	0	0	High	Moderate	Moderate
Smokey Bay -----	none	---	---	0	0	High	Moderate	Moderate
512: Benka -----	none	---	---	0	0	High	High	High
513: Benka -----	none	---	---	0	0	High	High	High
514: Benka -----	none	---	---	0	0	High	High	High
515: Benka -----	none	---	---	0	0	High	High	High
516: Benka -----	none	---	---	0	0	High	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
517: Benka, strongly sloping -----	none	---	---	0	0	High	High	High
Benka, gently sloping -----	none	---	---	0	0	High	High	High
518: Boxcar -----	none	---	---	0	0	High	High	High
519: Boxcar -----	none	---	---	0	0	High	High	High
520: Boxcar -----	none	---	---	0	0	High	High	High
521: Boxcar, cool -----	none	---	---	0	0	High	High	High
522: Boxcar, cool -----	none	---	---	0	0	High	High	High
523: Chenega -----	none	---	---	0	0	Low	Moderate	Moderate
524: Chenega, cool -----	none	---	---	0	0	Low	Moderate	Moderate
525: Chenega, occasionally flooded -----	none	---	---	0	0	Low	Moderate	Moderate
526: Chulitna -----	none	---	---	0	0	High	High	High
527: Chulitna -----	none	---	---	0	0	High	High	High
528: Chulitna -----	none	---	---	0	0	High	High	High
529: Chulitna -----	none	---	---	0	0	High	High	High
530: Chunilna -----	none	---	---	0	0	High	High	High
531: Chunilna -----	none	---	---	0	0	High	High	High
532: Chunilna, cool -----	none	---	---	0	0	High	High	High
533: Chunilna, cool -----	none	---	---	0	0	High	High	High
534: Clam Gulch -----	none	---	---	0	0	High	Moderate	High
535: Clunie -----	none	---	---	8-16	16-31	High	Moderate	Moderate

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
536: Coal Creek -----	none	---	---	0	0	High	High	High
537: Coal Creek -----	none	---	---	0	0	High	High	High
538: Coal Creek -----	none	---	---	0	0	High	High	High
539: Cohoe -----	none	---	---	0	0	High	High	High
540: Cohoe -----	none	---	---	0	0	High	High	High
541: Cohoe -----	none	---	---	0	0	High	High	High
542: Cohoe -----	none	---	---	0	0	High	High	High
543: Cohoe -----	none	---	---	0	0	High	High	High
544: Cohoe -----	none	---	---	0	0	High	High	High
545: Cohoe, dry-----	none	---	---	0	0	High	High	High
546: Cohoe, dry-----	none	---	---	0	0	High	High	High
547: Cohoe, dry-----	none	---	---	0	0	High	High	High
548: Cohoe, dry-----	none	---	---	0	0	High	High	High
549: Cohoe, dry-----	none	---	---	0	0	High	High	High
550: Cohoe, dry-----	none	---	---	0	0	High	High	High
551: Cohoe, moderately steep-----	none	---	---	0	0	High	High	High
Cohoe, gently sloping -----	none	---	---	0	0	High	High	High
552: Cohoe, dry, moderately steep-----	none	---	---	0	0	High	High	High
Cohoe, dry, gently sloping -----	none	---	---	0	0	High	High	High
553: Cohoe, dry-----	none	---	---	0	0	High	High	High
Kenai-----	none	---	---	0	0	Moderate	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
554: Cohoe, dry-----	none	---	---	0	0	High	High	High
Kenai-----	none	---	---	0	0	Moderate	High	High
555: Cohoe, dry-----	none	---	---	0	0	High	High	High
Nikolai -----	none	---	---	18-26	26-35	High	High	High
556: Cohoe, dry-----	none	---	---	0	0	High	High	High
Nikolai -----	none	---	---	18-26	26-35	High	High	High
557: Cytex Creek-----	none	---	---	0	0	High	Moderate	High
558: Doroshin -----	none	---	---	12-25	24-36	High	High	High
559: Doroshin -----	none	---	---	12-25	24-36	High	High	High
560: Dystrocryepts-----	none	---	---	0	0	Low	Moderate	High
Typic Cryorthents-----	none	---	---	0	0	Moderate	Moderate	Moderate
Iliamna, cool -----	none	---	---	0	0	High	High	High
561: Foreland -----	none	---	---	0	0	High	High	High
562: Foreland -----	none	---	---	0	0	High	High	High
Soldotna -----	none	---	---	0	0	High	High	High
Starichkof-----	none	---	---	41	60	High	High	High
563: Pits, gravel -----	none	---	---	---	---	---	---	---
564: Iliamna-----	none	---	---	0	0	High	High	High
565: Iliamna-----	none	---	---	0	0	High	High	High
566: Iliamna-----	none	---	---	0	0	High	High	High
567: Iliamna, cool -----	none	---	---	0	0	High	High	High
568: Island -----	none	---	---	0	0	High	Moderate	Moderate

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
569: Island -----	none	---	---	0	0	High	Moderate	Moderate
570: Island -----	none	---	---	0	0	High	Moderate	Moderate
571: Island -----	none	---	---	0	0	High	Moderate	Moderate
572: Island, forested-----	none	---	---	0	0	High	Moderate	Moderate
573: Kachemak -----	none	---	---	0	0	High	High	High
574: Kachemak -----	none	---	---	0	0	High	High	High
575: Kachemak -----	none	---	---	0	0	High	High	High
576: Kachemak -----	none	---	---	0	0	High	High	High
577: Kachemak -----	none	---	---	0	0	High	High	High
578: Kachemak, cool-----	none	---	---	0	0	High	High	High
579: Kachemak, cool-----	none	---	---	0	0	High	High	High
580: Kachemak, cool-----	none	---	---	0	0	High	High	High
581: Kachemak, cool-----	none	---	---	0	0	High	High	High
582: Kachemak, cool-----	none	---	---	0	0	High	High	High
583: Kachemak, forested -----	none	---	---	0	0	High	High	High
584: Kachemak, forested -----	none	---	---	0	0	High	High	High
585: Kachemak, forested -----	none	---	---	0	0	High	High	High
586: Kachemak, cool-----	none	---	---	0	0	High	High	High
Snowdance-----	none	---	---	0	0	High	High	High
587: Kachemak, cool-----	none	---	---	0	0	High	High	High
Snowdance-----	none	---	---	0	0	High	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
588: Kachemak, cool-----	none	---	---	0	0	High	High	High
Snowdance-----	none	---	---	0	0	High	High	High
589: Kalifonsky-----	none	---	---	0	0	High	High	High
590: Kalifonsky-----	none	---	---	0	0	High	High	High
591: Kalifonsky-----	none	---	---	0	0	High	High	High
Typic Cryorthents-----	none	---	---	0	0	Moderate	Moderate	Moderate
592: Karluk-----	none	---	---	0	0	High	Moderate	High
593: Kashwitna-----	none	---	---	0	0	High	High	High
594: Kashwitna-----	none	---	---	0	0	High	High	High
595: Kashwitna-----	none	---	---	0	0	High	High	High
596: Kashwitna, moderately steep-----	none	---	---	0	0	High	High	High
Kashwitna, strongly sloping-----	none	---	---	0	0	High	High	High
597: Kenai-----	none	---	---	0	0	Moderate	High	High
598: Kenai-----	none	---	---	0	0	Moderate	High	High
599: Kenai-----	none	---	---	0	0	Moderate	High	High
600: Kenai-----	none	---	---	0	0	Moderate	High	High
601: Kenai-----	none	---	---	0	0	Moderate	High	High
602: Kenai, moderately steep-----	none	---	---	0	0	Moderate	High	High
Kenai, gently sloping-----	none	---	---	0	0	Moderate	High	High
603: Kenai-----	none	---	---	0	0	Moderate	High	High
Starichkof-----	none	---	---	41	60	High	High	High
604: Kichatna-----	none	---	---	0	0	Low	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top In.	Hardness	Initial In.	Total In.		Uncoated steel	Concrete
605: Kichatna-----	none	---	---	0	0	Low	High	High
606: Kichatna-----	none	---	---	0	0	Low	High	High
607: Kichatna-----	none	---	---	0	0	Low	High	High
608: Kichatna-----	none	---	---	0	0	Low	High	High
609: Kichatna-----	none	---	---	0	0	Low	High	High
Killey-----	none	---	---	0	0	High	High	High
610: Kidazqeni-----	none	---	---	0	0	Low	Moderate	Moderate
611: Killey-----	none	---	---	0	0	High	High	High
Moose River-----	none	---	---	0	0	High	High	High
612: Liten-----	none	---	---	0	0	Low	High	High
613: Lithic Haplocryands-----	Bedrock (lithic)	8-19	Indurated	0	0	High	High	High
Alic Haplocryands-----	Bedrock (lithic)	22-60	Indurated	0	0	High	High	High
Rock outcrop-----	none	---	---	---	---	---	---	---
614: Lithic Haplocryands-----	Bedrock (lithic)	8-19	Indurated	0	0	High	High	High
Alic Haplocryands-----	Bedrock (lithic)	22-60	Indurated	0	0	High	High	High
Rock outcrop-----	none	---	---	---	---	---	---	---
615: Longmare-----	none	---	---	0	0	Moderate	High	High
616: Longmare-----	none	---	---	0	0	Moderate	High	High
617: Mutnala-----	none	---	---	0	0	High	High	High
618: Mutnala-----	none	---	---	0	0	High	High	High
619: Mutnala-----	none	---	---	0	0	High	High	High
620: Mutnala-----	none	---	---	0	0	High	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
621: Mutnala-----	none	---	---	0	0	High	High	High
622: Mutnala-----	none	---	---	0	0	High	High	High
623: Mutnala-----	none	---	---	0	0	High	High	High
Starichkof-----	none	---	---	41	60	High	High	High
Slikok-----	none	---	---	4-12	6-17	High	High	High
624: Naptowne-----	none	---	---	0	0	High	High	High
625: Naptowne-----	none	---	---	0	0	High	High	High
626: Naptowne-----	none	---	---	0	0	High	High	High
627: Naptowne-----	none	---	---	0	0	High	High	High
628: Naptowne-----	none	---	---	0	0	High	High	High
629: Naptowne-----	none	---	---	0	0	High	High	High
630: Naptowne, moderately steep-----	none	---	---	0	0	High	High	High
Naptowne, strongly sloping-----	none	---	---	0	0	High	High	High
631: Naptowne, strongly sloping-----	none	---	---	0	0	High	High	High
Naptowne, gently sloping-----	none	---	---	0	0	High	High	High
632: Niklason-----	none	---	---	0	0	Moderate	Moderate	Moderate
633: Nikolaevsk-----	none	---	---	0	0	High	Moderate	High
634: Nikolaevsk-----	none	---	---	0	0	High	Moderate	High
635: Nikolaevsk-----	none	---	---	0	0	High	Moderate	High
636: Nikolai-----	none	---	---	18-26	26-35	High	High	High
637: Nikolai, somewhat poorly drained---	none	---	---	18-26	26-35	High	High	High
Tuxedni-----	none	---	---	0	0	High	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
638: Puntilla -----	none	---	---	0	0	High	High	High
639: Puntilla -----	none	---	---	0	0	High	High	High
640: Qutal -----	none	---	---	0	0	High	High	High
641: Qutal -----	none	---	---	0	0	High	High	High
642: Qutal -----	none	---	---	0	0	High	High	High
643: Redoubt, terraces -----	none	---	---	0	0	High	High	High
644: Redoubt -----	none	---	---	0	0	High	High	High
645: Redoubt -----	none	---	---	0	0	High	High	High
646: Redoubt, cool -----	none	---	---	0	0	High	High	High
647: Redoubt, moderately steep -----	none	---	---	0	0	High	High	High
Redoubt, gently sloping -----	none	---	---	0	0	High	High	High
648: Redoubt, cool -----	none	---	---	0	0	High	High	High
Tuxedni -----	none	---	---	0	0	High	High	High
649: Riverwash -----	none	---	---	---	---	---	---	---
650: Salamatof -----	none	---	---	42	60	High	High	High
Doroshin -----	none	---	---	12-25	24-36	High	High	High
651: Salamatof -----	none	---	---	42	60	High	High	High
652: Slikok -----	none	---	---	4-12	6-17	High	High	High
653: Slikok -----	none	---	---	4-12	6-17	High	High	High
654: Smithfha -----	none	---	---	0	0	Moderate	Moderate	Moderate
655: Smithfha -----	none	---	---	0	0	Moderate	Moderate	Moderate

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
656: Smokey Bay -----	none	---	---	0	0	High	Moderate	Moderate
657: Smokey Bay -----	none	---	---	0	0	High	Moderate	Moderate
658: Snowdance-----	none	---	---	0	0	High	High	High
659: Soldotna -----	none	---	---	0	0	High	High	High
660: Soldotna -----	none	---	---	0	0	High	High	High
661: Soldotna -----	none	---	---	0	0	High	High	High
662: Soldotna -----	none	---	---	0	0	High	High	High
663: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
664: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
665: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
666: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
667: Soldotna, strongly sloping-----	none	---	---	0	0	High	High	High
Soldotna, gently sloping -----	none	---	---	0	0	High	High	High
668: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
Kenai-----	none	---	---	0	0	Moderate	High	High
669: Soldotna, sandy substratum-----	none	---	---	0	0	High	High	High
Kenai-----	none	---	---	0	0	Moderate	High	High
670: Soldotna -----	none	---	---	0	0	High	High	High
Kichatna-----	none	---	---	0	0	Low	High	High
671: Soldotna -----	none	---	---	0	0	High	High	High
Kichatna-----	none	---	---	0	0	Low	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness	Initial	Total		Uncoated steel	Concrete
		In.		In.	In.			
672: Soldotna -----	none	---	---	0	0	High	High	High
Nikolai -----	none	---	---	18-26	26-35	High	High	High
673: Spenard -----	none	---	---	0	0	High	High	High
674: Spenard -----	none	---	---	0	0	High	High	High
675: Spenard -----	none	---	---	0	0	High	High	High
676: Starichkof -----	none	---	---	41	60	High	High	High
Doroshin -----	none	---	---	12-25	24-36	High	High	High
677: Starichkof -----	none	---	---	41	60	High	High	High
678: Starichkof -----	none	---	---	41	60	High	High	High
679: Starichkof, forested -----	none	---	---	41	60	High	High	High
680: Starichkof -----	none	---	---	41	60	High	High	High
Slikok -----	none	---	---	4-12	6-17	High	High	High
Naptowne -----	none	---	---	0	0	High	High	High
681: Starichkof -----	none	---	---	41	60	High	High	High
Spenard -----	none	---	---	0	0	High	High	High
682: Susitna -----	none	---	---	0	0	Moderate	High	High
Riverwash -----	none	---	---	---	---	---	---	---
683: Susitna -----	none	---	---	0	0	Moderate	High	High
684: Talkeetna -----	none	---	---	0	0	High	High	High
685: Talkeetna -----	none	---	---	0	0	High	High	High
686: Talkeetna -----	none	---	---	0	0	High	High	High
Starichkof -----	none	---	---	41	60	High	High	High

Table 13. Soil Features—Continued

Map symbol and soil name	Restrictive layer			Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top In.	Hardness	Initial In.	Total In.		Uncoated steel	Concrete
705: Water, fresh -----	none	---	---	---	---	---	---	---
706: Whitsol -----	none	---	---	0	0	High	High	High
707: Whitsol -----	none	---	---	0	0	High	High	High
708: Whitsol -----	none	---	---	0	0	High	High	High
709: Whitsol -----	none	---	---	0	0	High	High	High
710: Whitsol -----	none	---	---	0	0	High	High	High
711: Whitsol -----	none	---	---	0	0	High	High	High
Doroshin -----	none	---	---	12-25	24-36	High	High	High

Table 14. Land Capability

Map symbol and soil name	Land capability (non-irrigated)
501: Aquic Cryofluvents -----	4w
502: Aquic Cryofluvents, shallow-----	4w
503: Badland, sea cliffs -----	8
504: Badland, sea cliffs ----- Typic Cryorthents-----	8 7e
505: Beaches -----	8
506: Beluga -----	5w
507: Beluga -----	5w
508: Beluga -----	5w
509: Beluga ----- Mutnala -----	5w 3e
510: Beluga ----- Smokey Bay-----	5w 4w
511: Beluga ----- Smokey Bay-----	5w 4w
512: Benka -----	3e
513: Benka -----	3e
514: Benka -----	3e
515: Benka -----	6e
516: Benka -----	7e
517: Benka, strongly sloping ----- Benka, gently sloping-----	4e 3e
518: Boxcar -----	4c

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
519: Boxcar -----	6e
520: Boxcar -----	7e
521: Boxcar, cool -----	4c
522: Boxcar, cool -----	7e
523: Chenega -----	6s
524: Chenega, cool -----	6s
525: Chenega, occasionally flooded -----	6s
526: Chulitna-----	3c
527: Chulitna-----	3e
528: Chulitna-----	4e
529: Chulitna-----	6e
530: Chunilna-----	5w
531: Chunilna-----	6w
532: Chunilna, cool-----	6w
533: Chunilna, cool-----	6w
534: Clam Gulch-----	5w
535: Clunie -----	7w
536: Coal Creek-----	5w
537: Coal Creek-----	5w
538: Coal Creek-----	5w

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
539: Cohoe-----	3e
540: Cohoe-----	3e
541: Cohoe-----	4e
542: Cohoe-----	6e
543: Cohoe-----	6e
544: Cohoe-----	7e
545: Cohoe, dry-----	3e
546: Cohoe, dry-----	3e
547: Cohoe, dry-----	4e
548: Cohoe, dry-----	6e
549: Cohoe, dry-----	6e
550: Cohoe, dry-----	7e
551: Cohoe, moderately steep-----	6e
Cohoe, gently sloping-----	4e
552: Cohoe, dry, moderately steep-----	6e
Cohoe, dry, gently sloping-----	4e
553: Cohoe, dry-----	4e
Kenai-----	3e
554: Cohoe, dry-----	4e
Kenai-----	3e
555: Cohoe, dry-----	6e
Nikolai-----	6w
556: Cohoe, dry-----	6e
Nikolai-----	6w

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
557: Cytex Creek -----	3c
558: Doroshin -----	7w
559: Doroshin -----	7w
560: Dystrocrypts ----- Typic Cryorthents ----- Iliamna, cool -----	7c 6e 6e
561: Foreland -----	7w
562: Foreland ----- Soldotna ----- Starichkof -----	7w 3e 7w
563: Pits, gravel -----	8
564: Iliamna -----	3c
565: Iliamna -----	3e
566: Iliamna -----	6e
567: Iliamna, cool -----	4e
568: Island -----	3e
569: Island -----	3e
570: Island -----	6e
571: Island -----	6e
572: Island, forested -----	3e
573: Kachemak -----	3e
574: Kachemak -----	4e
575: Kachemak -----	6e

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
576: Kachemak -----	6e
577: Kachemak -----	7e
578: Kachemak, cool -----	3e
579: Kachemak, cool -----	4e
580: Kachemak, cool -----	6e
581: Kachemak, cool -----	6e
582: Kachemak, cool -----	6e
583: Kachemak, forested-----	3e
584: Kachemak, forested-----	4e
585: Kachemak, forested-----	6e
586: Kachemak, cool ----- Snowdance-----	3e 5w
587: Kachemak, cool ----- Snowdance-----	3e 5w
588: Kachemak, cool ----- Snowdance-----	4e 6w
589: Kalifonsky-----	5w
590: Kalifonsky-----	5w
591: Kalifonsky----- Typic Cryorthents-----	7w 6e
592: Karluk-----	6w
593: Kashwitna-----	3e
594: Kashwitna-----	3e

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
595: Kashwitna-----	3e
596: Kashwitna, moderately steep-----	6e
Kashwitna, strongly sloping-----	4e
597: Kenai-----	3e
598: Kenai-----	3e
599: Kenai-----	3e
600: Kenai-----	3e
601: Kenai-----	3e
602: Kenai, moderately steep-----	6e
Kenai, gently sloping-----	4e
603: Kenai-----	3e
Starichkof-----	7w
604: Kichatna-----	4s
605: Kichatna-----	6e
606: Kichatna-----	6e
607: Kichatna-----	7e
608: Kichatna-----	7e
609: Kichatna-----	7e
Killey-----	5w
610: Kidazqeni-----	4e
611: Killey-----	5w
Moose River-----	5w
612: Liten-----	4s

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
613:	
Lithic Haplocryands -----	7e
Alic Haplocryands -----	7s
Rock outcrop-----	8
614:	
Lithic Haplocryands -----	7e
Alic Haplocryands -----	7s
Rock outcrop-----	8
615:	
Longmare -----	3c
616:	
Longmare -----	3c
617:	
Mutnala -----	3c
618:	
Mutnala -----	3e
619:	
Mutnala -----	4e
620:	
Mutnala -----	6e
621:	
Mutnala -----	7e
622:	
Mutnala -----	7e
623:	
Mutnala -----	6e
Starichkof -----	7w
Slikok-----	5w
624:	
Naptowne -----	3s
625:	
Naptowne -----	3e
626:	
Naptowne -----	4e
627:	
Naptowne -----	6e
628:	
Naptowne -----	6e
629:	
Naptowne -----	3e
630:	
Naptowne, moderately steep -----	6e
Naptowne, strongly sloping -----	4e

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
631:	
Naptowne, strongly sloping -----	4e
Naptowne, gently sloping -----	3e
632:	
Niklason -----	4w
633:	
Nikolaevsk -----	5w
634:	
Nikolaevsk -----	5w
635:	
Nikolaevsk -----	5w
636:	
Nikolai -----	6w
637:	
Nikolai, somewhat poorly drained -----	6w
Tuxedni -----	4e
638:	
Puntilla -----	4e
639:	
Puntilla -----	6e
640:	
Qutal -----	3c
641:	
Qutal -----	3e
642:	
Qutal -----	3e
643:	
Redoubt, terraces -----	3e
644:	
Redoubt -----	3e
645:	
Redoubt -----	6e
646:	
Redoubt, cool -----	4c
647:	
Redoubt, moderately steep -----	4e
Redoubt, gently sloping -----	3e
648:	
Redoubt, cool -----	7e
Tuxedni -----	6e
649:	
Riverwash -----	8

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
650:	
Salamatof -----	7w
Doroshin -----	7w
651:	
Salamatof -----	7w
652:	
Slikok -----	5w
653:	
Slikok -----	5w
654:	
Smithfha -----	3e
655:	
Smithfha -----	7e
656:	
Smokey Bay -----	4w
657:	
Smokey Bay -----	4w
658:	
Snowdance -----	5w
659:	
Soldotna -----	3c
660:	
Soldotna -----	3c
661:	
Soldotna -----	4e
662:	
Soldotna -----	6e
663:	
Soldotna, sandy substratum -----	3c
664:	
Soldotna, sandy substratum -----	3c
665:	
Soldotna, sandy substratum -----	3c
666:	
Soldotna, sandy substratum -----	3c
667:	
Soldotna, strongly sloping -----	4e
Soldotna, gently sloping -----	3e
668:	
Soldotna, sandy substratum -----	6e
Kenai -----	3e

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
669:	
Soldotna, sandy substratum -----	3e
Kenai -----	3e
670:	
Soldotna -----	7e
Kichatna -----	6e
671:	
Soldotna -----	7e
Kichatna -----	7e
672:	
Soldotna -----	3c
Nikolai -----	6w
673:	
Spenard -----	5w
674:	
Spenard -----	5w
675:	
Spenard -----	6w
676:	
Starichkof -----	7w
Doroshin -----	7w
677:	
Starichkof -----	7w
678:	
Starichkof -----	7w
679:	
Starichkof, forested -----	7w
680:	
Starichkof -----	7w
Slikok -----	5w
Naptowne -----	3e
681:	
Starichkof -----	7w
Spenard -----	5w
682:	
Susitna -----	3c
Riverwash -----	8
683:	
Susitna -----	3c
684:	
Talkeetna -----	4e
685:	
Talkeetna -----	6e

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
686:	
Talkeetna -----	6e
Starichkof -----	7w
687:	
Tangerra -----	5w
688:	
Beaches, tidal flats -----	8
689:	
Tliakila -----	5w
690:	
Tliakila -----	5w
691:	
Tliakila -----	6w
692:	
Tokositna -----	3e
693:	
Tokositna -----	3e
694:	
Tokositna -----	4e
695:	
Truuli -----	5w
696:	
Tutka -----	7e
Kasitsna -----	6e
Rock outcrop -----	8
697:	
Tutka -----	7e
Portgraham -----	7e
698:	
Tuxedni -----	4e
699:	
Tuxedni -----	4e
700:	
Tuxedni, warm -----	4e
701:	
Typic Cryaquents -----	5w
702:	
Typic Cryopsamments -----	6e
703:	
Typic Cryorthents -----	7e
704:	
Urban land -----	8

Table 14. Land Capability—Continued

Map symbol and soil name	Land capability (non-irrigated)
705: Water, fresh -----	8
706: Whitsol-----	3c
707: Whitsol-----	3c
708: Whitsol-----	4e
709: Whitsol-----	6e
710: Whitsol-----	7e
711: Whitsol----- Doroshin-----	3c 7w

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Aquic Cryofluvents -----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	1.00 0.50 0.05	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.05	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
502: Aquic Cryofluvents, shallow -----	80	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	1.00 0.50 0.05	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.05	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
503: Badland, sea cliffs -----	100	Not rated		Not rated		Not rated	
504: Badland, sea cliffs -----	55	Not rated		Not rated		Not rated	
Typic Cryorthents -----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
505: Beaches -----	90	Not rated		Not rated		Not rated	
506: Beluga -----	85	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
507: Beluga -----	87	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
508: Beluga -----	87	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	1.00 1.00 0.50 0.16	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.16	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
509: Beluga -----	55	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
Mutnala -----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
510: Beluga -----	60	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
Smokey Bay -----	37	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
511: Beluga -----	50	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	1.00 1.00 0.50 0.16	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.16	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
Smokey Bay -----	47	Very limited: Depth to saturated zone Restricted permeability Slope Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.63 0.50	Very limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.63 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
512: Benka -----	86	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
513: Benka-----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
514: Benka-----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
515: Benka-----	90	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
516: Benka-----	95	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
517: Benka, strongly sloping-----	45	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Benka, gently sloping----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
518: Boxcar-----	75	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
519: Boxcar-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
520: Boxcar-----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
521: Boxcar, cool-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
522: Boxcar, cool-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
523: Chenega -----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Flooding	0.50 0.40
524: Chenega, cool -----	90	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Flooding	0.50 0.40
525: Chenega, occasionally flooded-----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
526: Chulitna -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
527: Chulitna -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
528: Chulitna -----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
529: Chulitna -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
530: Chunilna -----	92	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
531: Chunilna -----	82	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
532: Chunilna, cool -----	80	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
533: Chunilna, cool -----	85	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	0.99 0.50 0.16	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	0.99 0.50 0.16	Very limited: Water erosion hazard Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50 0.50
534: Clam Gulch-----	85	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
535: Clunie-----	90	Very limited: Depth to saturated zone Flooding Ponding Excess surface organic matter Restricted permeability	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Ponding Silty surface layer dusty when dry and slippery when wet Flooding	1.00 1.00 1.00 0.50 0.40
536: Coal Creek -----	75	Very limited: Depth to saturated zone Flooding Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
537: Coal Creek -----	88	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
538: Coal Creek -----	88	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.60 0.50 0.37	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.37	Very limited: Water erosion hazard Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.86 0.50
539: Cohoe -----	87	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
540: Cohoe -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
541: Cohoe -----	89	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
542: Cohoe -----	93	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
543: Cohoe -----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
544: Cohoe -----	84	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
545: Cohoe, dry-----	87	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
546: Cohoe, dry-----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
547: Cohoe, dry-----	89	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
548: Cohoe, dry-----	93	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
549: Cohoe, dry-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
550: Cohoe, dry-----	84	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
551: Cohoe, moderately steep -----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Cohoe, gently sloping ---	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
552: Cohoe, dry, moderately steep -----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Cohoe, dry, gently sloping -----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
553: Cohoe, dry -----	55	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kenai -----	30	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	0.96 0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
554: Cohoe, dry -----	55	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kenai -----	30	Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
555: Cohoe, dry -----	70	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Nikolai -----	30	Very limited: Depth to saturated zone Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
556: Cohoe, dry-----	70	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Nikolai -----	30	Very limited: Depth to saturated zone Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
557: Cytex Creek-----	75	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.78 0.50
558: Doroshin -----	83	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
559: Doroshin -----	79	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
560: Dystrocryepts-----	50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet Sandy surface layer easily displaced	1.00 0.50 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Sandy surface layer easily displaced Silty surface layer dusty when dry and slippery when wet	0.50 0.50
Typic Cryorthents-----	30	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Iliamna, cool -----	20	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
561: Foreland -----	79	Very limited: Depth to saturated zone Excess surface organic matter Sandy surface layer easily displaced	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00	Very limited: Depth to saturated zone Excess surface organic matter Sandy surface layer easily displaced	1.00 1.00 0.50
562: Foreland -----	59	Very limited: Depth to saturated zone Excess surface organic matter Sandy surface layer easily displaced	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00	Very limited: Depth to saturated zone Excess surface organic matter Sandy surface layer easily displaced	1.00 1.00 0.50
Soldotna -----	20	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Starichkof -----	20	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
563: Pits, gravel -----	95	Not rated		Not rated		Not rated	
564: Iliamna-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
565: Iliamna-----	82	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
566: Iliamna-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
567: Iliamna, cool -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
568: Island -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
569: Island -----	91	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
570: Island -----	90	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
571: Island -----	92	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
572: Island, forested-----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
573: Kachemak -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
574: Kachemak -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
575: Kachemak -----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
576: Kachemak -----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
577: Kachemak -----	90	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
578: Kachemak, cool -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
579: Kachemak, cool -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
580: Kachemak, cool -----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
581: Kachemak, cool -----	40	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
582: Kachemak, cool -----	40	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
583: Kachemak, forested ----	75	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
584: Kachemak, forested ----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
585: Kachemak, forested ----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
586: Kachemak, cool-----	60	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Snowdance-----	40	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
587: Kachemak, cool-----	65	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Snowdance-----	35	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
588: Kachemak, cool-----	70	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Snowdance-----	30	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.37	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.37	Very limited: Water erosion hazard Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.86 0.50
589: Kalifonsky-----	83	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
590: Kalifonsky-----	85	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
591: Kalifonsky-----	50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
591: Typic Cryorthents-----	30	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
592: Karluk-----	80	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.94 0.50
593: Kashwitna -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
594: Kashwitna -----	88	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
595: Kashwitna -----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
596: Kashwitna, moderately steep-----	50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kashwitna, strongly sloping-----	40	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
597: Kenai-----	81	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
598: Kenai-----	82	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
599: Kenai-----	85	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	0.96 0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
600: Kenai-----	88	Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
601: Kenai-----	86	Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
602: Kenai, moderately steep -----	45	Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kenai, gently sloping ----	40	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
603: Kenai-----	60	Somewhat limited: Restricted permeability Slope Silty surface layer dusty when dry and slippery when wet	0.96 0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Starichkof-----	31	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
604: Kichatna-----	70	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
605: Kichatna-----	75	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
606: Kichatna-----	75	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
607: Kichatna-----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
608: Kichatna-----	70	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
609: Kichatna-----	50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Killey -----	50	Very limited: Flooding Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.99 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.99 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Flooding	0.50 0.50 0.40
610: Kidazqeni -----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
611: Killey -----	45	Very limited: Flooding Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.99 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.99 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Flooding	0.50 0.50 0.40
Moose River -----	45	Very limited: Depth to saturated zone Flooding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Flooding	1.00 0.50 0.40
612: Liten -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
613: Lithic Haplocryands -----	55	Very limited: Slope Depth to bedrock Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Alic Haplocryands -----	20	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Rock outcrop-----	17	Not rated		Not rated		Not rated	
614: Lithic Haplocryands -----	55	Very limited: Slope Depth to bedrock Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Alic Haplocryands -----	20	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Rock outcrop-----	20	Not rated		Not rated		Not rated	
615: Longmare-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
616: Longmare-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
617: Mutnala-----	75	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
618: Mutnala-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
619: Mutnala-----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
620: Mutnala-----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
621: Mutnala-----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
622: Mutnala-----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
623: Mutnala-----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Starichkof-----	35	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
623: Slikok -----	20	Very limited: Depth to saturated zone Flooding Ponding Excess surface organic matter Restricted permeability	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 1.00 0.50
624: Naptowne-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
625: Naptowne-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
626: Naptowne-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
627: Naptowne-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
628: Naptowne-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
629: Naptowne-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
630: Naptowne, moderately steep -----	45	Very limited: Slope	1.00	Very limited: Slope	1.00	Very limited: Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Naptowne, strongly sloping -----	40	Somewhat limited: Slope	0.96	Somewhat limited: Slope	0.96	Very limited: Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
631: Naptowne, strongly sloping -----	45	Somewhat limited: Slope	0.63	Somewhat limited: Slope	0.63	Very limited: Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
Naptowne, gently sloping -----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
632: Niklason -----	85	Very limited: Flooding	1.00	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
		Silty surface layer dusty when dry and slippery when wet	0.50				
633: Nikolaevsk -----	85	Very limited: Depth to saturated zone	1.00	Very limited: Depth to saturated zone	1.00	Somewhat limited: Depth to saturated zone	0.78
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
634: Nikolaevsk -----	83	Very limited: Depth to saturated zone	1.00	Very limited: Depth to saturated zone	1.00	Somewhat limited: Depth to saturated zone	0.78
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50
635: Nikolaevsk -----	85	Very limited: Depth to saturated zone	1.00	Very limited: Depth to saturated zone	1.00	Very limited: Water erosion hazard	1.00
		Silty surface layer dusty when dry and slippery when wet	0.50	Silty surface layer dusty when dry and slippery when wet	0.50	Depth to saturated zone	0.78
		Slope	0.37	Slope	0.37	Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
636: Nikolai -----	90	Very limited: Depth to saturated zone Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
637: Nikolai, somewhat poorly drained -----	60	Very limited: Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	1.00 0.60 0.50 0.28	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.28	Very limited: Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Tuxedni-----	25	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
638: Puntilla -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Restricted permeability	0.50 0.21	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
639: Puntilla -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet Restricted permeability	1.00 0.50 0.21	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
640: Qutal -----	77	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
641: Qutal -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.39	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
642: Qutal -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone Slope	0.50 0.39 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone Slope	0.50 0.39 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
643: Redoubt, terraces -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
644: Redoubt -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
645: Redoubt -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
646: Redoubt, cool -----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
647: Redoubt, moderately steep -----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Redoubt, gently sloping -----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
648: Redoubt, cool -----	55	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.04	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.04	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Tuxedni -----	35	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone Slope	0.50 0.44 0.04	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone Slope	0.50 0.44 0.04	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
649: Riverwash -----	100	Not rated		Not rated		Not rated	
650: Salamatof -----	70	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
Doroshin -----	22	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
651: Salamatof -----	80	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
652: Slikok -----	85	Very limited: Depth to saturated zone Flooding Ponding Excess surface organic matter Restricted permeability	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 1.00 0.50
653: Slikok -----	82	Very limited: Depth to saturated zone Flooding Ponding Excess surface organic matter Restricted permeability	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 1.00 0.50
654: Smithfa -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
655: Smithfa -----	90	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
656: Smokey Bay -----	77	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
657: Smokey Bay -----	77	Very limited: Depth to saturated zone Restricted permeability Silty surface layer dusty when dry and slippery when wet Slope	1.00 1.00 0.50 0.37	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Slope	1.00 0.50 0.37	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
658: Snowdance-----	90	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.86 0.50
659: Soldotna -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
660: Soldotna -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
661: Soldotna -----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
662: Soldotna -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
663: Soldotna, sandy substratum-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
664: Soldotna, sandy substratum-----	75	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.37	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
665: Soldotna, sandy substratum-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
666: Soldotna, sandy substratum-----	80	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
667: Soldotna, strongly sloping-----	45	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Soldotna, gently sloping-----	40	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
668: Soldotna, sandy substratum-----	55	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kenai-----	40	Very limited: Slope Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 0.96 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
669: Soldotna, sandy substratum-----	55	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Kenai-----	40	Somewhat limited: Restricted permeability Silty surface layer dusty when dry and slippery when wet	0.96 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
670: Soldotna -----	50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kichatna-----	40	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
671: Soldotna -----	50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Kichatna-----	40	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
672: Soldotna -----	55	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Nikolai -----	45	Very limited: Depth to saturated zone Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.60 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
673: Spenard -----	89	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
674: Spenard -----	67	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
675: Spenard -----	87	Very limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.63 0.50	Very limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.63 0.50	Very limited: Depth to saturated zone Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
676: Starichkof -----	60	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
Doroshin -----	35	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
677: Starichkof -----	75	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
678: Starichkof -----	82	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
679: Starichkof, forested -----	85	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
680: Starichkof -----	45	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
Slikok -----	30	Very limited: Depth to saturated zone Flooding Ponding Excess surface organic matter Restricted permeability	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding Silty surface layer dusty when dry and slippery when wet Slope	1.00 1.00 0.50 0.16	Very limited: Depth to saturated zone Excess surface organic matter Ponding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 1.00 1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680: Naptowne -----	25	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
681: Starichkof -----	50	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
Spenard -----	42	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
682: Susitna -----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Riverwash -----	5	Not rated		Not rated		Not rated	
683: Susitna -----	85	Very limited: Flooding Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
684: Talkeetna -----	94	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
685: Talkeetna -----	90	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
686: Talkeetna -----	55	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Starichkof -----	40	Very limited: Depth to saturated zone Ponding Excess surface organic matter	1.00 1.00 1.00	Very limited: Depth to saturated zone Ponding	1.00 1.00	Very limited: Depth to saturated zone Excess surface organic matter Ponding	1.00 1.00 1.00
687: Tangerra -----	80	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50
688: Beaches, tidal flats -----	90	Not rated		Not rated		Not rated	
689: Tlikakila -----	90	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.93 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.93 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.27
690: Tlikakila -----	87	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.93 0.50	Somewhat limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	0.93 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.27
691: Tlikakila -----	85	Somewhat limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet	0.93 0.63 0.50	Somewhat limited: Depth to saturated zone Slope Silty surface layer dusty when dry and slippery when wet	0.93 0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	1.00 0.50 0.27
692: Tokositna -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
693: Tokositna -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
694: Tokositna -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Slope	0.50 0.16	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
695: Truuli -----	88	Very limited: Depth to saturated zone Excess surface organic matter Restricted permeability Silty surface layer dusty when dry and slippery when wet	1.00 1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50
696: Tutka -----	45	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Kasitsna -----	40	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
Rock outcrop -----	15	Not rated		Not rated		Not rated	
697: Tutka -----	55	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Portgraham -----	30	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
698: Tuxedni -----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
699: Tuxedni -----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.63 0.50 0.44	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.63 0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
700: Tuxedni, warm-----	85	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet Depth to saturated zone	0.50 0.44	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
701: Typic Cryaquents-----	95	Very limited: Depth to saturated zone Flooding Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet Flooding	1.00 0.50 0.40
702: Typic Cryopsamments --	84	Very limited: Slope Sandy surface layer easily displaced	1.00 0.50	Very limited: Slope	1.00	Somewhat limited: Sandy surface layer easily displaced	0.50
703: Typic Cryorthents-----	80	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
704: Urban land-----	85	Not rated		Not rated		Not rated	
705: Water, fresh-----	100	Not rated		Not rated		Not rated	
706: Whitsol -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
707: Whitsol -----	90	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
708: Whitsol -----	85	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Somewhat limited: Slope Silty surface layer dusty when dry and slippery when wet	0.63 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
709: Whitsol -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50

Table 15. Recreation: Camp and Picnic Areas, Primitive Camp Areas, Foot and ATV Trails—Continued

Map symbol and soil name	Pct. of map unit	Camp and Picnic Areas (Alaska criteria)		Primitive camp areas (Alaska criteria)		Foot and ATV trails (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
710: Whitsol -----	85	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Slope Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Water erosion hazard Silty surface layer dusty when dry and slippery when wet	1.00 0.50
711: Whitsol -----	55	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50	Somewhat limited: Silty surface layer dusty when dry and slippery when wet	0.50
Doroshin -----	30	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50	Very limited: Depth to saturated zone Silty surface layer dusty when dry and slippery when wet	1.00 0.50	Very limited: Depth to saturated zone Excess surface organic matter Silty surface layer dusty when dry and slippery when wet	1.00 1.00 0.50

Table 16. Ecological Site-Soils Correlation

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
501: Aquic Cryofluvents-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
502: Aquic Cryofluvents, shallow-----	none assigned	---	---
503: Badland, sea cliffs-----	none assigned	---	---
504: Badland, sea cliffs-----	none assigned	---	---
Typic Cryorthents-----	Alpine Ridges	Rangeland	R169XY101AK
505: Beaches-----	none assigned	---	---
506: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
507: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
508: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
509: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
Mutnala-----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
510: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
Smokey Bay-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
511: Beluga-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
Smokey Bay-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
512: Benka-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
513: Benka-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
514: Benka-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
515: Benka -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
516: Benka -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
517: Benka, strongly sloping-----	none assigned	---	---
Benka, gently sloping -----	none assigned	---	---
518: Boxcar-----	Rolling Uplands	Rangeland	R170XD427AK
519: Boxcar-----	Rolling Uplands	Rangeland	R170XD427AK
520: Boxcar-----	Rolling Uplands	Rangeland	R170XD427AK
521: Boxcar, cool -----	Rolling Uplands	Rangeland	R170XD427AK
522: Boxcar, cool -----	Rolling Uplands	Rangeland	R170XD427AK
523: Chenega-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
524: Chenega, cool -----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
525: Chenega, occasionally flooded-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
526: Chulitna-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
527: Chulitna-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
528: Chulitna-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
529: Chulitna-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
530: Chunilna-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
531: Chunilna-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
532: Chunilna, cool-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
533: Chunilna, cool-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
534: Clam Gulch-----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
535: Clunie-----	Ramensk's Sedge	Rangeland	R170XY402AK
536: Coal Creek-----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
537: Coal Creek-----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
538: Coal Creek-----	Picea mariana/Empetrum nigrum- Betula nana	Forestland	F170XY412AK
539: Cohoe-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
540: Cohoe-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
541: Cohoe-----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
542: Cohoe -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
543: Cohoe -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
544: Cohoe -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
545: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
546: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
547: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
548: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
549: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
550: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
551: Cohoe, moderately steep -----	none assigned	---	---
Cohoe, gently sloping -----	none assigned	---	---
552: Cohoe, dry, moderately steep -----	none assigned	---	---
Cohoe, dry, gently sloping -----	none assigned	---	---
553: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
554: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
555: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Nikolai -----	Picea xlutzii/Calamagrostis canadensis	Forestland	F170XD414AK
556: Cohoe, dry -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Nikolai -----	Picea xlutzii/Calamagrostis canadensis	Forestland	F170XD414AK
557: Cytex Creek -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
558: Doroshin -----	Wetland Complex	Rangeland	R170XY400AK
559: Doroshin -----	Wetland Complex	Rangeland	R170XY400AK
560: Dystrocryepts -----	Alpine Ridges	Rangeland	R169XY101AK
Typic Cryorthents -----	Alpine Ridges	Rangeland	R169XY101AK
Iliamna, cool -----	Alpine Ridges	Rangeland	R169XY101AK
561: Foreland -----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
562: Foreland -----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
Soldotna -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
563: Pits, gravel -----	none assigned	---	---
564: Iliamna -----	Rolling Uplands	Rangeland	R170XD427AK
565: Iliamna -----	Rolling Uplands	Rangeland	R170XD427AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
566: Iliamna -----	Rolling Uplands	Rangeland	R170XD427AK
567: Iliamna, cool -----	Alpine Ridges	Rangeland	R169XY101AK
568: Island -----	Shallow Kettles	Rangeland	R170XD407AK
569: Island -----	Shallow Kettles	Rangeland	R170XD407AK
570: Island -----	Shallow Kettles	Rangeland	R170XD407AK
571: Island -----	Shallow Kettles	Rangeland	R170XD407AK
572: Island, forested -----	Picea xlutzii/Salix barclayi/Calamagrostis canadensis-Chamerion angustifolium	Forestland	F170XD416AK
573: Kachemak -----	Loamy Slopes	Rangeland	R170XY201AK
	Mountain Slopes	Rangeland	R170XY103AK
574: Kachemak -----	Loamy Slopes	Rangeland	R170XY201AK
	Mountain Slopes	Rangeland	R170XY103AK
575: Kachemak -----	Loamy Slopes	Rangeland	R170XY201AK
	Mountain Slopes	Rangeland	R170XY103AK
576: Kachemak -----	Loamy Slopes	Rangeland	R170XY201AK
	Mountain Slopes	Rangeland	R170XY103AK
577: Kachemak -----	Loamy Slopes	Rangeland	R170XY201AK
	Mountain Slopes	Rangeland	R170XY103AK
578: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
	Mountain Slopes	Rangeland	R170XY103AK
579: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
	Mountain Slopes	Rangeland	R170XY103AK
580: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
	Mountain Slopes	Rangeland	R170XY103AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
581: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
	Mountain Slopes	Rangeland	R170XY103AK
582: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
	Mountain Slopes	Rangeland	R170XY103AK
583: Kachemak, forested -----	<i>Picea x</i> lutzii/ <i>Salix barclayi</i> - <i>Empetrum nigrum</i> / <i>Equisetum</i> <i>arvense</i>	Forestland	F170XD429AK
584: Kachemak, forested -----	<i>Picea x</i> lutzii/ <i>Salix barclayi</i> - <i>Empetrum nigrum</i> / <i>Equisetum</i> <i>arvense</i>	Forestland	F170XD429AK
585: Kachemak, forested -----	<i>Picea x</i> lutzii/ <i>Salix barclayi</i> - <i>Empetrum nigrum</i> / <i>Equisetum</i> <i>arvense</i>	Forestland	F170XD429AK
586: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
Snowdance -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
587: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
Snowdance -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
588: Kachemak, cool -----	Rolling Uplands	Rangeland	R170XD427AK
Snowdance -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
589: Kalifonsky -----	<i>Picea mariana</i> / <i>Empetrum</i> <i>B nigrum-etula nana</i>	Forestland	F170XY412AK
590: Kalifonsky -----	<i>Picea mariana</i> / <i>Empetrum</i> <i>nigrum-Betula nana</i>	Forestland	F170XY412AK
591: Kalifonsky -----	<i>Picea mariana</i> / <i>Empetrum</i> <i>nigrum-Betula nana</i>	Forestland	F170XY412AK
Typic Cryorthents -----	Alpine Ridges	Rangeland	R169XY101AK
592: Karluk -----	<i>Picea glauca</i> - <i>Betula</i> <i>papyrifera</i> / <i>Gymnocarpium</i> <i>dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
593: Kashwitna -----	<i>Picea x</i> lutzii- <i>Betula</i> <i>papyrifera</i> / <i>Gymnocarpium</i> <i>dryopteris</i> - <i>Rubus pedatus</i>	Forestland	F170XY435AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
594: Kashwitna -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
595: Kashwitna -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
596: Kashwitna, moderately steep -----	none assigned	---	---
Kashwitna, strongly sloping -----	none assigned	---	---
597: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
598: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
599: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
600: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
601: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
602: Kenai, moderately steep -----	none assigned	---	---
Kenai, gently sloping -----	none assigned	---	---
603: Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
604: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
605: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
606: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
607: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
608: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
609: Kichatna -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
Killey-----	Willow - Grass (Riparian)	Rangeland	R170XY408AK
610: Kidazqeni-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
611: Killey-----	Willow - Grass (Riparian)	Rangeland	R170XY408AK
Moose River -----	Willow - Grass (Riparian)	Rangeland	R170XY408AK
612: Liten -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
613: Lithic Haplocryands -----	none assigned	---	---
Alic Haplocryands-----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
Rock outcrop -----	none assigned	---	---
614: Lithic Haplocryands -----	none assigned	---	---
Alic Haplocryands-----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
Rock outcrop -----	none assigned	---	---
615: Longmare -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
616: Longmare -----	Picea-Betula papyrifera/Ledum- Vaccinium vitis-idaea/Cornus canadensis	Forestland	F170XY009AK
617: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
618: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
619: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
620: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
621: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
622: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
623: Mutnala -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
Slikok -----	Picea mariana/Empetrum nigrum-Betula nana	Forestland	F170XY412AK
624: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
625: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
626: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
627: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
628: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
629: Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
630: Naptowne, moderately steep -----	none assigned	---	---
Naptowne, strongly sloping-----	none assigned	---	---
631: Naptowne, strongly sloping-----	none assigned	---	---
Naptowne, gently sloping -----	none assigned	---	---
632: Niklason -----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
633: Nikolaevsk -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
634: Nikolaevsk -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
635: Nikolaevsk -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
636: Nikolai-----	Picea xlutzii/Calamagrostis canadensis	Forestland	F170XD414AK
637: Nikolai, somewhat poorly drained--	Picea xlutzii/Calamagrostis canadensis	Forestland	F170XD414AK
Tuxedni -----	Rolling Uplands	Rangeland	R170XD427AK
638: Puntilla -----	Loamy Slopes	Rangeland	R170XY201AK
639: Puntilla -----	Loamy Slopes	Rangeland	R170XY201AK
640: Qutal-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
641: Qutal-----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
642: Qutal-----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Menziesia ferruginea</i> / <i>Gymnocarpium dryopteris</i>	Forestland	F170XY018AK
643: Redoubt, terraces-----	<i>Populus balsamifera</i> / <i>Oplopanax horridus</i>	Forestland	F170XY445AK
644: Redoubt-----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Calamagrostis canadensis</i> - <i>Equisetum arvense</i>	Forestland	F170XD443AK
645: Redoubt-----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Calamagrostis canadensis</i> - <i>Equisetum arvense</i>	Forestland	F170XD443AK
646: Redoubt, cool-----	Rolling Uplands	Rangeland	R170XD427AK
647: Redoubt, moderately steep-----	none assigned	---	---
Redoubt, gently sloping-----	none assigned	---	---
648: Redoubt, cool-----	Rolling Uplands	Rangeland	R170XD427AK
Tuxedni-----	Rolling Uplands	Rangeland	R170XD427AK
649: Riverwash-----	none assigned	---	---
650: Salamatof-----	Wetland Complex	Rangeland	R170XY400AK
Doroshin-----	Wetland Complex	Rangeland	R170XY400AK
651: Salamatof-----	Wetland Complex	Rangeland	R170XY400AK
652: Slikok-----	<i>Picea mariana</i> / <i>Empetrum B nigrum</i> - <i>etula nana</i>	Forestland	F170XY412AK
653: Slikok-----	<i>Picea mariana</i> / <i>Empetrum nigrum</i> - <i>Betula nana</i>	Forestland	F170XY412AK
654: Smithfha-----	<i>Populus balsamifera</i> / <i>Oplopanax horridus</i>	Forestland	F170XY445AK
655: Smithfha-----	<i>Populus balsamifera</i> / <i>Oplopanax horridus</i>	Forestland	F170XY445AK
656: Smokey Bay-----	Lower Bench Toe Slopes	Rangeland	R170XD424AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
657: Smokey Bay -----	Lower Bench Toe Slopes	Rangeland	R170XD424AK
658: Snowdance -----	Mountain Slopes, Drainages	Rangeland	R170XY106AK
659: Soldotna -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
660: Soldotna -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
661: Soldotna -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
662: Soldotna -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
663: Soldotna, sandy substratum -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
664: Soldotna, sandy substratum -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
665: Soldotna, sandy substratum -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
666: Soldotna, sandy substratum -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
667: Soldotna, strongly sloping -----	none assigned	---	---
Soldotna, gently sloping -----	none assigned	---	---
668: Soldotna, sandy substratum -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
Kenai -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
669: Soldotna, sandy substratum -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Gymnocarpium dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
Kenai -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Gymnocarpium dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
670: Soldotna -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Gymnocarpium dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
Kichatna -----	<i>Picea</i> - <i>Betula papyrifera</i> / <i>Ledum</i> - <i>Vaccinium vitis-idaea</i> / <i>Cornus canadensis</i>	Forestland	F170XY009AK
671: Soldotna -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Gymnocarpium dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
Kichatna -----	<i>Picea</i> - <i>Betula papyrifera</i> / <i>Ledum</i> - <i>Vaccinium vitis-idaea</i> / <i>Cornus canadensis</i>	Forestland	F170XY009AK
672: Soldotna -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Gymnocarpium dryopteris</i> - <i>Cornus suecica</i>	Forestland	F170XC447AK
Nikolai -----	<i>Picea x</i> <i>lutzii</i> / <i>Calamagrostis canadensis</i>	Forestland	F170XD414AK
673: Spenard -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Menziesia ferruginea</i> / <i>Gymnocarpium dryopteris</i>	Forestland	F170XY018AK
674: Spenard -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Menziesia ferruginea</i> / <i>Gymnocarpium dryopteris</i>	Forestland	F170XY018AK
675: Spenard -----	<i>Picea glauca</i> - <i>Betula papyrifera</i> / <i>Menziesia ferruginea</i> / <i>Gymnocarpium dryopteris</i>	Forestland	F170XY018AK
676: Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
Doroshin -----	Wetland Complex	Rangeland	R170XY400AK
677: Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
678: Starichkof -----	Wetland Complex	Rangeland	R170XY400AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
679: Starichkof, forested-----	Picea mariana/Betula nana	Forestland	F170XY444AK
680: Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
Slikok-----	Picea mariana/Empetrum B nigrum-etula nana	Forestland	F170XY412AK
Naptowne -----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
681: Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
Spenard -----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
682: Susitna-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
Riverwash-----	none assigned	---	---
683: Susitna-----	Betula papyrifera-Picea glauca/Alnus-Oplopanax horridus/Calamagrostis canadensis	Forestland	F170XY004AK
684: Talkeetna-----	Loamy Slopes	Rangeland	R170XY201AK
685: Talkeetna-----	Loamy Slopes	Rangeland	R170XY201AK
686: Talkeetna-----	Loamy Slopes	Rangeland	R170XY201AK
Starichkof -----	Wetland Complex	Rangeland	R170XY400AK
687: Tangerra-----	Picea glauca-Betula papyrifera/Gymnocarpium dryopteris-Cornus suecica	Forestland	F170XC447AK
688: Beaches, tidal flats-----	none assigned	---	---
689: Tlikakila -----	Rolling Uplands	Rangeland	R170XD427AK
690: Tlikakila -----	Rolling Uplands	Rangeland	R170XD427AK
691: Tlikakila -----	Rolling Uplands	Rangeland	R170XD427AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
692: Tokositna -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
693: Tokositna -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
694: Tokositna -----	Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense	Forestland	F170XD443AK
695: Truuli -----	Picea glauca-Betula papyrifera/Menziesia ferruginea/Gymnocarpium dryopteris	Forestland	F170XY018AK
696: Tutka -----	none assigned	---	---
Kasitsna -----	none assigned	---	---
Rock outcrop -----	none assigned	---	---
697: Tutka -----	none assigned	---	---
Portgraham -----	none assigned	---	---
698: Tuxedni -----	Rolling Uplands	Rangeland	R170XD427AK
699: Tuxedni -----	Rolling Uplands	Rangeland	R170XD427AK
700: Tuxedni, warm -----	Populus balsamifera/Oplopanax horridus	Forestland	F170XY445AK
701: Typic Cryaquents -----	none assigned	---	---
702: Typic Cryosamments -----	Beach Dunes and Ridges	Rangeland	R170XY050AK
703: Typic Cryorthents -----	Alpine Ridges	Rangeland	R169XY101AK
704: Urban land -----	none assigned	---	---
705: Water, fresh -----	none assigned	---	---
706: Whitsol -----	Picea xlutzi-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK

Table 16. Ecological Site-Soils Correlation--Continued

Map symbol and soil name	Ecological site name	Ecological site type	Ecological site ID
707: Whitsol -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
708: Whitsol -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
709: Whitsol -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
710: Whitsol -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
711: Whitsol -----	Picea xlutzii-Betula papyrifera/Gymnocarpium dryopteris-Rubus pedatus	Forestland	F170XY435AK
Doroshin -----	Wetland Complex	Rangeland	R170XY400AK

Table 17. Forest Productivity

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
501: Aquic Cryofluvents -----	---	---	---	---
502: Aquic Cryofluvents, shallow -----	---	---	---	---
503: Badland, sea cliffs -----	---	---	---	---
504: Badland, sea cliffs -----	---	---	---	---
Typic Cryorthents -----	---	---	---	---
505: Beaches -----	---	---	---	---
506: Beluga -----	white spruce	75	14	paper birch, spruce
507: Beluga -----	white spruce	75	14	paper birch, spruce
508: Beluga -----	white spruce	75	14	paper birch, spruce
509: Beluga -----	white spruce	75	14	paper birch, spruce
Mutnala -----	white spruce	75	14	paper birch, spruce
510: Beluga -----	white spruce	75	14	paper birch, spruce
Smokey Bay -----	---	---	---	---
511: Beluga -----	white spruce	75	14	paper birch, spruce
Smokey Bay -----	---	---	---	---
512: Benka -----	white spruce	69	12	paper birch, spruce
513: Benka -----	white spruce	69	12	paper birch, spruce
514: Benka -----	white spruce	69	12	paper birch, spruce
515: Benka -----	white spruce	69	12	paper birch, spruce
516: Benka -----	white spruce	69	12	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
517: Benka, strongly sloping-----	white spruce	69	12	paper birch, spruce
Benka, gently sloping-----	white spruce	69	12	paper birch, spruce
518: Boxcar-----	white spruce	54	7	spruce
519: Boxcar-----	white spruce	54	7	spruce
520: Boxcar-----	white spruce	54	7	spruce
521: Boxcar, cool-----	---	---	---	---
522: Boxcar, cool-----	---	---	---	---
523: Chenega-----	---	---	---	---
524: Chenega, cool-----	---	---	---	---
525: Chenega, occasionally flooded-----	---	---	---	---
526: Chulitna-----	white spruce	74	14	paper birch, spruce
527: Chulitna-----	white spruce	74	14	paper birch, spruce
528: Chulitna-----	white spruce	74	14	paper birch, spruce
529: Chulitna-----	white spruce	74	14	paper birch, spruce
530: Chunilna-----	white spruce	51	6	spruce
531: Chunilna-----	white spruce	51	6	spruce
532: Chunilna, cool-----	---	---	---	---
533: Chunilna, cool-----	---	---	---	---
534: Clam Gulch-----	white spruce	59	8	spruce
535: Clunie-----	---	---	---	---

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
536: Coal Creek -----	white spruce	59	8	paper birch, spruce
537: Coal Creek -----	white spruce	59	8	paper birch, spruce
538: Coal Creek -----	white spruce	59	8	paper birch, spruce
539: Cohoe -----	white spruce	66	11	paper birch, spruce
540: Cohoe -----	white spruce	66	11	paper birch, spruce
541: Cohoe -----	white spruce	66	11	paper birch, spruce
542: Cohoe -----	white spruce	66	11	paper birch, spruce
543: Cohoe -----	white spruce	66	11	paper birch, spruce
544: Cohoe -----	white spruce	66	11	paper birch, spruce
545: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
546: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
547: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
548: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
549: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
550: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
551: Cohoe, moderately steep -----	---	---	---	paper birch, spruce
Cohoe, gently sloping -----	---	---	---	paper birch, spruce
552: Cohoe, dry, moderately steep -----	---	---	---	paper birch, spruce
Cohoe, dry, gently sloping -----	---	---	---	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
553: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
Kenai-----	white spruce	64	10	paper birch, spruce
554: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
Kenai-----	white spruce	64	10	paper birch, spruce
555: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
Nikolai -----	white spruce	55	7	spruce
556: Cohoe, dry -----	white spruce	69	12	paper birch, spruce
Nikolai -----	white spruce	55	7	spruce
557: Cytex Creek-----	---	---	---	---
558: Doroshin -----	white spruce	29	1	black spruce
559: Doroshin -----	white spruce	29	1	black spruce
560: Dystrocryepts-----	---	---	---	---
Typic Cryorthents-----	---	---	---	---
Iliamna, cool -----	---	---	---	---
561: Foreland -----	---	---	---	---
562: Foreland -----	---	---	---	---
Soldotna -----	white spruce	66	12	paper birch, spruce
Starichkof-----	---	---	---	---
563: Pits, gravel -----	---	---	---	---
564: Iliamna-----	white spruce	64	10	paper birch, spruce
565: Iliamna-----	white spruce	64	10	paper birch, spruce
566: Iliamna-----	white spruce	64	10	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
567: Iliamna, cool -----	---	---	---	---
568: Island -----	---	---	---	---
569: Island -----	---	---	---	---
570: Island -----	---	---	---	---
571: Island -----	---	---	---	---
572: Island, forested-----	white spruce	67	11	paper birch, spruce
573: Kachemak -----	white spruce	67	11	---
574: Kachemak -----	white spruce	67	11	---
575: Kachemak -----	white spruce	67	11	---
576: Kachemak -----	white spruce	67	11	---
577: Kachemak -----	white spruce	67	11	---
578: Kachemak, cool-----	white spruce	67	11	---
579: Kachemak, cool-----	white spruce	67	11	---
580: Kachemak, cool-----	white spruce	67	11	---
581: Kachemak, cool-----	white spruce	67	11	---
582: Kachemak, cool-----	white spruce	67	11	---
583: Kachemak, forested -----	white spruce	72	13	paper birch, spruce
584: Kachemak, forested -----	white spruce	72	13	paper birch, spruce
585: Kachemak, forested -----	white spruce	72	13	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
586: Kachemak, cool-----	white spruce	67	11	---
Snowdance -----	---	---	---	---
587: Kachemak, cool-----	white spruce	67	11	---
Snowdance -----	---	---	---	---
588: Kachemak, cool-----	white spruce	67	11	---
Snowdance -----	---	---	---	---
589: Kalifonsky -----	white spruce	55	7	black spruce, spruce
590: Kalifonsky -----	white spruce	55	7	black spruce, spruce
591: Kalifonsky -----	white spruce	55	7	black spruce, spruce
Typic Cryorthents-----	---	---	---	---
592: Karluk-----	---	---	---	---
593: Kashwitna -----	white spruce	67	11	paper birch, spruce
594: Kashwitna -----	white spruce	67	11	paper birch, spruce
595: Kashwitna -----	white spruce	67	11	paper birch, spruce
596: Kashwitna, moderately steep -----	---	---	---	---
Kashwitna, strongly sloping-----	---	---	---	---
597: Kenai-----	white spruce	64	10	paper birch, spruce
598: Kenai-----	white spruce	64	10	paper birch, spruce
599: Kenai-----	white spruce	64	10	paper birch, spruce
600: Kenai-----	white spruce	64	10	paper birch, spruce
601: Kenai-----	white spruce	64	10	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
602: Kenai, moderately steep-----	---	---	---	---
Kenai, gently sloping -----	---	---	---	---
603: Kenai-----	white spruce	64	10	paper birch, spruce
Starichkof-----	---	---	---	---
604: Kichatna-----	white spruce	61	8	spruce
605: Kichatna-----	white spruce	61	8	spruce
606: Kichatna-----	white spruce	61	8	spruce
607: Kichatna-----	white spruce	61	8	spruce
608: Kichatna-----	white spruce	61	8	spruce
609: Kichatna-----	white spruce	61	8	spruce
Killey-----	---	---	---	---
610: Kidazqeni-----	---	---	---	---
611: Killey-----	---	---	---	---
Moose River -----	---	---	---	---
612: Liten-----	white spruce	72	13	paper birch, spruce
613: Lithic Haplocryands-----	---	---	---	---
Alic Haplocryands-----	---	---	---	---
Rock outcrop -----	---	---	---	---
614: Lithic Haplocryands-----	---	---	---	---
Alic Haplocryands-----	---	---	---	---
Rock outcrop -----	---	---	---	---
615: Longmare-----	white spruce	84	17	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
616: Longmare-----	white spruce	84	17	paper birch, spruce
617: Mutnala-----	white spruce	75	14	paper birch, spruce
618: Mutnala-----	white spruce	75	14	paper birch, spruce
619: Mutnala-----	white spruce	75	14	paper birch, spruce
620: Mutnala-----	white spruce	75	14	paper birch, spruce
621: Mutnala-----	white spruce	75	14	paper birch, spruce
622: Mutnala-----	white spruce	75	14	paper birch, spruce
623: Mutnala-----	white spruce	75	14	paper birch, spruce
Starichkof-----	---	---	---	---
Slikok-----	---	---	---	---
624: Naptowne-----	white spruce	68	11	paper birch, spruce
625: Naptowne-----	white spruce	68	11	paper birch, spruce
626: Naptowne-----	white spruce	68	11	paper birch, spruce
627: Naptowne-----	white spruce	68	11	paper birch, spruce
628: Naptowne-----	white spruce	68	11	paper birch, spruce
629: Naptowne-----	white spruce	68	11	paper birch, spruce
630: Naptowne, moderately steep-----	---	---	---	---
Naptowne, strongly sloping-----	---	---	---	---
631: Naptowne, strongly sloping-----	---	---	---	---
Naptowne, gently sloping-----	---	---	---	---

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
632: Niklason-----	white spruce	66	11	paper birch, spruce
633: Nikolaevsk-----	white spruce	62	9	spruce
634: Nikolaevsk-----	white spruce	62	9	spruce
635: Nikolaevsk-----	white spruce	62	9	spruce
636: Nikolai-----	white spruce	55	7	spruce
637: Nikolai, somewhat poorly drained---	---	---	---	spruce
Tuxedni-----	white spruce	68	11	paper birch, spruce
638: Puntilla-----	white spruce	58	8	spruce
639: Puntilla-----	white spruce	58	8	spruce
640: Qutal-----	---	---	---	---
641: Qutal-----	---	---	---	---
642: Qutal-----	---	---	---	---
643: Redoubt, terraces-----	white spruce	65	10	paper birch, spruce
644: Redoubt-----	white spruce	64	10	paper birch, spruce
645: Redoubt-----	white spruce	64	10	paper birch, spruce
646: Redoubt, cool-----	---	---	---	---
647: Redoubt, moderately steep-----	---	---	---	---
Redoubt, gently sloping-----	---	---	---	---
648: Redoubt, cool-----	---	---	---	---
Tuxedni-----	white spruce	68	11	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
649: Riverwash -----	---	---	---	---
650: Salamatof-----	---	---	---	---
Doroshin -----	white spruce	29	1	black spruce
651: Salamatof-----	---	---	---	---
652: Slikok -----	---	---	---	---
653: Slikok -----	---	---	---	---
654: Smithfha -----	---	---	---	---
655: Smithfha -----	---	---	---	---
656: Smokey Bay -----	---	---	---	---
657: Smokey Bay -----	---	---	---	---
658: Snowdance -----	---	---	---	---
659: Soldotna -----	white spruce	66	12	paper birch, spruce
660: Soldotna -----	white spruce	66	12	paper birch, spruce
661: Soldotna -----	white spruce	66	12	paper birch, spruce
662: Soldotna -----	white spruce	66	12	paper birch, spruce
663: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce
664: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce
665: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce
666: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
667: Soldotna, strongly sloping-----	white spruce	66	12	paper birch, spruce
Soldotna, gently sloping-----	white spruce	66	12	paper birch, spruce
668: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce
Kenai-----	white spruce	64	10	paper birch, spruce
669: Soldotna, sandy substratum-----	white spruce	66	12	paper birch, spruce
Kenai-----	white spruce	64	10	paper birch, spruce
670: Soldotna-----	white spruce	66	12	paper birch, spruce
Kichatna-----	white spruce	61	8	spruce
671: Soldotna-----	white spruce	66	12	paper birch, spruce
Kichatna-----	white spruce	61	8	spruce
672: Soldotna-----	white spruce	66	12	paper birch, spruce
Nikolai-----	white spruce	55	7	spruce
673: Spenard-----	white spruce	66	12	paper birch, spruce
674: Spenard-----	white spruce	66	12	paper birch, spruce
675: Spenard-----	white spruce	66	12	paper birch, spruce
676: Starichkof-----	---	---	---	---
Doroshin-----	white spruce	29	1	black spruce
677: Starichkof-----	---	---	---	---
678: Starichkof-----	---	---	---	---
679: Starichkof, forested-----	white spruce	51	6	black spruce, white spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
680: Starichkof-----	---	---	---	---
Slikok-----	---	---	---	---
Naptowne-----	white spruce	68	11	paper birch, spruce
681: Starichkof-----	---	---	---	---
Spenard-----	white spruce	66	12	paper birch, spruce
682: Susitna-----	---	---	---	---
Riverwash-----	---	---	---	---
683: Susitna-----	---	---	---	---
684: Talkeetna-----	white spruce	65	10	paper birch, spruce
685: Talkeetna-----	white spruce	65	10	paper birch, spruce
686: Talkeetna-----	white spruce	65	10	paper birch, spruce
Starichkof-----	---	---	---	---
687: Tangerra-----	---	---	---	---
688: Beaches, tidal flats-----	---	---	---	---
689: Tlikakila-----	white spruce	45	5	black spruce, white spruce
690: Tlikakila-----	white spruce	45	5	black spruce, white spruce
691: Tlikakila-----	white spruce	45	5	black spruce, white spruce
692: Tokositna-----	white spruce	86	18	paper birch, spruce
693: Tokositna-----	white spruce	86	18	paper birch, spruce
694: Tokositna-----	white spruce	86	18	paper birch, spruce
695: Truuli-----	white spruce	55	7	paper birch, spruce

Table 17. Forest Productivity—Continued

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber Cu. Ft./Acre	
696: Tutka-----	---	---	---	---
Kasitsna-----	---	---	---	---
Rock outcrop-----	---	---	---	---
697: Tutka-----	---	---	---	---
Portgraham-----	---	---	---	---
698: Tuxedni-----	white spruce	68	11	paper birch, spruce
699: Tuxedni-----	white spruce	68	11	paper birch, spruce
700: Tuxedni, warm-----	white spruce	65	10	spruce
701: Typic Cryaquents-----	---	---	---	---
702: Typic Cryopsamments-----	---	---	---	---
703: Typic Cryorthents-----	---	---	---	---
704: Urban land-----	---	---	---	---
705: Water, fresh-----	---	---	---	---
706: Whitsol-----	white spruce	62	9	paper birch, spruce
707: Whitsol-----	white spruce	62	9	paper birch, spruce
708: Whitsol-----	white spruce	62	9	paper birch, spruce
709: Whitsol-----	white spruce	62	9	paper birch, spruce
710: Whitsol-----	white spruce	62	9	paper birch, spruce
711: Whitsol-----	white spruce	62	9	paper birch, spruce
Doroshin-----	white spruce	29	1	black spruce

Table 18. Building Site Development: Structures

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Aquic Cryofluvents -----	85	Very limited Flooding Depth to saturated zone	1.00 0.05	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.05
502: Aquic Cryofluvents, shallow -----	80	Very limited Flooding Depth to saturated zone	1.00 0.05	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.05
503: Badland, sea cliffs -----	100	Not rated		Not rated		Not rated	
504: Badland, sea cliffs -----	55	Not rated		Not rated		Not rated	
Typic Cryorthents -----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
505: Beaches -----	90	Not rated		Not rated		Not rated	
506: Beluga -----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone	1.00
507: Beluga -----	87	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Slope	1.00 0.12
508: Beluga -----	87	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Shrink-swell Slope	1.00 0.50 0.16	Very limited Slope Depth to saturated zone	1.00 1.00
509: Beluga -----	55	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone	1.00
Mutnala -----	40	Not limited		Not limited		Somewhat limited Slope	0.50
510: Beluga -----	60	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Slope	1.00 0.12
Smokey Bay -----	37	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
511: Beluga -----	50	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Depth to saturated zone Shrink-swell Slope	1.00 0.50 0.16	Very limited Slope Depth to saturated zone	1.00 1.00
Smokey Bay -----	47	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 1.00
512: Benka -----	86	Not limited		Not limited		Not limited	
513: Benka -----	90	Not limited		Not limited		Somewhat limited Slope	0.50
514: Benka -----	85	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
515: Benka -----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
516: Benka -----	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
517: Benka, strongly sloping -	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Benka, gently sloping----	40	Not limited		Not limited		Somewhat limited Slope	0.12
518: Boxcar -----	75	Not limited		Not limited		Not limited	
519: Boxcar -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
520: Boxcar -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
521: Boxcar, cool-----	80	Not limited		Not limited		Not limited	
522: Boxcar, cool-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
523: Chenega -----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
524: Chenega, cool -----	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
525: Chenega, occasionally flooded -----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
526: Chulitna -----	90	Not limited		Not limited		Not limited	
527: Chulitna -----	80	Not limited		Not limited		Somewhat limited Slope	0.50
528: Chulitna -----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
529: Chulitna -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
530: Chunilna -----	92	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
531: Chunilna -----	82	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50
532: Chunilna, cool -----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
533: Chunilna, cool -----	85	Somewhat limited Depth to saturated zone Slope	0.99 0.16	Very limited Depth to saturated zone Slope	1.00 0.16	Very limited Slope Depth to saturated zone	1.00 0.99
534: Clam Gulch -----	85	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50
535: Clunie -----	90	Very limited Ponding Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00 1.00 0.50	Very limited Ponding Subsidence Flooding Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00 1.00
536: Coal Creek -----	75	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
537: Coal Creek -----	88	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.12
538: Coal Creek -----	88	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Slope Depth to saturated zone	1.00 1.00
539: Cohoe -----	87	Not limited		Not limited		Not limited	
540: Cohoe -----	85	Not limited		Not limited		Somewhat limited Slope	0.50
541: Cohoe -----	89	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
542: Cohoe -----	93	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
543: Cohoe -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
544: Cohoe -----	84	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
545: Cohoe, dry-----	87	Not limited		Not limited		Not limited	
546: Cohoe, dry-----	85	Not limited		Not limited		Somewhat limited Slope	0.50
547: Cohoe, dry-----	89	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
548: Cohoe, dry-----	93	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
549: Cohoe, dry-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
550: Cohoe, dry-----	84	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
551: Cohoe, moderately steep -----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Cohoe, gently sloping ---	40	Not limited		Not limited		Somewhat limited Slope	0.50
552: Cohoe, dry, moderately steep -----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Cohoe, dry, gently sloping -----	40	Not limited		Not limited		Somewhat limited Slope	0.50
553: Cohoe, dry -----	55	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
Kenai -----	30	Somewhat limited Shrink-swell Slope	0.50 0.37	Somewhat limited Shrink-swell Slope	0.50 0.37	Very limited Slope Shrink-swell	1.00 0.50
554: Cohoe, dry -----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Kenai -----	30	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
555: Cohoe, dry -----	70	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Nikolai -----	30	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
556: Cohoe, dry -----	70	Not limited		Not limited		Somewhat limited Slope	0.50
Nikolai -----	30	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
557: Cytex Creek -----	75	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
558: Doroshin -----	83	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
559: Doroshin -----	79	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content Slope	1.00 1.00 1.00 0.12
560: Dystrocryepts -----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Typic Cryorthents -----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Iliamna, cool -----	20	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
561: Foreland -----	79	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
562: Foreland -----	59	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
Soldotna -----	20	Not limited		Not limited		Somewhat limited Slope	0.50
Starichkof -----	20	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
563: Pits, gravel -----	95	Not rated		Not rated		Not rated	
564: Iliamna -----	80	Not limited		Not limited		Not limited	
565: Iliamna -----	82	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
566: Iliamna -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
567: Iliamna, cool -----	90	Not limited		Not limited		Not limited	
568: Island -----	90	Not limited		Not limited		Not limited	

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
569: Island -----	91	Not limited		Not limited		Somewhat limited Slope	0.50
570: Island -----	90	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
571: Island -----	92	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
572: Island, forested-----	90	Not limited		Not limited		Not limited	
573: Kachemak -----	80	Not limited		Not limited		Somewhat limited Slope	0.50
574: Kachemak -----	80	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
575: Kachemak -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
576: Kachemak -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
577: Kachemak -----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
578: Kachemak, cool-----	80	Not limited		Not limited		Somewhat limited Slope	0.50
579: Kachemak, cool-----	80	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
580: Kachemak, cool-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
581: Kachemak, cool-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
582: Kachemak, cool-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
583: Kachemak, forested ----	75	Not limited		Not limited		Somewhat limited Slope	0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
584: Kachemak, forested -----	85	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
585: Kachemak, forested -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
586: Kachemak, cool-----	60	Not limited		Not limited		Not limited	
Snowdance-----	40	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
587: Kachemak, cool-----	65	Not limited		Not limited		Somewhat limited Slope	0.50
Snowdance-----	35	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50
588: Kachemak, cool-----	70	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
Snowdance-----	30	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Slope Depth to saturated zone	1.00 1.00
589: Kalifonsky-----	83	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
590: Kalifonsky-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50
591: Kalifonsky-----	50	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.12
Typic Cryorthents-----	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
592: Karluk-----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
593: Kashwitna -----	85	Not limited		Not limited		Not limited	
594: Kashwitna -----	88	Not limited		Not limited		Somewhat limited Slope	0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
595: Kashwitna -----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
596: Kashwitna, moderately steep -----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Kashwitna, strongly sloping -----	40	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
597: Kenai-----	81	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
598: Kenai-----	82	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.50 0.50
599: Kenai-----	85	Somewhat limited Shrink-swell Slope	0.50 0.37	Somewhat limited Shrink-swell Slope	0.50 0.37	Very limited Slope Shrink-swell	1.00 0.50
600: Kenai-----	88	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
601: Kenai-----	86	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
602: Kenai, moderately steep -----	45	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
Kenai, gently sloping ----	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.50 0.50
603: Kenai-----	60	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
Starichkof -----	31	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
604: Kichatna-----	70	Not limited		Not limited		Not limited	
605: Kichatna-----	75	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
606: Kichatna-----	75	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
607: Kichatna-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
608: Kichatna-----	70	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
609: Kichatna-----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Killey -----	50	Very limited Flooding Depth to saturated zone	1.00 0.99	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.99
610: Kidazqeni -----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
611: Killey -----	45	Very limited Flooding Depth to saturated zone	1.00 0.99	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 0.99
Moose River -----	45	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
612: Liten-----	85	Not limited		Not limited		Not limited	
613: Lithic Haplocryands -----	55	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Alic Haplocryands -----	20	Very limited Slope Depth to hard bedrock	1.00 0.32	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.32
Rock outcrop-----	17	Not rated		Not rated		Not rated	

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
614: Lithic Haplocryands-----	55	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Alic Haplocryands-----	20	Very limited Slope Depth to hard bedrock	1.00 0.32	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.32
Rock outcrop-----	20	Not rated		Not rated		Not rated	
615: Longmare-----	80	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
616: Longmare-----	80	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Slope Depth to saturated zone	0.50 0.39
617: Mutnala-----	75	Not limited		Not limited		Not limited	
618: Mutnala-----	80	Not limited		Not limited		Somewhat limited Slope	0.50
619: Mutnala-----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
620: Mutnala-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
621: Mutnala-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
622: Mutnala-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
623: Mutnala-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Starichkof-----	35	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Slikok-----	20	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
624: Naptowne-----	80	Not limited		Not limited		Not limited	
625: Naptowne-----	80	Not limited		Not limited		Somewhat limited Slope	0.50
626: Naptowne-----	80	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
627: Naptowne-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
628: Naptowne-----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
629: Naptowne-----	80	Not limited		Not limited		Somewhat limited Slope	0.50
630: Naptowne, moderately steep-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Naptowne, strongly sloping-----	40	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
631: Naptowne, strongly sloping-----	45	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Naptowne, gently sloping-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
632: Niklason-----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
633: Nikolaevsk-----	85	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
634: Nikolaevsk-----	83	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone Slope	1.00 0.50
635: Nikolaevsk-----	85	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Slope Depth to saturated zone	1.00 1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
636: Nikolai -----	90	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
637: Nikolai, somewhat poorly drained -----	60	Very limited Subsidence Organic matter content Depth to saturated zone	1.00 1.00 0.28	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Organic matter content Depth to saturated zone	1.00 1.00 0.28
Tuxedni-----	25	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
638: Puntilla -----	80	Somewhat limited Slope	0.01	Somewhat limited Slope	0.01	Very limited Slope	1.00
639: Puntilla -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
640: Qutal -----	77	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39
641: Qutal -----	80	Somewhat limited Shrink-swell Depth to saturated zone	0.50 0.39	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Somewhat limited Slope Shrink-swell Depth to saturated zone	0.50 0.50 0.39
642: Qutal -----	80	Somewhat limited Shrink-swell Depth to saturated zone Slope	0.50 0.39 0.37	Very limited Depth to saturated zone Shrink-swell Slope	1.00 0.50 0.37	Very limited Slope Shrink-swell Depth to saturated zone	1.00 0.50 0.39
643: Redoubt, terraces -----	85	Not limited		Not limited		Not limited	
644: Redoubt -----	85	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
645: Redoubt -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
646: Redoubt, cool-----	80	Not limited		Not limited		Not limited	

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
647: Redoubt, moderately steep-----	45	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Redoubt, gently sloping-----	40	Not limited		Not limited		Somewhat limited Slope	0.50
648: Redoubt, cool -----	55	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
Tuxedni -----	35	Somewhat limited Depth to saturated zone Slope	0.44 0.04	Very limited Depth to saturated zone Slope	1.00 0.04	Very limited Slope Depth to saturated zone	1.00 0.44
649: Riverwash-----	100	Not rated		Not rated		Not rated	
650: Salamatof -----	70	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Doroshin-----	22	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
651: Salamatof -----	80	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
652: Slikok-----	85	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00
653: Slikok-----	82	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00
654: Smithfha -----	85	Not limited		Not limited		Somewhat limited Slope	0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
655: Smithfha -----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
656: Smokey Bay -----	77	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
657: Smokey Bay -----	77	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Depth to saturated zone Slope	1.00 0.37	Very limited Slope Depth to saturated zone	1.00 1.00
658: Snowdance -----	90	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
659: Soldotna -----	90	Not limited		Not limited		Not limited	
660: Soldotna -----	90	Not limited		Not limited		Somewhat limited Slope	0.50
661: Soldotna -----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
662: Soldotna -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
663: Soldotna, sandy substratum -----	80	Not limited		Not limited		Somewhat limited Slope	0.50
664: Soldotna, sandy substratum -----	75	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
665: Soldotna, sandy substratum -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
666: Soldotna, sandy substratum -----	80	Not limited		Not limited		Not limited	
667: Soldotna, strongly sloping -----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Soldotna, gently sloping -----	40	Not limited		Not limited		Not limited	

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
668: Soldotna, sandy substratum -----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Kenai -----	40	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50	Very limited Slope Shrink-swell	1.00 0.50
669: Soldotna, sandy substratum -----	55	Not limited		Not limited		Somewhat limited Slope	0.50
Kenai -----	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.50 0.50
670: Soldotna -----	50	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Kichatna -----	40	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
671: Soldotna -----	50	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Kichatna -----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
672: Soldotna -----	55	Not limited		Not limited		Not limited	
Nikolai -----	45	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
673: Spenard -----	89	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50
674: Spenard -----	67	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Slope Shrink-swell	1.00 0.50 0.50
675: Spenard -----	87	Very limited Depth to saturated zone Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to saturated zone Slope Shrink-swell	1.00 0.63 0.50	Very limited Slope Depth to saturated zone Shrink-swell	1.00 1.00 0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
676: Starichkof -----	60	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Doroshin-----	35	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone	1.00 1.00	Very limited Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00
677: Starichkof -----	75	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
678: Starichkof -----	82	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content Slope	1.00 1.00 1.00 1.00 0.12
679: Starichkof, forested-----	85	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
680: Starichkof -----	45	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Slikok-----	30	Very limited Ponding Flooding Depth to saturated zone Organic matter content Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Depth to saturated zone Subsidence Slope	1.00 1.00 1.00 1.00 0.16	Very limited Ponding Flooding Depth to saturated zone Organic matter content Slope	1.00 1.00 1.00 1.00 1.00
Naptowne -----	25	Not limited		Not limited		Somewhat limited Slope	0.12

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
681: Starichkof -----	50	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
Spenard -----	42	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50
682: Susitna -----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Riverwash -----	5	Not rated		Not rated		Not rated	
683: Susitna -----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.50
684: Talkeetna -----	94	Not limited		Not limited		Not limited	
685: Talkeetna -----	90	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
686: Talkeetna -----	55	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Starichkof -----	40	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00	Very limited Ponding Subsidence Depth to saturated zone Organic matter content	1.00 1.00 1.00 1.00
687: Tangerra -----	80	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
688: Beaches, tidal flats -----	90	Not rated		Not rated		Not rated	
689: Tlikakila -----	90	Somewhat limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.93
690: Tlikakila -----	87	Somewhat limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone Slope	0.93 0.50

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
691: Tiikakila-----	85	Somewhat limited Depth to saturated zone Slope	0.93 0.63	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.93
692: Tokositna-----	85	Not limited		Not limited		Not limited	
693: Tokositna-----	90	Not limited		Not limited		Somewhat limited Slope	0.50
694: Tokositna-----	90	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
695: Truuli-----	88	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
696: Tutka-----	45	Very limited Slope Depth to hard bedrock	1.00 0.99	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.99
Kasitsna-----	40	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
697: Tutka-----	55	Very limited Slope Depth to hard bedrock	1.00 0.99	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.99
Portgraham-----	30	Very limited Slope Depth to hard bedrock	1.00 0.71	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.71
698: Tuxedni-----	85	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
699: Tuxedni-----	85	Somewhat limited Slope Depth to saturated zone	0.63 0.44	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.44
700: Tuxedni, warm-----	85	Somewhat limited Depth to saturated zone	0.44	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.44
701: Typic Cryaquents-----	95	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00

Table 18. Building Site Development: Structures—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements (Standard criteria)		Dwellings with basements (Standard criteria)		Small commercial buildings (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
702: Typic Cryopsamments--	84	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
703: Typic Cryorthents -----	80	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
704: Urban land -----	85	Not rated		Not rated		Not rated	
705: Water, fresh -----	100	Not rated		Not rated		Not rated	
706: Whitsol -----	90	Not limited		Not limited		Not limited	
707: Whitsol -----	90	Not limited		Not limited		Somewhat limited Slope	0.50
708: Whitsol -----	85	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
709: Whitsol -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
710: Whitsol -----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
711: Whitsol -----	55	Not limited		Not limited		Somewhat limited Slope	0.12
Doroshin -----	30	Very limited Subsidence	1.00	Very limited Subsidence	1.00	Very limited Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00

Table 19. Building Site Development: Site Improvements

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
501: Aquic Cryofluvents -----	85	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.60
502: Aquic Cryofluvents, shallow -----	80	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.60
503: Badland, sea cliffs -----	100	Not rated	
504: Badland, sea cliffs -----	55	Not rated	
Typic Cryorthents -----	45	Very limited: Slope Cutbanks cave	1.00 1.00
505: Beaches -----	90	Not rated	
506: Beluga -----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
507: Beluga -----	87	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
508: Beluga -----	87	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.16 0.10
509: Beluga -----	55	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
Mutnala -----	40	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
510: Beluga-----	60	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
Smokey Bay-----	37	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
511: Beluga-----	50	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.16 0.10
Smokey Bay-----	47	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.63 0.10
512: Benka-----	86	Very limited: Cutbanks cave	1.00
513: Benka-----	90	Very limited: Cutbanks cave	1.00
514: Benka-----	85	Very limited: Cutbanks cave Slope	1.00 0.37
515: Benka-----	90	Very limited: Slope Cutbanks cave	1.00 1.00
516: Benka-----	95	Very limited: Slope Cutbanks cave	1.00 1.00
517: Benka, strongly sloping-----	45	Very limited: Cutbanks cave Slope	1.00 0.63
Benka, gently sloping-----	40	Very limited: Cutbanks cave	1.00
518: Boxcar-----	75	Very limited: Cutbanks cave	1.00
519: Boxcar-----	80	Very limited: Cutbanks cave Slope	1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
520: Boxcar -----	85	Very limited: Slope Cutbanks cave	1.00 1.00
521: Boxcar, cool -----	80	Very limited: Cutbanks cave	1.00
522: Boxcar, cool -----	80	Very limited: Slope Cutbanks cave	1.00 1.00
523: Chenega -----	85	Very limited: Cutbanks cave Flooding	1.00 0.80
524: Chenega, cool -----	90	Very limited: Cutbanks cave Flooding	1.00 0.80
525: Chenega, occasionally flooded -----	85	Very limited: Cutbanks cave Flooding	1.00 0.60
526: Chulitna -----	90	Very limited: Cutbanks cave	1.00
527: Chulitna -----	80	Very limited: Cutbanks cave	1.00
528: Chulitna -----	85	Very limited: Cutbanks cave Slope	1.00 0.63
529: Chulitna -----	85	Very limited: Slope Cutbanks cave	1.00 1.00
530: Chunilna -----	92	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
531: Chunilna -----	82	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
532: Chunilna, cool -----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
533: Chunilna, cool -----	85	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.16
534: Clam Gulch-----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
535: Clunie-----	90	Very limited: Ponding Depth to saturated zone Organic matter content Flooding Cutbanks cave	1.00 1.00 1.00 0.80 0.10
536: Coal Creek -----	75	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
537: Coal Creek -----	88	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
538: Coal Creek -----	88	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.37
539: Cohoe-----	87	Very limited: Cutbanks cave Dense layer	1.00 0.50
540: Cohoe-----	85	Very limited: Cutbanks cave Dense layer	1.00 0.50
541: Cohoe-----	89	Very limited: Cutbanks cave Dense layer Slope	1.00 0.50 0.37

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
542: Cohoe-----	93	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
543: Cohoe-----	80	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
544: Cohoe-----	84	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
545: Cohoe, dry-----	87	Very limited: Cutbanks cave Dense layer	1.00 0.50
546: Cohoe, dry-----	85	Very limited: Cutbanks cave Dense layer	1.00 0.50
547: Cohoe, dry-----	89	Very limited: Cutbanks cave Dense layer Slope	1.00 0.50 0.37
548: Cohoe, dry-----	93	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
549: Cohoe, dry-----	80	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
550: Cohoe, dry-----	84	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
551: Cohoe, moderately steep-----	45	Very limited: Cutbanks cave Slope Dense layer	1.00 1.00 0.50
Cohoe, gently sloping -----	40	Very limited: Cutbanks cave Dense layer	1.00 0.50
552: Cohoe, dry, moderately steep-----	45	Very limited: Cutbanks cave Slope Dense layer	1.00 1.00 0.50
Cohoe, dry, gently sloping-----	40	Very limited: Cutbanks cave Dense layer	1.00 0.50
553: Cohoe, dry-----	55	Very limited: Cutbanks cave Dense layer Slope	1.00 0.50 0.37
Kenai-----	30	Somewhat limited: Slope Cutbanks cave	0.37 0.10
554: Cohoe, dry-----	55	Very limited: Slope Cutbanks cave Dense layer	1.00 1.00 0.50
Kenai-----	30	Very limited: Slope Cutbanks cave	1.00 0.10
555: Cohoe, dry-----	70	Very limited: Cutbanks cave Slope Dense layer	1.00 1.00 0.50
Nikolai -----	30	Very limited: Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00
556: Cohoe, dry-----	70	Very limited: Cutbanks cave Dense layer	1.00 0.50
Nikolai -----	30	Very limited: Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
557: Cytex Creek-----	75	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
558: Doroshin-----	83	Very limited: Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 0.10
559: Doroshin-----	79	Very limited: Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 0.10
560: Dystrocryepts-----	50	Very limited: Cutbanks cave Slope	1.00 1.00
Typic Cryorthents-----	30	Very limited: Slope Cutbanks cave	1.00 1.00
Iliamna, cool-----	20	Very limited: Cutbanks cave Slope	1.00 1.00
561: Foreland-----	79	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
562: Foreland-----	59	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
Soldotna-----	20	Very limited: Cutbanks cave	1.00
Starichkof-----	20	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
563: Pits, gravel-----	95	Not rated	
564: Iliamna-----	80	Very limited: Cutbanks cave	1.00
565: Iliamna-----	82	Very limited: Cutbanks cave Slope	1.00 0.16

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
566: Iliamna-----	80	Very limited: Slope Cutbanks cave	1.00 1.00
567: Iliamna, cool-----	90	Very limited: Cutbanks cave	1.00
568: Island -----	90	Very limited: Cutbanks cave	1.00
569: Island -----	91	Very limited: Cutbanks cave	1.00
570: Island -----	90	Very limited: Cutbanks cave Slope	1.00 0.63
571: Island -----	92	Very limited: Slope Cutbanks cave	1.00 1.00
572: Island, forested-----	90	Very limited: Cutbanks cave	1.00
573: Kachemak -----	80	Somewhat limited: Cutbanks cave	0.10
574: Kachemak -----	80	Somewhat limited: Slope Cutbanks cave	0.37 0.10
575: Kachemak -----	80	Very limited: Slope Cutbanks cave	1.00 0.10
576: Kachemak -----	80	Very limited: Slope Cutbanks cave	1.00 0.10
577: Kachemak -----	90	Very limited: Slope Cutbanks cave	1.00 0.10
578: Kachemak, cool-----	80	Somewhat limited: Cutbanks cave	0.10

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
579: Kachemak, cool-----	80	Somewhat limited: Slope Cutbanks cave	0.37 0.10
580: Kachemak, cool-----	80	Very limited: Slope Cutbanks cave	1.00 0.10
581: Kachemak, cool-----	80	Very limited: Slope Cutbanks cave	1.00 0.10
582: Kachemak, cool-----	80	Very limited: Slope Cutbanks cave	1.00 0.10
583: Kachemak, forested-----	75	Somewhat limited: Cutbanks cave	0.10
584: Kachemak, forested-----	85	Somewhat limited: Slope Cutbanks cave	0.37 0.10
585: Kachemak, forested-----	80	Very limited: Slope Cutbanks cave	1.00 0.10
586: Kachemak, cool-----	60	Somewhat limited: Cutbanks cave	0.10
Snowdance-----	40	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
587: Kachemak, cool-----	65	Somewhat limited: Cutbanks cave	0.10
Snowdance-----	35	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
588: Kachemak, cool-----	70	Somewhat limited: Slope Cutbanks cave	0.37 0.10
Snowdance-----	30	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.37 0.10

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
589: Kalifonsky-----	83	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
590: Kalifonsky-----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
591: Kalifonsky-----	50	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
Typic Cryorthents-----	30	Very limited: Slope Cutbanks cave	1.00 1.00
592: Karluk-----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
593: Kashwitna-----	85	Very limited: Cutbanks cave	1.00
594: Kashwitna-----	88	Very limited: Cutbanks cave	1.00
595: Kashwitna-----	85	Very limited: Cutbanks cave Slope	1.00 0.63
596: Kashwitna, moderately steep-----	50	Very limited: Slope Cutbanks cave	1.00 1.00
Kashwitna, strongly sloping-----	40	Very limited: Cutbanks cave Slope	1.00 0.96
597: Kenai-----	81	Somewhat limited: Cutbanks cave	0.10
598: Kenai-----	82	Somewhat limited: Cutbanks cave	0.10
599: Kenai-----	85	Somewhat limited: Slope Cutbanks cave	0.37 0.10

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
600: Kenai-----	88	Very limited: Slope Cutbanks cave	1.00 0.10
601: Kenai-----	86	Very limited: Slope Cutbanks cave	1.00 0.10
602: Kenai, moderately steep-----	45	Very limited: Slope Cutbanks cave	1.00 0.10
Kenai, gently sloping-----	40	Somewhat limited: Cutbanks cave	0.10
603: Kenai-----	60	Somewhat limited: Slope Cutbanks cave	0.63 0.10
Starichkof-----	31	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
604: Kichatna-----	70	Very limited: Cutbanks cave	1.00
605: Kichatna-----	75	Very limited: Cutbanks cave Slope	1.00 0.63
606: Kichatna-----	75	Very limited: Slope Cutbanks cave	1.00 1.00
607: Kichatna-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
608: Kichatna-----	70	Very limited: Slope Cutbanks cave	1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
609: Kichatna-----	50	Very limited: Slope Cutbanks cave	1.00 1.00
Killey-----	50	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80
610: Kidazqeni-----	85	Very limited: Cutbanks cave	1.00
611: Killey-----	45	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80
Moose River-----	45	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80
612: Liten-----	85	Very limited: Cutbanks cave	1.00
613: Lithic Haplocryands-----	55	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
Alic Haplocryands-----	20	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00
Rock outcrop-----	17	Not rated	
614: Lithic Haplocryands-----	55	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
Alic Haplocryands-----	20	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00
Rock outcrop-----	20	Not rated	
615: Longmare-----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
616: Longmare-----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
617: Mutnala-----	75	Very limited: Cutbanks cave	1.00
618: Mutnala-----	80	Very limited: Cutbanks cave	1.00
619: Mutnala-----	85	Very limited: Cutbanks cave Slope	1.00 0.63
620: Mutnala-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
621: Mutnala-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
622: Mutnala-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
623: Mutnala-----	45	Very limited: Slope Cutbanks cave	1.00 1.00
Starichkof-----	35	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
Slikok-----	20	Very limited: Ponding Depth to saturated zone Cutbanks cave Organic matter content Flooding	1.00 1.00 1.00 1.00 0.60
624: Naptowne-----	80	Very limited: Cutbanks cave	1.00
625: Naptowne-----	80	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
626: Naptowne-----	80	Very limited: Cutbanks cave Slope	1.00 0.16
627: Naptowne-----	80	Very limited: Slope Cutbanks cave	1.00 1.00
628: Naptowne-----	80	Very limited: Slope Cutbanks cave	1.00 1.00
629: Naptowne-----	80	Very limited: Cutbanks cave	1.00
630: Naptowne, moderately steep-----	45	Very limited: Slope Cutbanks cave	1.00 1.00
Naptowne, strongly sloping-----	40	Very limited: Cutbanks cave Slope	1.00 0.96
631: Naptowne, strongly sloping-----	45	Very limited: Cutbanks cave Slope	1.00 0.63
Naptowne, gently sloping-----	40	Very limited: Cutbanks cave	1.00
632: Niklason-----	85	Very limited: Cutbanks cave Flooding	1.00 0.60
633: Nikolaevsk-----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
634: Nikolaevsk-----	83	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
635: Nikolaevsk-----	85	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.37

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
636: Nikolai -----	90	Very limited: Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00
637: Nikolai, somewhat poorly drained -----	60	Very limited: Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00
Tuxedni -----	25	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
638: Puntilla -----	80	Very limited: Cutbanks cave Slope	1.00 0.01
639: Puntilla -----	85	Very limited: Cutbanks cave Slope	1.00 1.00
640: Qutal -----	77	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
641: Qutal -----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
642: Qutal -----	80	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.37
643: Redoubt, terraces -----	85	Very limited: Cutbanks cave	1.00
644: Redoubt -----	85	Very limited: Cutbanks cave Slope	1.00 0.16
645: Redoubt -----	85	Very limited: Slope Cutbanks cave	1.00 1.00
646: Redoubt, cool -----	80	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
647: Redoubt, moderately steep -----	45	Very limited: Cutbanks cave Slope	1.00 1.00
Redoubt, gently sloping -----	40	Very limited: Cutbanks cave	1.00
648: Redoubt, cool -----	55	Very limited: Cutbanks cave Slope	1.00 0.04
Tuxedni -----	35	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.04
649: Riverwash -----	100	Not rated	
650: Salamatof -----	70	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 0.10
Doroshin -----	22	Very limited: Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 0.10
651: Salamatof -----	80	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 0.10
652: Slikok -----	85	Very limited: Ponding Depth to saturated zone Cutbanks cave Organic matter content Flooding	1.00 1.00 1.00 1.00 0.60
653: Slikok -----	82	Very limited: Ponding Depth to saturated zone Cutbanks cave Organic matter content Flooding	1.00 1.00 1.00 1.00 0.60
654: Smithfha -----	85	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
655: Smithfha-----	90	Very limited: Slope Cutbanks cave	1.00 1.00
656: Smokey Bay-----	77	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
657: Smokey Bay-----	77	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.37 0.10
658: Snowdance-----	90	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
659: Soldotna-----	90	Very limited: Cutbanks cave	1.00
660: Soldotna-----	90	Very limited: Cutbanks cave	1.00
661: Soldotna-----	85	Very limited: Cutbanks cave Slope	1.00 0.63
662: Soldotna-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
663: Soldotna, sandy substratum-----	80	Very limited: Cutbanks cave	1.00
664: Soldotna, sandy substratum-----	75	Very limited: Cutbanks cave Slope	1.00 0.37
665: Soldotna, sandy substratum-----	80	Very limited: Slope Cutbanks cave	1.00 1.00
666: Soldotna, sandy substratum-----	80	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
667: Soldotna, strongly sloping-----	45	Very limited: Cutbanks cave Slope	1.00 0.16
Soldotna, gently sloping -----	40	Very limited: Cutbanks cave	1.00
668: Soldotna, sandy substratum-----	55	Very limited: Slope Cutbanks cave	1.00 1.00
Kenai-----	40	Very limited: Slope Cutbanks cave	1.00 0.10
669: Soldotna, sandy substratum-----	55	Very limited: Cutbanks cave	1.00
Kenai-----	40	Somewhat limited: Cutbanks cave	0.10
670: Soldotna-----	50	Very limited: Cutbanks cave Slope	1.00 0.63
Kichatna-----	40	Very limited: Cutbanks cave Slope	1.00 0.63
671: Soldotna-----	50	Very limited: Slope Cutbanks cave	1.00 1.00
Kichatna-----	40	Very limited: Slope Cutbanks cave	1.00 1.00
672: Soldotna-----	55	Very limited: Cutbanks cave	1.00
Nikolai -----	45	Very limited: Depth to saturated zone Cutbanks cave Organic matter content	1.00 1.00 1.00
673: Spenard-----	89	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
674: Spenard-----	67	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
675: Spenard -----	87	Very limited: Depth to saturated zone Slope Cutbanks cave	1.00 0.63 0.10
676: Starichkof -----	60	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
Doroshin -----	35	Very limited: Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 0.10
677: Starichkof -----	75	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
678: Starichkof -----	82	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
679: Starichkof, forested -----	85	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
680: Starichkof -----	45	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
Slikok -----	30	Very limited: Ponding Depth to saturated zone Cutbanks cave Organic matter content Flooding	1.00 1.00 1.00 1.00 0.60
Naptowne -----	25	Very limited: Cutbanks cave	1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
681: Starichkof -----	50	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
Spenard -----	42	Very limited: Depth to saturated zone Cutbanks cave	1.00 0.10
682: Susitna- -----	85	Very limited: Cutbanks cave	1.00
Riverwash -----	5	Not rated	
683: Susitna- -----	85	Very limited: Cutbanks cave	1.00
684: Talkeetna -----	94	Very limited: Cutbanks cave	1.00
685: Talkeetna -----	90	Very limited: Slope Cutbanks cave	1.00 1.00
686: Talkeetna -----	55	Very limited: Cutbanks cave Slope	1.00 1.00
Starichkof -----	40	Very limited: Ponding Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 1.00 1.00
687: Tangerra -----	80	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
688: Beaches, tidal flats -----	90	Not rated	
689: Tlikakila -----	90	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
690: Tlikakila -----	87	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
691: Tlikakila-----	85	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.63
692: Tokositna -----	85	Somewhat limited: Cutbanks cave	0.10
693: Tokositna -----	90	Somewhat limited: Cutbanks cave	0.10
694: Tokositna -----	90	Somewhat limited: Slope Cutbanks cave	0.16 0.10
695: Truuli-----	88	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
696: Tutka-----	45	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00
Kasitsna-----	40	Very limited: Slope Cutbanks cave	1.00 1.00
Rock outcrop-----	15	Not rated	
697: Tutka-----	55	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00
Portgraham-----	30	Very limited: Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10
698: Tuxedni-----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
699: Tuxedni-----	85	Very limited: Depth to saturated zone Cutbanks cave Slope	1.00 1.00 0.63

Table 19. Building Site Development: Site Improvements—Continued

Map symbol and soil name	Percent of map unit	Shallow excavations (Standard criteria)	
		Rating class and limiting features	Value
700: Tuxedni, warm-----	85	Very limited: Depth to saturated zone Cutbanks cave	1.00 1.00
701: Typic Cryaquents-----	95	Very limited: Depth to saturated zone Cutbanks cave Flooding	1.00 1.00 0.80
702: Typic Cryopsamments-----	84	Very limited: Cutbanks cave Slope	1.00 1.00
703: Typic Cryorthents-----	80	Very limited: Slope Cutbanks cave	1.00 1.00
704: Urban land-----	85	Not rated	
705: Water, fresh-----	100	Not rated	
706: Whitsol-----	90	Very limited: Cutbanks cave	1.00
707: Whitsol-----	90	Very limited: Cutbanks cave	1.00
708: Whitsol-----	85	Very limited: Cutbanks cave Slope	1.00 0.63
709: Whitsol-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
710: Whitsol-----	85	Very limited: Slope Cutbanks cave	1.00 1.00
711: Whitsol-----	55	Very limited: Cutbanks cave	1.00
Doroshin-----	30	Very limited: Depth to saturated zone Organic matter content Cutbanks cave	1.00 1.00 0.10

Table 20. Sanitary Facilities: Sewage Treatment and Landfill

(This table gives soil limitation ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
501: Aquic Cryofluvents-----	85	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
502: Aquic Cryofluvents, shallow-----	80	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
503: Badland, sea cliffs -----	100	Not rated		Not rated		Not rated	
504: Badland, sea cliffs -----	55	Not rated		Not rated		Not rated	
Typic Cryorthents -----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
505: Beaches -----	90	Not rated		Not rated		Not rated	
506: Beluga-----	85	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 0.50	Very limited: Depth to saturated zone	1.00
507: Beluga-----	87	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited: Depth to saturated zone	1.00
508: Beluga-----	87	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00 1.00 0.16	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone Slope	1.00 0.16

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
509: Beluga-----	55	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 0.50	Very limited: Depth to saturated zone	1.00
Mutnala-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.73	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
510: Beluga-----	60	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Slope Seepage	1.00 0.68 0.50	Very limited: Depth to saturated zone	1.00
Smokey Bay-----	37	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.31	Very limited: Depth to saturated zone Slope Seepage	1.00 0.92 0.50	Very limited: Depth to saturated zone	1.00
511: Beluga-----	50	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00 1.00 0.16	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone Slope	1.00 0.16
Smokey Bay-----	47	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope Restricted permeability	1.00 1.00 1.00 0.63 0.31	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone Slope	1.00 0.63
512: Benka-----	86	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage	1.00	Very limited: Seepage	1.00
513: Benka-----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
514: Benka-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
515: Benka- -----	90	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
516: Benka- -----	95	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
517: Benka, strongly sloping-	45	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.63	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
Benka, gently sloping ---	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.68	Very limited: Seepage	1.00
518: Boxcar-----	75	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00
519: Boxcar-----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
520: Boxcar-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
521: Boxcar, cool -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
522: Boxcar, cool -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
523: Chenega-----	85	Very limited: Flooding Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage	1.00 1.00	Very limited: Flooding Seepage	1.00 1.00
524: Chenega, cool -----	90	Very limited: Flooding Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage	1.00 1.00	Very limited: Flooding Seepage	1.00 1.00
525: Chenega, occasionally flooded -----	85	Very limited: Flooding Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage	1.00 1.00	Very limited: Flooding Seepage	1.00 1.00
526: Chulitna-----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
527: Chulitna-----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
528: Chulitna-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
529: Chulitna-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
530: Chunilna-----	92	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone	1.00
531: Chunilna-----	82	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone	1.00
532: Chunilna, cool-----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.32	Very limited: Depth to saturated zone	1.00
533: Chunilna, cool-----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability Slope	1.00 1.00 1.00 0.84 0.16	Very limited: Seepage Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Slope	1.00 0.16
534: Clam Gulch-----	85	Very limited: Depth to saturated zone Restricted permeability Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone	1.00
535: Clunie-----	90	Very limited: Flooding Restricted permeability Ponding Depth to saturated zone Subsidence	1.00 1.00 1.00 1.00 1.00	Very limited: Ponding Flooding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00
536: Coal Creek-----	75	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability Flooding	1.00 1.00 1.00 1.00 0.40	Very limited: Depth to saturated zone Seepage	1.00 0.53	Very limited: Depth to saturated zone Flooding	1.00 0.40

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
537: Coal Creek-----	88	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00	Very limited: Depth to saturated zone Slope Seepage	1.00 0.68 0.53	Very limited: Depth to saturated zone	1.00
538: Coal Creek-----	88	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability Slope	1.00 1.00 1.00 1.00 0.37	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 0.53	Very limited: Depth to saturated zone Slope	1.00 0.37
539: Cohoe-----	87	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage	1.00	Very limited: Seepage	1.00
540: Cohoe-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
541: Cohoe-----	89	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Restricted permeability	1.00 1.00 1.00 0.37 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
542: Cohoe-----	93	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
543: Cohoe-----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
544: Cohoe-----	84	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
545: Cohoe, dry -----	87	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage	1.00	Very limited: Seepage	1.00
546: Cohoe, dry -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
547: Cohoe, dry -----	89	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Restricted permeability	1.00 1.00 1.00 0.37 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
548: Cohoe, dry -----	93	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
549: Cohoe, dry -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
550: Cohoe, dry -----	84	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
551: Cohoe, moderately steep -----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
Cohoe, gently sloping---	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
552: Cohoe, dry, moderately steep-----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
Cohoe, dry, gently sloping-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
553: Cohoe, dry-----	55	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Restricted permeability	1.00 1.00 1.00 0.37 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
Kenai-----	30	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 1.00 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
554: Cohoe, dry-----	55	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Kenai-----	30	Very limited: Slope Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
555: Cohoe, dry-----	70	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
555: Nikolai-----	30	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone Slope	1.00 1.00 1.00 0.32	Very limited: Depth to saturated zone Seepage	1.00 1.00
556: Cohoe, dry-----	70	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.20	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
Nikolai-----	30	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
557: Cytex Creek-----	75	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
558: Doroshin-----	83	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00
559: Doroshin-----	79	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Excess surface organic matter Depth to saturated zone Slope Seepage	1.00 1.00 0.68 0.50	Very limited: Depth to saturated zone	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
560: Dystrocryepts -----	50	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
Typic Cryorthents -----	30	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
Iliamna, cool -----	20	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
561: Foreland -----	79	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
562: Foreland -----	59	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
Soldotna -----	20	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
Starichkof -----	20	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
563: Pits, gravel -----	95	Not rated		Not rated		Not rated	

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
564: Iliamna -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
565: Iliamna -----	82	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Slope	1.00 1.00 1.00 0.50 0.16	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 0.16
566: Iliamna -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
567: Iliamna, cool -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00
568: Island -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
569: Island -----	91	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
570: Island -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
571: Island -----	92	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
572: Island, forested -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
573: Kachemak-----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.91	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
574: Kachemak-----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.91 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
575: Kachemak-----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
576: Kachemak-----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
577: Kachemak-----	90	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
578: Kachemak, cool -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.91	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
579: Kachemak, cool -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.91 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
580: Kachemak, cool -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
581: Kachemak, cool -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
582: Kachemak, cool -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
583: Kachemak, forested ----	75	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.91	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
584: Kachemak, forested ----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.91 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
585: Kachemak, forested ----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.91	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
586: Kachemak, cool -----	60	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.91	Very limited: Seepage	1.00	Very limited: Seepage	1.00
Snowdance -----	40	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
587: Kachemak, cool -----	65	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.91	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
Snowdance -----	35	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
588: Kachemak, cool -----	70	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.91 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
Snowdance -----	30	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability Slope	1.00 1.00 1.00 0.84 0.37	Very limited: Slope Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.37
589: Kalifonsky -----	83	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
590: Kalifonsky -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
591: Kalifonsky -----	50	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.68	Very limited: Depth to saturated zone Seepage	1.00 1.00
Typic Cryorthents -----	30	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
592: Karluk -----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.50	Very limited: Depth to saturated zone Seepage	1.00 0.27	Very limited: Depth to saturated zone	1.00
593: Kashwitna -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
594: Kashwitna -----	88	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
595: Kashwitna -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
596: Kashwitna, moderately steep -----	50	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Kashwitna, strongly sloping -----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.96 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.96
597: Kenai -----	81	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Seepage	1.00	Very limited: Seepage	1.00
598: Kenai -----	82	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
599: Kenai -----	85	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 1.00 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
600: Kenai -----	88	Very limited: Slope Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
601: Kenai -----	86	Very limited: Slope Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
602: Kenai, moderately steep -----	45	Very limited: Restricted permeability Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
Kenai, gently sloping ----	40	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
603: Kenai -----	60	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 1.00 0.63	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
Starichkof -----	31	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
604: Kichatna -----	70	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00
605: Kichatna -----	75	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
606: Kichatna -----	75	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
607: Kichatna -----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
608: Kichatna -----	70	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
609: Kichatna -----	50	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Killey -----	50	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
610: Kidazqeni-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Flooding	1.00 1.00 1.00 0.50 0.40	Very limited: Seepage	1.00	Very limited: Seepage Flooding	1.00 0.40
611: Killey-----	45	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
Moose River-----	45	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone	1.00 1.00
612: Liten-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.08	Very limited: Seepage	1.00
613: Lithic Haplocryands-----	55	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 0.53	Very limited: Slope Depth to bedrock	1.00 1.00
Alic Haplocryands-----	20	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 1.00	Very limited: Slope Seepage Depth to bedrock	1.00 1.00 1.00
Rock outcrop-----	17	Not rated		Not rated		Not rated	
614: Lithic Haplocryands-----	55	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 0.53	Very limited: Slope Depth to bedrock	1.00 1.00
Alic Haplocryands-----	20	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 1.00	Very limited: Slope Seepage Depth to bedrock	1.00 1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
614: Rock outcrop -----	20	Not rated		Not rated		Not rated	
615: Longmare -----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
616: Longmare -----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
617: Mutnala -----	75	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.73	Very limited: Seepage	1.00	Very limited: Seepage	1.00
618: Mutnala -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.73	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
619: Mutnala -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.73 0.63	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
620: Mutnala -----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.73	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
621: Mutnala -----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.73	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
622: Mutnala -----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.73	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
623: Mutnala -----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.73	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Starichkof -----	35	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
Slikok -----	20	Very limited: Flooding Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00 1.00	Very limited: Ponding Flooding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00
624: Naptowne -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage	1.00	Very limited: Seepage	1.00
625: Naptowne -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
626: Naptowne -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.16	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.16
627: Naptowne -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
628: Naptowne -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
629: Naptowne -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
630: Naptowne, moderately steep-----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Naptowne, strongly sloping-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.96	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.96
631: Naptowne, strongly sloping-----	45	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope	1.00 1.00 1.00 0.63	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
Naptowne, gently sloping-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.68	Very limited: Seepage	1.00
632: Niklason -----	85	Very limited: Flooding Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Seepage	1.00 1.00	Very limited: Flooding Seepage	1.00 1.00
633: Nikolaevsk -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
634: Nikolaevsk -----	83	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
635: Nikolaevsk -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity Slope	1.00 1.00 1.00 0.50 0.37	Very limited: Slope Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.37
636: Nikolai-----	90	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
637: Nikolai, somewhat poorly drained-----	60	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
Tuxedni -----	25	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
638: Puntilla-----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.97	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage	1.00
639: Puntilla-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.97	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
640: Qutal-----	77	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
641: Qutal-----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
642: Qutal-----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity Slope	1.00 1.00 1.00 0.50 0.37	Very limited: Slope Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.37
643: Redoubt, terraces-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.31	Very limited: Seepage	1.00	Very limited: Seepage	1.00
644: Redoubt-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.31 0.16	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 0.16
645: Redoubt-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
646: Redoubt, cool-----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.31	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00
647: Redoubt, moderately steep-----	45	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
Redoubt, gently sloping-	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.31	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
648: Redoubt, cool -----	55	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.31 0.04	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 0.04
Tuxedni -----	35	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00 0.04	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.04
649: Riverwash -----	100	Not rated		Not rated		Not rated	
650: Salamatof -----	70	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Ponding Depth to saturated zone Seepage	1.00 1.00 1.00
Doroshin -----	22	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00
651: Salamatof -----	80	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Ponding Depth to saturated zone Seepage	1.00 1.00 1.00
652: Slikok -----	85	Very limited: Flooding Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00 1.00	Very limited: Ponding Flooding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
653: Slikok -----	82	Very limited: Flooding Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00 1.00	Very limited: Ponding Flooding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Flooding Ponding Depth to saturated zone Seepage	1.00 1.00 1.00 1.00
654: Smithfha -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
655: Smithfha -----	90	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
656: Smokey Bay -----	77	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.31	Very limited: Depth to saturated zone Seepage	1.00 0.50	Very limited: Depth to saturated zone	1.00
657: Smokey Bay -----	77	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope Restricted permeability	1.00 1.00 1.00 0.37 0.31	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone Slope	1.00 0.37
658: Snowdance -----	90	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.84	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.32	Very limited: Depth to saturated zone Seepage	1.00 1.00
659: Soldotna -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
660: Soldotna -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
661: Soldotna -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
662: Soldotna -----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
663: Soldotna, sandy substratum -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
664: Soldotna, sandy substratum -----	75	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Slope	1.00 1.00 1.00 0.50 0.37	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.37
665: Soldotna, sandy substratum -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
666: Soldotna, sandy substratum -----	80	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
667: Soldotna, strongly sloping-----	45	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Slope	1.00 1.00 1.00 0.50 0.16	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.16
Soldotna, gently sloping-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.32	Very limited: Seepage	1.00
668: Soldotna, sandy substratum-----	55	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Kenai-----	40	Very limited: Slope Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
669: Soldotna, sandy substratum-----	55	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
Kenai-----	40	Very limited: Restricted permeability Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
670: Soldotna-----	50	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
Kichatna-----	40	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
671: Soldotna -----	50	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
Kichatna -----	40	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
672: Soldotna -----	55	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage	1.00	Very limited: Seepage	1.00
Nikolai -----	45	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
673: Spenard -----	89	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.60	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
674: Spenard -----	67	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.60	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
675: Spenard -----	87	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope Restricted permeability	1.00 1.00 1.00 0.63 0.60	Very limited: Slope Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.63

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
676: Starichkof -----	60	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
Doroshin -----	35	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00
677: Starichkof -----	75	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
678: Starichkof -----	82	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Slope	1.00 1.00 1.00 1.00 0.68	Very limited: Ponding Depth to saturated zone	1.00 1.00
679: Starichkof, forested -----	85	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
680: Starichkof -----	45	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680: Slikok -----	30	Very limited: Flooding Ponding Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00 1.00 1.00	Very limited: Ponding Flooding Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Flooding Ponding Depth to saturated zone Seepage Slope	1.00 1.00 1.00 1.00 0.16
Naptowne -----	25	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00	Very limited: Seepage Slope	1.00 0.68	Very limited: Seepage	1.00
681: Starichkof -----	50	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
Spenard -----	42	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 0.60	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
682: Susitna -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Flooding	1.00 1.00 1.00 0.50 0.40	Very limited: Seepage	1.00	Somewhat limited: Flooding	0.40
Riverwash -----	5	Not rated		Not rated		Not rated	
683: Susitna -----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Flooding	1.00 1.00 1.00 0.50 0.40	Very limited: Seepage Slope	1.00 0.92	Somewhat limited: Flooding	0.40
684: Talkeetna -----	94	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.45	Very limited: Seepage Slope	1.00 0.32	Not limited	

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
685: Talkeetna-----	90	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
686: Talkeetna-----	55	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
Starichkof -----	40	Not rated Not rated; Fragments > 75mm Ponding Depth to saturated zone Subsidence Depth to bedrock	1.00 1.00 1.00 1.00 1.00 1.00	Not rated Not rated; Fragments > 75mm Ponding Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 1.00 1.00 0.50	Very limited: Ponding Depth to saturated zone	1.00 1.00
687: Tangerra-----	80	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.08	Very limited: Depth to saturated zone Seepage	1.00 1.00
688: Beaches, tidal flats-----	90	Not rated		Not rated		Not rated	
689: Tlikakila-----	90	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone	1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
690: Tlikakila-----	87	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 0.50	Very limited: Seepage Depth to saturated zone Slope	1.00 1.00 0.92	Very limited: Depth to saturated zone Seepage	1.00 1.00
691: Tlikakila-----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.63

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
692: Tokositna-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.45	Very limited: Seepage Slope	1.00 0.08	Very limited: Seepage	1.00
693: Tokositna-----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 0.45	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
694: Tokositna-----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability Slope	1.00 1.00 1.00 0.45 0.16	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.16
695: Truuli-----	88	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00	Very limited: Excess surface organic matter Seepage Depth to saturated zone	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage	1.00 1.00
696: Tutka-----	45	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 1.00	Very limited: Slope Seepage Depth to bedrock	1.00 1.00 1.00
Kasitsna-----	40	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
Rock outcrop-----	15	Not rated		Not rated		Not rated	
697: Tutka-----	55	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 1.00	Very limited: Slope Seepage Depth to bedrock	1.00 1.00 1.00
Portgraham-----	30	Very limited: Restricted permeability Depth to bedrock Slope Depth to cemented pan Depth to saturated zone	1.00 1.00 1.00 1.00 1.00	Very limited: Depth to hard bedrock Slope Seepage	1.00 1.00 1.00	Very limited: Slope Depth to bedrock Seepage	1.00 1.00 1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
698: Tuxedni -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.32	Very limited: Depth to saturated zone Seepage	1.00 1.00
699: Tuxedni -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00 0.63	Very limited: Slope Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.63
700: Tuxedni, warm -----	85	Very limited: Depth to saturated zone Depth to bedrock Depth to cemented pan	1.00 1.00 1.00	Very limited: Depth to saturated zone Seepage Slope	1.00 1.00 0.32	Very limited: Depth to saturated zone Seepage	1.00 1.00
701: Typic Cryaquents -----	95	Very limited: Flooding Depth to saturated zone Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00	Very limited: Flooding Depth to saturated zone Seepage	1.00 1.00 1.00
702: Typic Cryopsamments--	84	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Seepage Slope	1.00 1.00	Very limited: Seepage Slope	1.00 1.00
703: Typic Cryorthents -----	80	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Restricted permeability	1.00 1.00 1.00 1.00 0.31	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope	1.00
704: Urban land -----	85	Not rated		Not rated		Not rated	
705: Water, fresh -----	100	Not rated		Not rated		Not rated	
706: Whitsol -----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Restricted permeability	1.00 1.00 1.00 0.50 0.29	Very limited: Seepage	1.00	Very limited: Seepage	1.00

Table 20. Sanitary Facilities: Sewage Treatment and Landfill—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields (Alaska criteria)		Sewage lagoons (Alaska criteria)		Sanitary landfill (area) (Standard criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
707: Whitsol-----	90	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Restricted permeability	1.00 1.00 1.00 0.50 0.29	Very limited: Seepage Slope	1.00 0.92	Very limited: Seepage	1.00
708: Whitsol-----	85	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Slope Filtering capacity	1.00 1.00 1.00 0.63 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Seepage Slope	1.00 0.63
709: Whitsol-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
710: Whitsol-----	85	Very limited: Slope Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity	1.00 1.00 1.00 1.00 0.50	Very limited: Slope Seepage	1.00 1.00	Very limited: Slope Seepage	1.00 1.00
711: Whitsol-----	55	Very limited: Depth to bedrock Depth to cemented pan Depth to saturated zone Filtering capacity Restricted permeability	1.00 1.00 1.00 0.50 0.29	Very limited: Seepage Slope	1.00 0.68	Very limited: Seepage	1.00
Doroshin-----	30	Very limited: Depth to saturated zone Subsidence Depth to bedrock Depth to cemented pan Restricted permeability	1.00 1.00 1.00 1.00 0.45	Very limited: Excess surface organic matter Depth to saturated zone Seepage	1.00 1.00 0.50	Very limited: Depth to saturated zone	1.00

Table 21. Construction Materials: Gravel and Sand

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
501: Aquic Cryofluvents-----	85	Improbable: Bottom layer not a source	0.00	Sand source	
502: Aquic Cryofluvents, shallow-----	80	Improbable: Bottom layer not a source	0.00	Sand source	
503: Badland, sea cliffs -----	100	Not rated		Not rated	
504: Badland, sea cliffs -----	55	Not rated		Not rated	
Typic Cryorthents -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
505: Beaches -----	90	Not rated		Not rated	
506: Beluga-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
507: Beluga-----	87	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
508: Beluga-----	87	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
509: Beluga-----	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Mutnala -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
510: Beluga-----	60	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Smokey Bay-----	37	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
511: Beluga-----	50	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Smokey Bay-----	47	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
512: Benka -----	86	Improbable: Bottom layer not a source	0.00	Sand source	
513: Benka -----	90	Improbable: Bottom layer not a source	0.00	Sand source	
514: Benka -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
515: Benka -----	90	Improbable: Bottom layer not a source	0.00	Sand source	
516: Benka -----	95	Improbable: Bottom layer not a source	0.00	Sand source	
517: Benka, strongly sloping-----	45	Improbable: Bottom layer not a source	0.00	Sand source	
Benka, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Sand source	
518: Boxcar-----	75	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
519: Boxcar-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
520: Boxcar-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
521: Boxcar, cool -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
522: Boxcar, cool -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
523: Chenega-----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer not a source	0.00
524: Chenega, cool -----	90	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.83
525: Chenega, occasionally flooded-----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.83

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
526: Chulitna-----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
527: Chulitna-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
528: Chulitna-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
529: Chulitna-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
530: Chunilna-----	92	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
531: Chunilna-----	82	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
532: Chunilna, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
533: Chunilna, cool-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
534: Clam Gulch-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
535: Clunie-----	90	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
536: Coal Creek-----	75	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
537: Coal Creek-----	88	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
538: Coal Creek-----	88	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
539: Cohoe-----	87	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
540: Cohoe -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
541: Cohoe -----	89	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
542: Cohoe -----	93	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
543: Cohoe -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
544: Cohoe -----	84	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
545: Cohoe, dry -----	87	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
546: Cohoe, dry -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
547: Cohoe, dry -----	89	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
548: Cohoe, dry -----	93	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
549: Cohoe, dry -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
550: Cohoe, dry -----	84	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
551: Cohoe, moderately steep -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Cohoe, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
552: Cohoe, dry, moderately steep -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Cohoe, dry, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
553: Cohoe, dry -----	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Kenai -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
554: Cohoe, dry -----	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Kenai -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
555: Cohoe, dry -----	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Nikolai -----	30	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
556: Cohoe, dry -----	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Nikolai -----	30	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
557: Cytex Creek -----	75	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.14
558: Doroshin -----	83	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
559: Doroshin -----	79	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
560: Dystrocryepts -----	50	Gravel source		Improbable: Bottom layer not a source	0.00
Typic Cryorthents -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Iliamna, cool -----	20	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
561: Foreland -----	79	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
562: Foreland -----	59	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Soldotna -----	20	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Starichkof -----	20	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
563: Pits, gravel -----	95	Not rated		Not rated	
564: Iliamna -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
565: Iliamna -----	82	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
566: Iliamna -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
567: Iliamna, cool -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
568: Island -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
569: Island -----	91	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
570: Island -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
571: Island -----	92	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
572: Island, forested -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
573: Kachemak -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
574: Kachemak -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
575: Kachemak-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
576: Kachemak-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
577: Kachemak-----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
578: Kachemak, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
579: Kachemak, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
580: Kachemak, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
581: Kachemak, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
582: Kachemak, cool-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
583: Kachemak, forested-----	75	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
584: Kachemak, forested-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
585: Kachemak, forested-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
586: Kachemak, cool-----	60	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Snowdance-----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
587: Kachemak, cool-----	65	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Snowdance-----	35	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
588: Kachemak, cool -----	70	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Snowdance -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
589: Kalifonsky -----	83	Improbable: Bottom layer not a source	0.00	Sand source	
590: Kalifonsky -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
591: Kalifonsky -----	50	Improbable: Bottom layer not a source	0.00	Sand source	
Typic Cryorthents -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
592: Karluk -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
593: Kashwitna -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
594: Kashwitna -----	88	Improbable: Bottom layer not a source	0.00	Sand source	
595: Kashwitna -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
596: Kashwitna, moderately steep -----	50	Improbable: Bottom layer not a source	0.00	Sand source	
Kashwitna, strongly sloping -----	40	Improbable: Bottom layer not a source	0.00	Sand source	
597: Kenai -----	81	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
598: Kenai -----	82	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
599: Kenai -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
600: Kenai -----	88	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
601: Kenai -----	86	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
602: Kenai, moderately steep -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Kenai, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
603: Kenai -----	60	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Starichkof -----	31	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
604: Kichatna -----	70	Gravel source		Improbable: Bottom layer not a source	0.00
605: Kichatna -----	75	Gravel source		Improbable: Bottom layer not a source	0.00
606: Kichatna -----	75	Gravel source		Improbable: Bottom layer not a source	0.00
607: Kichatna -----	85	Gravel source		Improbable: Bottom layer not a source	0.00
608: Kichatna -----	70	Gravel source		Improbable: Bottom layer not a source	0.00
609: Kichatna -----	50	Gravel source		Improbable: Bottom layer not a source	0.00
Killey -----	50	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.91
610: Kidazqeni -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.34
611: Killey -----	45	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.91
Moose River -----	45	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.43

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612: Liten -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
613: Lithic Haplocryands-----	55	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Alic Haplocryands-----	20	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Rock outcrop-----	17	Not rated		Not rated	
614: Lithic Haplocryands-----	55	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Alic Haplocryands-----	20	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
615: Longmare -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
616: Longmare -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
617: Mutnala -----	75	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
618: Mutnala -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
619: Mutnala -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
620: Mutnala -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
621: Mutnala -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
622: Mutnala -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
623: Mutnala -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Starichkof -----	35	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Slikok -----	20	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
624: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
625: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
626: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
627: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
628: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
629: Naptowne -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
630: Naptowne, moderately steep -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Naptowne, strongly sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
631: Naptowne, strongly sloping -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Naptowne, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
632: Niklason -----	85	Gravel source		Improbable: Bottom layer not a source	0.00
633: Nikolaevsk -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.43
634: Nikolaevsk -----	83	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.43

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
635: Nikolaevsk -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.43
636: Nikolai -----	90	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
637: Nikolai, somewhat poorly drained -----	60	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Tuxedni -----	25	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
638: Puntilla -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
639: Puntilla -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
640: Qutal -----	77	Gravel source		Improbable: Bottom layer not a source	0.00
641: Qutal -----	80	Gravel source		Improbable: Bottom layer not a source	0.00
642: Qutal -----	80	Gravel source		Improbable: Bottom layer not a source	0.00
643: Redoubt, terraces -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
644: Redoubt -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
645: Redoubt -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
646: Redoubt, cool -----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
647: Redoubt, moderately steep -----	45	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Redoubt, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
648: Redoubt, cool -----	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Tuxedni -----	35	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
649: Riverwash -----	100	Not rated		Not rated	
650: Salamatof -----	70	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Doroshin -----	22	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
651: Salamatof -----	80	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
652: Slikok -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
653: Slikok -----	82	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
654: Smithfha -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
655: Smithfha -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
656: Smokey Bay -----	77	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
657: Smokey Bay -----	77	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
658: Snowdance -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
659: Soldotna -----	90	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
660: Soldotna -----	90	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
661: Soldotna -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
662: Soldotna -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
663: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
664: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
665: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
666: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
667: Soldotna, strongly sloping -----	45	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Soldotna, gently sloping -----	40	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
668: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
Kenai -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
669: Soldotna, sandy substratum -----	80	Improbable: Bottom layer not a source	0.00	Sand source	
Kenai -----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
670: Soldotna -----	50	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Kichatna -----	40	Gravel source		Improbable: Bottom layer not a source	0.00
671: Soldotna -----	50	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Kichatna -----	40	Gravel source		Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
672: Soldotna -----	55	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Nikolai -----	45	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
673: Spenard -----	89	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
674: Spenard -----	67	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
675: Spenard -----	87	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
676: Starichkof -----	60	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Doroshin -----	35	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
677: Starichkof -----	75	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
678: Starichkof -----	82	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
679: Starichkof, forested -----	85	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
680: Starichkof -----	45	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Slikok -----	30	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Naptowne -----	25	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
681: Starichkof -----	50	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
Spenard -----	42	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
682: Susitna -----	85	Gravel source		Improbable: Bottom layer not a source	0.00
Riverwash -----	5	Not rated		Not rated	
683: Susitna -----	85	Gravel source		Improbable: Bottom layer not a source	0.00
684: Talkeetna -----	94	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
685: Talkeetna -----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
686: Talkeetna -----	55	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Starichkof -----	40	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00
687: Tangerra -----	80	Gravel source		Improbable: Bottom layer not a source	0.00
688: Beaches, tidal flats -----	90	Not rated		Not rated	
689: Tlikakila -----	90	Improbable: Bottom layer not a source	0.00	Sand source	
690: Tlikakila -----	87	Improbable: Bottom layer not a source	0.00	Sand source	
691: Tlikakila -----	85	Improbable: Bottom layer not a source	0.00	Sand source	
692: Tokositna -----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
693: Tokositna-----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
694: Tokositna-----	90	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
695: Truuli-----	88	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
696: Tutka-----	45	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Kasitsna-----	40	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
Rock outcrop-----	15	Not rated		Not rated	
697: Tutka-----	55	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
Portgraham-----	30	Improbable: Hard bedrock within 4 feet Bottom layer not a source	0.00 0.00	Improbable: Bottom layer not a source Hard bedrock within 4 feet	0.00 0.00
698: Tuxedni-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
699: Tuxedni-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
700: Tuxedni, warm-----	85	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer not a source	0.00
701: Typic Cryaquents-----	95	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.77
702: Typic Cryopsamments-----	84	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer	0.77
703: Typic Cryorthents-----	80	Improbable: Bottom layer not a source	0.00	Improbable: Bottom layer	0.77
704: Urban land-----	85	Not rated		Not rated	

Table 21. Construction Materials: Gravel and Sand—Continued

Map symbol and soil name	Percent of map unit	Potential source of gravel (Alaska criteria)		Potential source of sand (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
705: Water, fresh -----	100	Not rated		Not rated	
706: Whitsol -----	90	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
707: Whitsol -----	90	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
708: Whitsol -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
709: Whitsol -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
710: Whitsol -----	85	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
711: Whitsol -----	55	Improbable: Bottom layer not a source	0.00	Probable: Bottom layer	0.80
Doroshin -----	30	Improbable: Organic soil Bottom layer not a source	0.00 0.00	Improbable: Organic soil Bottom layer not a source	0.00 0.00

Table 22. Construction Materials: Topsoil and Roadfill

(This table gives soil suitability ratings and the primary limiting factors associated with the ratings. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the potential limitation. Information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct, of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
501: Aquic Cryofluvents-----	85	Fair: Depth to saturated zone	0.78	Poor: High frost action (check lower layers) Depth to saturated zone Low strength	0.00 0.78 0.78
502: Aquic Cryofluvents, shallow-----	80	Poor: Too sandy Rock fragment content Depth to saturated zone	0.00 0.41 0.78	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.78
503: Badland, sea cliffs-----	100	Not rated		Not rated	
504: Badland, sea cliffs-----	55	Not rated		Not rated	
Typic Cryorthents-----	45	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.32 0.88	Poor: Slope Moderate frost action (check lower layers)	0.00 0.50
505: Beaches-----	90	Not rated		Not rated	
506: Beluga-----	85	Poor: Depth to saturated zone	0.00	Poor: Depth to saturated zone Low strength High frost action (check lower layers) Shrink-swell	0.00 0.00 0.00 0.99
507: Beluga-----	87	Fair: Depth to saturated zone	0.04	Poor: Low strength High frost action (check lower layers) Depth to saturated zone Shrink-swell	0.00 0.00 0.04 0.99
508: Beluga-----	87	Fair: Depth to saturated zone Slope	0.04 0.84	Poor: Low strength High frost action (check lower layers) Depth to saturated zone Shrink-swell	0.00 0.00 0.04 0.99

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
509: Beluga-----	55	Fair: Depth to saturated zone	0.04	Poor: Low strength High frost action (check lower layers) Depth to saturated zone Shrink-swell	0.00 0.00 0.04 0.99
Mutnala-----	40	Poor: Rock fragment content Hard to reclaim Too acid	0.00 0.95 0.99	Poor: High frost action (check lower layers)	0.00
510: Beluga-----	60	Fair: Depth to saturated zone	0.04	Poor: Low strength High frost action (check lower layers) Depth to saturated zone Shrink-swell	0.00 0.00 0.04 0.99
Smokey Bay-----	37	Fair: Depth to saturated zone Rock fragment content	0.04 0.50	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
511: Beluga-----	50	Fair: Depth to saturated zone Slope	0.04 0.84	Poor: Low strength High frost action (check lower layers) Depth to saturated zone Shrink-swell	0.00 0.00 0.04 0.99
Smokey Bay-----	47	Fair: Depth to saturated zone Slope Rock fragment content	0.04 0.37 0.50	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
512: Benka-----	86	Good source		Poor: High frost action (check lower layers)	0.00
513: Benka-----	90	Good source		Poor: High frost action (check lower layers)	0.00
514: Benka-----	85	Fair: Slope	0.63	Poor: High frost action (check lower layers)	0.00
515: Benka-----	90	Poor: Slope	0.00	Poor: High frost action (check lower layers) Slope	0.00 0.50
516: Benka-----	95	Poor: Slope	0.00	Poor: Slope High frost action (check lower layers)	0.00 0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
517: Benka, strongly sloping-----	45	Fair: Slope	0.37	Poor: High frost action (check lower layers)	0.00
Benka, gently sloping-----	40	Good source		Poor: High frost action (check lower layers)	0.00
518: Boxcar-----	75	Poor: Rock fragment content Hard to reclaim	0.00 0.00	Poor: High frost action (check lower layers) Cobble content	0.00 0.91
519: Boxcar-----	80	Poor: Rock fragment content Slope Hard to reclaim	0.00 0.00 0.00	Poor: High frost action (check lower layers) Cobble content	0.00 0.91
520: Boxcar-----	85	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.00	Poor: Slope High frost action (check lower layers) Cobble content	0.00 0.00 0.91
521: Boxcar, cool-----	80	Poor: Rock fragment content Hard to reclaim	0.00 0.00	Poor: High frost action (check lower layers) Cobble content	0.00 0.91
522: Boxcar, cool-----	80	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.00	Poor: Slope High frost action (check lower layers) Cobble content	0.00 0.00 0.91
523: Chenega-----	85	Poor: Rock fragment content Too sandy Too acid Not hard to reclaim	0.00 0.00 0.88 0.99	Good source	
524: Chenega, cool-----	90	Poor: Rock fragment content Too sandy Too acid Not hard to reclaim	0.00 0.00 0.88 0.99	Good source	
525: Chenega, occasionally flooded-----	85	Poor: Rock fragment content Too sandy Too acid Not hard to reclaim	0.00 0.00 0.88 0.99	Good source	
526: Chulitna-----	90	Fair: Too acid	0.98	Poor: High frost action (check lower layers)	0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
527: Chulitna-----	80	Fair: Too acid	0.98	Poor: High frost action (check lower layers)	0.00
528: Chulitna-----	85	Fair: Slope Too acid	0.37 0.98	Poor: High frost action (check lower layers)	0.00
529: Chulitna-----	85	Poor: Slope Too acid	0.00 0.98	Poor: High frost action (check lower layers) Slope	0.00 0.50
530: Chunilna-----	92	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.00 0.99	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
531: Chunilna-----	82	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.00 0.99	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
532: Chunilna, cool-----	80	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.00 0.99	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
533: Chunilna, cool-----	85	Poor: Rock fragment content Depth to saturated zone Slope Too acid	0.00 0.12 0.84 0.99	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.12
534: Clam Gulch-----	85	Poor: Depth to dense layer Depth to saturated zone	0.00 0.00	Poor: Depth to saturated zone High frost action (check lower layers) Low strength Shrink-swell	0.00 0.00 0.00 0.92
535: Clunie-----	90	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.68	Poor: Depth to saturated zone High frost action (check lower layers) Low strength	0.00 0.00 0.22
536: Coal Creek-----	75	Poor: Rock fragment content Depth to saturated zone Hard to reclaim Too acid	0.00 0.04 0.68 0.88	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
537: Coal Creek-----	88	Poor: Rock fragment content Depth to saturated zone Hard to reclaim Too acid	0.00 0.04 0.68 0.88	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
538: Coal Creek-----	88	Poor: Rock fragment content Depth to saturated zone Slope Hard to reclaim Too acid	0.00 0.04 0.63 0.68 0.88	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
539: Cohoe-----	87	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
540: Cohoe-----	85	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
541: Cohoe-----	89	Fair: Slope Too acid	0.63 0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
542: Cohoe-----	93	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Slope Low strength	0.00 0.50 0.78
543: Cohoe-----	80	Poor: Slope Too acid	0.00 0.92	Poor: Slope High frost action (check lower layers) Low strength	0.00 0.00 0.78
544: Cohoe-----	84	Poor: Slope Too acid	0.00 0.92	Poor: Slope High frost action (check lower layers) Low strength	0.00 0.00 0.78
545: Cohoe, dry-----	87	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
546: Cohoe, dry-----	85	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct, of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
547: Cohoe, dry -----	89	Fair: Slope Too acid	0.63 0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
548: Cohoe, dry -----	93	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Slope Low strength	0.00 0.50 0.78
549: Cohoe, dry -----	80	Poor: Slope Too acid	0.00 0.92	Poor: Slope High frost action (check lower layers) Low strength	0.00 0.00 0.78
550: Cohoe, dry -----	84	Poor: Slope Too acid	0.00 0.92	Poor: Slope High frost action (check lower layers) Low strength	0.00 0.00 0.78
551: Cohoe, moderately steep -----	45	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Low strength Slope	0.00 0.78 0.98
Cohoe, gently sloping -----	40	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
552: Cohoe, dry, moderately steep -----	45	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Low strength Slope	0.00 0.78 0.98
Cohoe, dry, gently sloping -----	40	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
553: Cohoe, dry -----	55	Fair: Slope Too acid	0.63 0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
Kenai -----	30	Fair: Slope	0.63	Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
554: Cohoe, dry	55	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Slope Low strength	0.00 0.50 0.78
Kenai	30	Poor: Slope	0.00	Poor: Low strength Moderate frost action (check lower layers) Slope Shrink-swell	0.00 0.50 0.50 0.98
555: Cohoe, dry	70	Poor: Slope Too acid	0.00 0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
Nikolai	30	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.32	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
556: Cohoe, dry	70	Fair: Too acid	0.92	Poor: High frost action (check lower layers) Low strength	0.00 0.78
Nikolai	30	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.32	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
557: Cytex Creek	75	Fair: Depth to saturated zone Hard to reclaim Too acid	0.06 0.32 0.98	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.06
558: Doroshin	83	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
559: Doroshin	79	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
560: Dystrocryepts -----	50	Poor: Rock fragment content Slope Too acid	 0.00 0.00 0.88	Good source	
Typic Cryorthents -----	30	Poor: Slope Rock fragment content Hard to reclaim Too acid	 0.00 0.00 0.32 0.88	Fair: Moderate frost action (check lower layers) Slope	 0.50 0.50
Iliamna, cool -----	20	Poor: Slope Too acid	 0.00 0.98	Poor: High frost action (check lower layers)	 0.00
561: Foreland -----	79	Poor: Depth to saturated zone Rock fragment content	 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
562: Foreland -----	59	Poor: Depth to saturated zone Rock fragment content	 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
Soldotna -----	20	Fair: Hard to reclaim Too acid	 0.98 0.98	Poor: High frost action (check lower layers)	 0.00
Starichkof -----	20	Poor: Depth to saturated zone Content of organic matter Too acid	 0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	 0.00 0.00
563: Pits, gravel -----	95	Not rated		Not rated	
564: Iliamna -----	80	Fair: Too acid	 0.98	Poor: High frost action (check lower layers)	 0.00
565: Iliamna -----	82	Fair: Slope Too acid	 0.84 0.98	Poor: High frost action (check lower layers)	 0.00
566: Iliamna -----	80	Poor: Slope Too acid	 0.00 0.98	Poor: High frost action (check lower layers) Slope	 0.00 0.00
567: Iliamna, cool -----	90	Fair: Too acid	 0.98	Poor: High frost action (check lower layers)	 0.00
568: Island -----	90	Fair: Too acid	 0.95	Poor: High frost action (check lower layers)	 0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
569: Island-----	91	Fair: Too acid	0.95	Poor: High frost action (check lower layers)	0.00
570: Island-----	90	Fair: Slope Too acid	0.37 0.95	Poor: High frost action (check lower layers)	0.00
571: Island-----	92	Poor: Slope Too acid	0.00 0.95	Poor: High frost action (check lower layers) Slope	0.00 0.00
572: Island, forested-----	90	Fair: Too acid	0.95	Poor: High frost action (check lower layers)	0.00
573: Kachemak-----	80	Fair: Too acid	0.88	Poor: High frost action (check lower layers)	0.00
574: Kachemak-----	80	Fair: Slope Too acid	0.63 0.88	Poor: High frost action (check lower layers)	0.00
575: Kachemak-----	80	Poor: Slope Too acid	0.00 0.88	Poor: High frost action (check lower layers) Slope	0.00 0.50
576: Kachemak-----	80	Poor: Slope Too acid	0.00 0.88	Poor: Slope High frost action (check lower layers)	0.00 0.00
577: Kachemak-----	90	Poor: Slope Too acid	0.00 0.88	Poor: Slope High frost action (check lower layers)	0.00 0.00
578: Kachemak, cool-----	80	Fair: Too acid	0.88	Poor: High frost action (check lower layers)	0.00
579: Kachemak, cool-----	80	Fair: Slope Too acid	0.63 0.88	Poor: High frost action (check lower layers)	0.00
580: Kachemak, cool-----	80	Poor: Slope Too acid	0.00 0.88	Poor: High frost action (check lower layers) Slope	0.00 0.50

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
581: Kachemak, cool -----	80	Poor: Slope Too acid	0.00 0.88	Poor: Slope High frost action (check lower layers)	0.00 0.00
582: Kachemak, cool -----	80	Poor: Slope Too acid	0.00 0.88	Poor: Slope High frost action (check lower layers)	0.00 0.00
583: Kachemak, forested -----	75	Fair: Too acid	0.88	Poor: High frost action (check lower layers)	0.00
584: Kachemak, forested -----	85	Fair: Slope Too acid	0.63 0.88	Poor: High frost action (check lower layers)	0.00
585: Kachemak, forested -----	80	Poor: Slope Too acid	0.00 0.88	Poor: High frost action (check lower layers) Slope	0.00 0.50
586: Kachemak, cool -----	60	Fair: Too acid	0.88	Poor: High frost action (check lower layers)	0.00
Snowdance -----	40	Poor: Rock fragment content Depth to saturated zone Hard to reclaim	0.00 0.04 0.92	Poor: High frost action (check lower layers) Depth to saturated zone Cobble content	0.00 0.04 0.77
587: Kachemak, cool -----	65	Fair: Too acid	0.88	Poor: High frost action (check lower layers)	0.00
Snowdance -----	35	Poor: Rock fragment content Depth to saturated zone Hard to reclaim	0.00 0.04 0.92	Poor: High frost action (check lower layers) Depth to saturated zone Cobble content	0.00 0.04 0.77
588: Kachemak, cool -----	70	Fair: Slope Too acid	0.63 0.88	Poor: High frost action (check lower layers)	0.00
Snowdance -----	30	Poor: Rock fragment content Depth to saturated zone Slope Hard to reclaim	0.00 0.04 0.63 0.92	Poor: High frost action (check lower layers) Depth to saturated zone Cobble content	0.00 0.04 0.77
589: Kalifonsky -----	83	Poor: Depth to saturated zone Too sandy Rock fragment content Too acid	0.00 0.00 0.00 0.95	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
590: Kalifonsky -----	85	Poor: Depth to saturated zone Too sandy Rock fragment content Too acid	0.00 0.00 0.00 0.95	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
591: Kalifonsky -----	50	Poor: Depth to saturated zone Too sandy Rock fragment content Too acid	0.00 0.00 0.00 0.95	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
Typic Cryorthents -----	30	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.32 0.88	Poor: Slope Moderate frost action (check lower layers)	0.00 0.50
592: Karluk -----	80	Poor: Depth to dense layer Depth to saturated zone Too acid	0.00 0.01 0.88	Poor: High frost action (check lower layers) Low strength Depth to saturated zone	0.00 0.00 0.01
593: Kashwitna -----	85	Poor: Rock fragment content Too sandy Too acid	0.00 0.00 0.99	Poor: High frost action (check lower layers)	0.00
594: Kashwitna -----	88	Poor: Rock fragment content Too sandy Too acid	0.00 0.00 0.99	Poor: High frost action (check lower layers)	0.00
595: Kashwitna -----	85	Poor: Rock fragment content Too sandy Slope Too acid	0.00 0.00 0.37 0.99	Poor: High frost action (check lower layers)	0.00
596: Kashwitna, moderately steep -----	50	Poor: Slope Rock fragment content Too sandy Too acid	0.00 0.00 0.00 0.99	Poor: High frost action (check lower layers) Slope	0.00 0.00
Kashwitna, strongly sloping -----	40	Poor: Rock fragment content Too sandy Slope Too acid	0.00 0.00 0.04 0.99	Poor: High frost action (check lower layers)	0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
597: Kenai -----	81	Good source		Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98
598: Kenai -----	82	Good source		Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98
599: Kenai -----	85	Fair: Slope	0.63	Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98
600: Kenai -----	88	Poor: Slope	0.00	Poor: Low strength Moderate frost action (check lower layers) Slope Shrink-swell	0.00 0.50 0.50 0.98
601: Kenai -----	86	Poor: Slope	0.00	Poor: Slope Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.00 0.50 0.98
602: Kenai, moderately steep -----	45	Poor: Slope	0.00	Poor: Low strength Moderate frost action (check lower layers) Shrink-swell Slope	0.00 0.50 0.98 0.98
Kenai, gently sloping -----	40	Good source		Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
603: Kenai -----	60	Fair: Slope	0.37	Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98
Starichkof -----	31	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action(check lower layers)	0.00 0.00
604: Kichatna -----	70	Poor: Rock fragment content Hard to reclaim	0.00 0.50	Good source	
605: Kichatna -----	75	Poor: Rock fragment content Slope Hard to reclaim	0.00 0.37 0.50	Good source	
606: Kichatna -----	75	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.50	Fair: Slope	0.50
607: Kichatna -----	85	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.50	Poor: Slope	0.00
608: Kichatna -----	70	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.50	Poor: Slope	0.00
609: Kichatna -----	50	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.50	Poor: Slope	0.00
Killey -----	50	Fair: Depth to saturated zone Too acid	0.12 0.88	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.12
610: Kidazqeni -----	85	Poor: Too sandy Rock fragment content Hard to reclaim	0.00 0.00 0.02	Good source	

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
611: Killey-----	45	Fair: Depth to saturated zone Too acid	0.12 0.88	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.12
Moose River-----	45	Poor: Depth to saturated zone Hard to reclaim Rock fragment content	0.00 0.12 0.18	Poor: Depth to saturated zone High frost action(check lower layers)	0.00 0.00
612: Liten-----	85	Poor: Too sandy	0.00	Good source	
613: Lithic Haplocryands-----	55	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.00 0.00 0.88	Poor: Depth to bedrock Slope High frost action(check lower layers) Low strength	0.00 0.00 0.00 0.78
Alic Haplocryands-----	20	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.12 0.67 0.88	Poor: Depth to bedrock Slope High frost action(check lower layers)	0.00 0.00 0.00
Rock outcrop-----	17	Not rated		Not rated	
614: Lithic Haplocryands-----	55	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.00 0.00 0.88	Poor: Depth to bedrock Slope High frost action(check lower layers) Low strength	0.00 0.00 0.00 0.78
Alic Haplocryands-----	20	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.12 0.67 0.88	Poor: Depth to bedrock Slope High frost action(check lower layers)	0.00 0.00 0.00
Rock outcrop-----	20	Not rated		Not rated	
615: Longmare-----	80	Fair: Depth to saturated zone Too acid	0.53 0.95	Fair: Moderate frost action (check lower layers) Depth to saturated zone	0.50 0.53
616: Longmare-----	80	Fair: Depth to saturated zone Too acid	0.53 0.95	Fair: Moderate frost action (check lower layers) Depth to saturated zone	0.50 0.53

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
617: Mutnala -----	75	Poor: Rock fragment content Hard to reclaim Too acid	0.00 0.95 0.99	Poor: High frost action(check lower layers)	0.00
618: Mutnala -----	80	Poor: Rock fragment content Hard to reclaim Too acid	0.00 0.95 0.99	Poor: High frost action(check lower layers)	0.00
619: Mutnala -----	85	Poor: Rock fragment content Slope Hard to reclaim Too acid	0.00 0.37 0.95 0.99	Poor: High frost action(check lower layers)	0.00
620: Mutnala -----	85	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.95 0.99	Poor: High frost action(check lower layers) Slope	0.00 0.50
621: Mutnala -----	85	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.95 0.99	Poor: Slope High frost action(check lower layers)	0.00 0.00
622: Mutnala -----	85	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.95 0.99	Poor: Slope High frost action(check lower layers)	0.00 0.00
623: Mutnala -----	45	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.95 0.99	Poor: High frost action(check lower layers) Slope	0.00 0.50
Starichkof -----	35	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action(check lower layers)	0.00 0.00
Slikok -----	20	Poor: Depth to saturated zone Too acid	0.00 0.98	Poor: Depth to saturated zone High frost action(check lower layers) Low strength	0.00 0.00 0.22

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
624: Naptowne -----	80	Poor: Rock fragment content Depth to dense layer	0.00 0.00	Poor: High frost action(check lower layers)	0.00
625: Naptowne -----	80	Poor: Rock fragment content Depth to dense layer	0.00 0.00	Poor: High frost action(check lower layers)	0.00
626: Naptowne -----	80	Poor: Rock fragment content Depth to dense layer Slope	0.00 0.00 0.84	Poor: High frost action(check lower layers)	0.00
627: Naptowne -----	80	Poor: Slope Rock fragment content Depth to dense layer	0.00 0.00 0.00	Poor: High frost action(check lower layers) Slope	0.00 0.50
628: Naptowne -----	80	Poor: Slope Rock fragment content Depth to dense layer	0.00 0.00 0.00	Poor: Slope High frost action(check lower layers)	0.00 0.00
629: Naptowne -----	80	Poor: Rock fragment content Depth to dense layer	0.00 0.00	Poor: High frost action(check lower layers)	0.00
630: Naptowne, moderately steep -----	45	Poor: Slope Rock fragment content Depth to dense layer	0.00 0.00 0.00	Poor: High frost action(check lower layers) Slope	0.00 0.00
Naptowne, strongly sloping-----	40	Poor: Rock fragment content Depth to dense layer Slope	0.00 0.00 0.04	Poor: High frost action(check lower layers)	0.00
631: Naptowne, strongly sloping-----	45	Poor: Rock fragment content Depth to dense layer Slope	0.00 0.00 0.37	Poor: High frost action(check lower layers)	0.00
Naptowne, gently sloping -----	40	Poor: Rock fragment content Depth to dense layer	0.00 0.00	Poor: High frost action(check lower layers)	0.00
632: Niklason -----	85	Fair: Hard to reclaim	0.88	Fair: Moderate frost action (check lower layers)	0.50

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
633: Nikolaevsk -----	85	Poor: Rock fragment content Too sandy Depth to saturated zone Hard to reclaim	0.00 0.00 0.06 0.32	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.06
634: Nikolaevsk -----	83	Poor: Rock fragment content Too sandy Depth to saturated zone Hard to reclaim	0.00 0.00 0.06 0.32	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.06
635: Nikolaevsk -----	85	Poor: Rock fragment content Too sandy Depth to saturated zone Hard to reclaim Slope	0.00 0.00 0.06 0.32 0.63	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.06
636: Nikolai -----	90	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.32	Poor: Depth to saturated zone High frost action(check lower layers)	0.00 0.00
637: Nikolai, somewhat poorly drained -----	60	Poor: Content of organic matter Too acid Depth to saturated zone	0.00 0.32 0.59	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.59
Tuxedni -----	25	Poor: Rock fragment content Depth to saturated zone Too acid	0.00 0.50 0.95	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.50
638: Puntilla -----	80	Fair: Too acid	0.59	Poor: High frost action(check lower layers)	0.00
639: Puntilla -----	85	Poor: Slope Too acid	0.00 0.59	Poor: High frost action(check lower layers) Slope	0.00 0.92
640: Qutal -----	77	Fair: Depth to saturated zone Rock fragment content Not hard to reclaim	0.53 0.88 0.99	Poor: High frost action(check lower layers) Low strength Depth to saturated zone	0.00 0.22 0.53
641: Qutal -----	80	Fair: Depth to saturated zone Rock fragment content Not hard to reclaim	0.53 0.88 0.99	Poor: High frost action(check lower layers) Low strength Depth to saturated zone	0.00 0.22 0.53

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
642: Qutal-----	80	Fair: Depth to saturated zone Slope Rock fragment content Not hard to reclaim	0.53 0.63 0.88 0.99	Poor: High frost action(check lower layers) Low strength Depth to saturated zone	0.00 0.22 0.53
643: Redoubt, terraces-----	85	Fair: Depth to dense layer Rock fragment content Too acid	0.03 0.12 0.41	Poor: High frost action(check lower layers)	0.00
644: Redoubt-----	85	Fair: Depth to dense layer Rock fragment content Too acid Slope	0.03 0.12 0.41 0.84	Poor: High frost action(check lower layers)	0.00
645: Redoubt-----	85	Poor: Slope Depth to dense layer Rock fragment content Too acid	0.00 0.03 0.12 0.41	Poor: High frost action(check lower layers) Slope	0.00 0.00
646: Redoubt, cool-----	80	Fair: Depth to dense layer Rock fragment content Too acid	0.03 0.12 0.41	Poor: High frost action(check lower layers)	0.00
647: Redoubt, moderately steep-----	45	Poor: Slope Depth to dense layer Rock fragment content Too acid	0.00 0.03 0.12 0.41	Poor: High frost action(check lower layers) Slope	0.00 0.98
Redoubt, gently sloping-----	40	Fair: Depth to dense layer Rock fragment content Too acid	0.03 0.12 0.41	Poor: High frost action(check lower layers)	0.00
648: Redoubt, cool-----	55	Fair: Depth to dense layer Rock fragment content Too acid Slope	0.03 0.12 0.41 0.96	Poor: High frost action(check lower layers)	0.00
Tuxedni-----	35	Poor: Rock fragment content Depth to saturated zone Too acid Slope	0.00 0.50 0.95 0.96	Poor: High frost action(check lower layers) Depth to saturated zone	0.00 0.50

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
649: Riverwash	100	Not rated		Not rated	
650: Salamatof	70	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.12	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
Doroshin	22	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
651: Salamatof	80	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.12	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
652: Slikok	85	Poor: Depth to saturated zone Too acid	0.00 0.98	Poor: Depth to saturated zone High frost action (check lower layers) Low strength	0.00 0.00 0.22
653: Slikok	82	Poor: Depth to saturated zone Too acid	0.00 0.98	Poor: Depth to saturated zone High frost action (check lower layers) Low strength	0.00 0.00 0.22
654: Smithfha	85	Good source		Fair: Moderate frost action (check lower layers)	0.50
655: Smithfha	90	Poor: Slope	0.00	Poor: Slope Moderate frost action (check lower layers)	0.00 0.50
656: Smokey Bay	77	Fair: Depth to saturated zone Rock fragment content	0.04 0.50	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
657: Smokey Bay	77	Fair: Depth to saturated zone Rock fragment content Slope	0.04 0.50 0.63	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.04
658: Snowdance	90	Poor: Rock fragment content Depth to saturated zone Hard to reclaim	0.00 0.04 0.92	Poor: High frost action (check lower layers) Depth to saturated zone Cobble content	0.00 0.04 0.77

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
659: Soldotna -----	90	Fair: Hard to reclaim Too acid	0.98 0.98	Poor: High frost action (check lower layers)	0.00
660: Soldotna -----	90	Fair: Hard to reclaim Too acid	0.98 0.98	Poor: High frost action (check lower layers)	0.00
661: Soldotna -----	85	Fair: Slope Hard to reclaim Too acid	0.37 0.98 0.98	Poor: High frost action (check lower layers)	0.00
662: Soldotna -----	85	Poor: Slope Hard to reclaim Too acid	0.00 0.98 0.98	Poor: High frost action (check lower layers) Slope	0.00 0.50
663: Soldotna, sandy substratum -----	80	Fair: Too acid	0.98	Poor: High frost action (check lower layers)	0.00
664: Soldotna, sandy substratum -----	75	Fair: Slope Too acid	0.63 0.98	Poor: High frost action (check lower layers)	0.00
665: Soldotna, sandy substratum -----	80	Poor: Slope Too acid	0.00 0.98	Poor: High frost action (check lower layers) Slope	0.00 0.50
666: Soldotna, sandy substratum -----	80	Fair: Too acid	0.98	Poor: High frost action (check lower layers)	0.00
667: Soldotna, strongly sloping -----	45	Fair: Slope Hard to reclaim Too acid	0.84 0.98 0.98	Poor: High frost action (check lower layers)	0.00
Soldotna, gently sloping -----	40	Fair: Hard to reclaim Too acid	0.98 0.98	Poor: High frost action (check lower layers)	0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
668: Soldotna, sandy substratum-----	55	Poor: Slope Too acid	0.00 0.98	Poor: Slope High frost action (check lower layers)	0.00 0.00
Kenai -----	40	Poor: Slope	0.00	Poor: Slope Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.00 0.50 0.98
669: Soldotna, sandy substratum -----	55	Fair: Too acid Hard to reclaim	0.98	Poor: High frost action (check lower layers)	0.00
Kenai -----	40	Good source		Poor: Low strength Moderate frost action (check lower layers) Shrink-swell	0.00 0.50 0.98
670: Soldotna -----	50	Fair: Slope Hard to reclaim Too acid	0.37 0.98 0.98	Poor: High frost action (check lower layers)	0.00
Kichatna -----	40	Poor: Rock fragment content Slope Hard to reclaim	0.00 0.37 0.50	Good source	
671: Soldotna -----	50	Poor: Slope Hard to reclaim Too acid	0.00 0.98 0.98	Poor: Slope High frost action (check lower layers)	0.00 0.00
Kichatna -----	40	Poor: Slope Rock fragment content Hard to reclaim	0.00 0.00 0.50	Poor: Slope	0.00
672: Soldotna -----	55	Fair: Hard to reclaim Too acid	0.98 0.98	Poor: High frost action (check lower layers)	0.00
Nikolai -----	45	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.32	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
673: Spenard -----	89	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.88 0.88	Poor: Depth to saturated zone High frost action (check lower layers) Low strength Shrink-swell	0.00 0.00 0.78 0.98

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
674: Spenard -----	67	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.88 0.88	Poor: Depth to saturated zone High frost action (check lower layers) Low strength Shrink-swell	0.00 0.00 0.78 0.98
675: Spenard -----	87	Poor: Depth to saturated zone Slope Rock fragment content Too acid	0.00 0.37 0.88 0.88	Poor: Depth to saturated zone High frost action (check lower layers) Low strength Shrink-swell	0.00 0.00 0.78 0.98
676: Starichkof -----	60	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
Doroshin -----	35	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
677: Starichkof -----	75	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
678: Starichkof -----	82	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
679: Starichkof, forested -----	85	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
680: Starichkof -----	45	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
Slikok -----	30	Poor: Depth to saturated zone Slope Too acid	0.00 0.84 0.98	Poor: Depth to saturated zone High frost action (check lower layers) Low strength	0.00 0.00 0.22
Naptowne -----	25	Poor: Rock fragment content Depth to dense layer	0.00 0.00	Poor: High frost action (check lower layers)	0.00

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
681: Starichkof -----	50	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
Spenard -----	42	Poor: Depth to saturated zone Rock fragment content Too acid	0.00 0.88 0.88	Poor: Depth to saturated zone High frost action (check lower layers) Low strength Shrink-swell	0.00 0.00 0.78 0.98
682: Susitna -----	85	Good source		Fair: Moderate frost action (check lower layers)	0.50
Riverwash -----	5	Not rated		Not rated	
683: Susitna -----	85	Good source		Fair: Moderate frost action (check lower layers)	0.50
684: Talkeetna -----	94	Poor: Rock fragment content Hard to reclaim Too acid	0.00 0.50 0.92	Poor: High frost action (check lower layers)	0.00
685: Talkeetna -----	90	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.50 0.92	Poor: High frost action (check lower layers) Slope	0.00 0.00
686: Talkeetna -----	55	Poor: Rock fragment content Slope Hard to reclaim Too acid	0.00 0.00 0.50 0.92	Poor: High frost action (check lower layers)	0.00
Starichkof -----	40	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
687: Tangerra -----	80	Poor: Depth to saturated zone	0.00	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
688: Beaches, tidal flats -----	90	Not rated		Not rated	

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
689: Tlikakila -----	90	Fair: Depth to saturated zone Too acid	0.20 0.41	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.20
690: Tlikakila -----	87	Fair: Depth to saturated zone Too acid	0.20 0.41	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.20
691: Tlikakila -----	85	Fair: Depth to saturated zone Slope Too acid	0.20 0.37 0.41	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.20
692: Tokositna -----	85	Poor: Rock fragment content Hard to reclaim	0.00 0.12	Poor: High frost action (check lower layers)	0.00
693: Tokositna -----	90	Poor: Rock fragment content Hard to reclaim	0.00 0.12	Poor: High frost action (check lower layers)	0.00
694: Tokositna -----	90	Poor: Rock fragment content Hard to reclaim Slope	0.00 0.12 0.84	Poor: High frost action (check lower layers)	0.00
695: Truuli -----	88	Poor: Depth to saturated zone Too acid	0.00 0.24	Poor: Depth to saturated zone High frost action (check lower layers) Low strength	0.00 0.00 0.78
696: Tutka -----	45	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.00 0.00 0.88	Poor: Depth to bedrock Slope High frost action (check lower layers) Low strength	0.00 0.00 0.00 0.00
Kasitsna -----	40	Poor: Slope Hard to reclaim Too acid	0.00 0.50 0.98	Poor: Slope High frost action (check lower layers)	0.00 0.00
Rock outcrop -----	15	Not rated		Not rated	

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
697: Tutka -----	55	Poor: Slope Rock fragment content Depth to bedrock Too acid	0.00 0.00 0.00 0.88	Poor: Depth to bedrock High frost action (check lower layers) Slope Low strength	0.00 0.00 0.00 0.00
Portgraham -----	30	Poor: Slope Depth to bedrock Rock fragment content Too acid	0.00 0.27 0.28 0.50	Poor: Depth to bedrock Slope High frost action (check lower layers) Low strength	0.00 0.00 0.00 0.00
698: Tuxedni -----	85	Poor: Rock fragment content Depth to saturated zone Too acid	0.00 0.50 0.95	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.50
699: Tuxedni -----	85	Poor: Rock fragment content Slope Depth to saturated zone Too acid	0.00 0.37 0.50 0.95	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.50
700: Tuxedni, warm -----	85	Poor: Rock fragment content Depth to saturated zone Too acid	0.00 0.50 0.95	Poor: High frost action (check lower layers) Depth to saturated zone	0.00 0.50
701: Typic Cryaquents -----	95	Poor: Depth to saturated zone Too sandy Rock fragment content Hard to reclaim	0.00 0.00 0.00 0.95	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00
702: Typic Cryopsamments -----	84	Poor: Slope	0.00	Fair: Slope	0.50
703: Typic Cryorthents -----	80	Poor: Slope Rock fragment content Hard to reclaim Too acid	0.00 0.00 0.32 0.88	Poor: Slope Moderate frost action (check lower layers)	0.00 0.50
704: Urban land -----	85	Not rated		Not rated	
705: Water, fresh -----	100	Not rated		Not rated	
706: Whitsol -----	90	Fair: Too acid	0.95	Poor: High frost action (check lower layers) Low strength	0.00 0.78

Table 22. Construction Materials: Topsoil and Roadfill—Continued

Map symbol and soil name	Pct. of map unit	Potential source of topsoil (Alaska criteria)		Potential source of roadfill (Alaska criteria)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
707: Whitsol-----	90	Fair: Too acid	0.95	Poor: High frost action(check lower layers) Low strength	0.00 0.78
708: Whitsol-----	85	Fair: Slope Too acid	0.37 0.95	Poor: High frost action (check lower layers) Low strength	0.00 0.78
709: Whitsol-----	85	Poor: Slope Too acid	0.00 0.95	Poor: High frost action (check lower layers) Slope Low strength	0.00 0.50 0.78
710: Whitsol-----	85	Poor: Slope Too acid	0.00 0.95	Poor: Slope High frost action(check lower layers) Low strength	0.00 0.00 0.78
711: Whitsol-----	55	Fair: Too acid	0.95	Poor: High frost action(check lower layers) Low strength	0.00 0.78
Doroshin-----	30	Poor: Depth to saturated zone Content of organic matter Too acid	0.00 0.00 0.50	Poor: Depth to saturated zone High frost action (check lower layers)	0.00 0.00

Table 23. Hydric Soils List

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
501: Aquic Cryofluvents (85%)-----	No	channels on alluvial flats, alluvial fans on alluvial flats	---	---	---	---
Susitna (10%)-----	No	stream terraces	---	---	---	---
Moose River (5%)-----	Yes	flood plains	2B3	Yes	No	No
502: Aquic Cryofluvents, shallow (80%)-----	No	alluvial fans on alluvial flats, channels on alluvial flats	---	---	---	---
Niklason (15%)-----	No	flood plains	---	---	---	---
Moose River (5%)-----	Yes	flood plains	2B3	Yes	No	No
503: Badland, sea cliffs (100%)-----	Unranked	cliffs	---	---	---	---
504: Badland, sea cliffs (55%)-----	Unranked	cliffs	---	---	---	---
Typic Cryorthents (45%)-----	No	sea cliffs	---	---	---	---
505: Beaches (90%)-----	Unranked	beaches	---	---	---	---
Beaches, tidal flats (10%)-----	Unranked	beaches	---	---	---	---
506: Beluga (85%)-----	Yes	alluvial fans	2B3	Yes	No	No
Slikok (5%)-----	Yes	depressions on till plains, flood plains	2B3	Yes	No	No
Smokey Bay (5%)-----	No	alluvial fans	---	---	---	---
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
507: Beluga (87%)-----	Yes	alluvial fans	2B3	Yes	No	No
Smokey Bay (10%)-----	No	alluvial fans	---	---	---	---
Slikok (3%)-----	Yes	flood plains, depressions on till plains	2B3	Yes	No	No
508: Beluga (87%)-----	Yes	alluvial fans	2B3	Yes	No	No
Smokey Bay (10%)-----	No	alluvial fans	---	---	---	---
Slikok (3%)-----	Yes	depressions on till plains, flood plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
509: Beluga (55%)-----	Yes	alluvial fans	2B3	Yes	No	No
Mutnala (40%)-----	No	moraines on till plains	---	---	---	---
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
510: Beluga (60%)-----	Yes	alluvial fans	2B3	Yes	No	No
Smokey Bay (37%)-----	No	alluvial fans	---	---	---	---
Slikok (3%)-----	Yes	alluvial fans	2B3	Yes	No	No
511: Beluga (50%)-----	Yes	alluvial fans	2B3	Yes	No	No
Smokey Bay (47%)-----	No	alluvial fans	---	---	---	---
Slikok (3%)-----	Yes	alluvial fans	2B3	Yes	No	No
512: Benka (86%)-----	No	outwash plains	---	---	---	---
Doroshin (7%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Kalifonsky (7%)-----	Yes	depressions on till plains	2B3	Yes	No	No
513: Benka (90%)-----	No	outwash plains	---	---	---	---
Iliamna (5%)-----	No	plains	---	---	---	---
Kalifonsky (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
514: Benka (85%)-----	No	outwash plains	---	---	---	---
Qutal (8%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
Tlikakila (7%)-----	No	depressions on till plains, depressions on terraces	---	---	---	---
515: Benka (90%)-----	No	moraines	---	---	---	---
Chulitna (5%)-----	No	terraces on till plains, moraines on till plains	---	---	---	---
Kalifonsky (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
516: Benka (95%)-----	No	moraines	---	---	---	---
Tlikakila (5%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
517: Benka, strongly sloping (45%)-----	No	outwash plains	---	---	---	---
Benka, gently sloping (40%)-----	No	outwash plains	---	---	---	---
Qutal (8%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Tlikakila (7%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---
518: Boxcar (75%)-----	No	kame moraines, lateral moraines	---	---	---	---
Tokositna (15%)-----	No	till plains	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
519: Boxcar (80%)-----	No	kame moraines, lateral moraines	---	---	---	---
Tokositna (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains, hills	---	---	---	---
520: Boxcar (85%)-----	No	lateral moraines, kame moraines	---	---	---	---
Truuli (10%)-----	Yes	hills, depressions on terraces, depressions on till plains	2B3	Yes	No	No
Kachemak (5%)-----	No	moraines on till plains	---	---	---	---
521: Boxcar, cool (80%)-----	No	kame moraines, lateral moraines	---	---	---	---
Kachemak, cool (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
522: Boxcar, cool (80%)-----	No	kame moraines, lateral moraines	---	---	---	---
Kachemak, cool (10%)-----	No	moraines on till plains	---	---	---	---
Snowdance (10%)-----	Yes	till plains	2B3	Yes	No	No
523: Chenega (85%)-----	No	flood plains, stream terraces, alluvial fans	---	---	---	---
Riverwash (10%)-----	Unranked	flood plains	---	---	---	---
Typic Cryaquents (5%)-----	Yes	estuaries, deltas	2B3	Yes	No	No
524: Chenega, cool (90%)-----	No	alluvial fans, flood plains, stream terraces	---	---	---	---
Riverwash (10%)-----	Unranked	flood plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
525: Chenegra, occasionally flooded (85%)	No	flood plains, stream terraces, alluvial fans	---	---	---	---
Riverwash (10%)	Unranked	flood plains	---	---	---	---
Typic Cryaquents (5%)	Yes	deltas, estuaries	2B3	Yes	No	No
526: Chulitna (90%)	No	moraines on till plains, terraces on till plains	---	---	---	---
Benka (6%)	No	outwash plains	---	---	---	---
Spenard (4%)	Yes	depressions on till plains	2B3	Yes	No	No
527: Chulitna (80%)	No	terraces on till plains, moraines on till plains	---	---	---	---
Spenard (15%)	Yes	depressions on till plains	2B3	Yes	No	No
Kashwitna (5%)	No	outwash plains, kame moraines	---	---	---	---
528: Chulitna (85%)	No	terraces on till plains, moraines on till plains	---	---	---	---
Whitsol (10%)	No	till plains, hills	---	---	---	---
Qutal (5%)	No	moraines on till plains, depressions on till plains	---	---	---	---
529: Chulitna (85%)	No	moraines on till plains, terraces on till plains	---	---	---	---
Whitsol (10%)	No	hills	---	---	---	---
Qutal (5%)	No	depressions on till plains, moraines on till plains	---	---	---	---
530: Chunilna (92%)	Yes	till plains	2B3	Yes	No	No
Tuxedni (6%)	No	till plains	---	---	---	---
Doroshin (2%)	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
531: Chunilna (82%)	Yes	till plains	2B3	Yes	No	No
Tuxedni (15%)	No	till plains	---	---	---	---
Doroshin (3%)	Yes	fens on till plains, depressions on till plains	1	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
532: Chuniina, cool (80%)-----	Yes	till plains	2B3	Yes	No	No
Tokositna (15%)-----	No	till plains	---	---	---	---
Doroshin (5%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
533: Chuniina, cool (85%)-----	Yes	till plains	2B3	Yes	No	No
Tokositna (10%)-----	No	hills, till plains	---	---	---	---
Doroshin (5%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
534: Clam Gulch (85%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Doroshin (5%)-----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
Kenai (5%)-----	No	moraines on till plains	---	---	---	---
Slikok (4%)-----	Yes	flood plains, depressions on till plains	2B3	Yes	No	No
Water, fresh (1%)-----	Unranked	NO DATA	---	---	---	---
535: Clunie (90%)-----	Yes	tidal flats	1,3	Yes	No	Yes
Typic Cryaquents (8%)-----	Yes	deltas, estuaries	2B3	Yes	No	No
Starichkof (2%)-----	Yes	fens	1	Yes	No	No
536: Coal Creek (75%)-----	Yes	depressions on stream terraces, till plains	2B3	Yes	No	No
Cohoe (10%)-----	No	moraines on till plains	---	---	---	---
Naptowne (10%)-----	No	moraines	---	---	---	---
Slikok (5%)-----	Yes	flood plains	2B3	Yes	No	No
537: Coal Creek (88%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (10%)-----	Yes	fens	1	Yes	No	No
Mutnala (2%)-----	No	moraines on till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
538: Coal Creek (88%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (8%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
Doroshin (4%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
539: Cohoe (87%)-----	No	moraines on till plains	---	---	---	---
Spenard (11%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Doroshin (2%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
540: Cohoe (85%)-----	No	moraines on till plains	---	---	---	---
Spenard (13%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Doroshin (2%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
541: Cohoe (89%)-----	No	moraines on till plains	---	---	---	---
Spenard (9%)-----	Yes	moraines on till plains	2B3	Yes	No	No
Doroshin (2%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
542: Cohoe (93%)-----	No	moraines on till plains	---	---	---	---
Spenard (7%)-----	Yes	moraines on till plains	2B3	Yes	No	No
543: Cohoe (80%)-----	No	moraines on till plains	---	---	---	---
Kichatna (10%)-----	No	terraces on outwash plains	---	---	---	---
Mutnala (10%)-----	No	moraines on till plains	---	---	---	---
544: Cohoe (84%)-----	No	moraines on till plains	---	---	---	---
Kichatna (14%)-----	No	terraces on outwash plains	---	---	---	---
Truuli (2%)-----	Yes	depressions on till plains, depressions on terraces, hills	2B3	Yes	No	No
545: Cohoe, dry (87%)-----	No	moraines on till plains	---	---	---	---
Spenard (11%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Doroshin (2%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
546: Cohoe, dry (85%) -----	No	moraines on till plains	---	---	---	---
Spenard (13%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Doroshin (2%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
547: Cohoe, dry (89%) -----	No	moraines on till plains	---	---	---	---
Spenard (9%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Doroshin (2%) -----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
548: Cohoe, dry (93%) -----	No	moraines on till plains	---	---	---	---
Spenard (7%) -----	Yes	moraines on till plains	2B3	Yes	No	No
549: Cohoe, dry (80%) -----	No	moraines on till plains	---	---	---	---
Kichatna (10%) -----	No	terraces on outwash plains	---	---	---	---
Naptowne (10%) -----	No	moraines	---	---	---	---
550: Cohoe, dry (84%) -----	No	moraines on till plains	---	---	---	---
Kichatna (14%) -----	No	terraces on outwash plains	---	---	---	---
Truuli (2%) -----	Yes	depressions on terraces, hills, depressions on till plains	2B3	Yes	No	No
551: Cohoe, moderately steep (45%) -----	No	moraines on till plains	---	---	---	---
Cohoe, gently sloping (40%) -----	No	moraines on till plains	---	---	---	---
Qutal (8%) -----	No	depressions on till plains, moraines on till plains	---	---	---	---
Slikok (7%) -----	Yes	flood plains	2B3	Yes	No	No
552: Cohoe, dry, moderately steep (45%) -----	No	moraines on till plains	---	---	---	---
Cohoe, dry, gently sloping (40%) -----	No	moraines on till plains	---	---	---	---
Qutal (8%) -----	No	depressions on till plains, moraines on till plains	---	---	---	---
Slikok (7%) -----	Yes	flood plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
553: Cohoe, dry (55%) -----	No	moraines on till plains	---	---	---	---
Kenai (30%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (5%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
Soldotna (5%) -----	No	moraines on till plains, outwash plains	---	---	---	---
554: Cohoe, dry (55%) -----	No	moraines on till plains	---	---	---	---
Kenai (30%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (5%) -----	No	depressions on till plains, moraines on till plains	---	---	---	---
Soldotna (5%) -----	No	moraines on till plains, outwash plains	---	---	---	---
555: Cohoe, dry (70%) -----	No	moraines on till plains	---	---	---	---
Nikolai (30%) -----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
556: Cohoe, dry (70%) -----	No	moraines on till plains	---	---	---	---
Nikolai (30%) -----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
557: Cytex Creek (75%) -----	No	moraines on till plains	---	---	---	---
Nikolaevsk (15%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Tokositna (10%) -----	No	till plains	---	---	---	---
558: Doroshin (83%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Starichkof (8%) -----	Yes	fens	1	Yes	No	No
Slikok (7%) -----	Yes	flood plains	2B3	Yes	No	No
Water, fresh (2%) -----	Unranked	NO DATA	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
559: Doroshin (79%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Starichkof (15%)-----	Yes	fens	1	Yes	No	No
Slikok (5%)-----	Yes	depressions on till plains, flood plains	2B3	Yes	No	No
Water, fresh (1%)-----	Unranked	NO DATA	---	---	---	---
560: Dystrocryepts (50%)-----	No	moraines on till plains, hills	---	---	---	---
Typic Cryorthents (30%)-----	No	moraines on till plains, hills	---	---	---	---
Iliamna, cool (20%)-----	No	hills	---	---	---	---
561: Foreland (79%)-----	Yes	stream terraces	2B3	Yes	No	No
Truuli (14%)-----	Yes	depressions on terraces, depressions on till plains	2B3	Yes	No	No
Doroshin (6%)-----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
Water, fresh (1%)-----	Unranked	NO DATA	---	---	---	---
562: Foreland (59%)-----	Yes	outwash plains	2B3	Yes	No	No
Soldotna (20%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Starichkof (20%)-----	Yes	fens	1	Yes	No	No
Water, fresh (1%)-----	Unranked	NO DATA	---	---	---	---
563: Pits, gravel (95%)-----	Unranked	outwash plains	---	---	---	---
Water, fresh (5%)-----	Unranked	NO DATA	---	---	---	---
564: Iliamna (80%)-----	No	plains	---	---	---	---
Benka (14%)-----	No	outwash plains	---	---	---	---
Tlikakila (6%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---
565: Iliamna (82%)-----	No	hills	---	---	---	---
Cohoe (14%)-----	No	moraines on till plains	---	---	---	---
Spenard (4%)-----	Yes	moraines on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
566: Iliamna (80%)-----	No	hills	---	---	---	---
Tlikakila (14%)-----	No	depressions on till plains, depressions on terraces	---	---	---	---
Cohoe (6%)-----	No	moraines on till plains	---	---	---	---
567: Iliamna, cool (90%)-----	No	hills	---	---	---	---
Snowdance (10%)-----	Yes	till plains	2B3	Yes	No	No
568: Island (90%)-----	No	till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Nikolai (2%)-----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
569: Island (91%)-----	No	till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Doroshin (1%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
570: Island (90%)-----	No	hillslopes on till plains	---	---	---	---
Tuxedni (10%)-----	No	hills, till plains	---	---	---	---
571: Island (92%)-----	No	hillslopes on till plains	---	---	---	---
Tuxedni (8%)-----	No	hills, till plains	---	---	---	---
572: Island, forested (90%)-----	No	till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Benka (2%)-----	No	outwash plains	---	---	---	---
573: Kachemak (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
574: Kachemak (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains, hills	---	---	---	---
Starichkof (2%)-----	Yes	fens	1	Yes	No	No
575: Kachemak (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
576: Kachemak (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	hills, till plains	---	---	---	---
577: Kachemak (80%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (10%)-----	No	hills, till plains	---	---	---	---
578: Kachemak, cool (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Starichkof (2%)-----	Yes	fens	1	Yes	No	No
579: Kachemak, cool (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Starichkof (2%)-----	Yes	fens	1	Yes	No	No
580: Kachemak, cool (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
581: Kachemak, cool (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	hills, till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
582: Kachemak, cool (80%) -----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains, hills	---	---	---	---
583: Kachemak, forested (75%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
584: Kachemak, forested (85%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Redoubt (5%)-----	No	hills	---	---	---	---
Starichkof (2%)-----	Yes	fens	1	Yes	No	No
585: Kachemak, forested (80%)-----	No	moraines on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---
586: Kachemak, cool (60%) -----	No	moraines on till plains	---	---	---	---
Snowdance (40%)-----	Yes	till plains	2B3	Yes	No	No
587: Kachemak, cool (65%) -----	No	moraines on till plains	---	---	---	---
Snowdance (35%)-----	Yes	till plains	2B3	Yes	No	No
588: Kachemak, cool (70%) -----	No	moraines on till plains	---	---	---	---
Snowdance (30%)-----	Yes	till plains	2B3	Yes	No	No
589: Kalifonsky (83%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Cohoe, dry (10%)-----	No	moraines on till plains	---	---	---	---
Doroshin (7%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
590: Kalifonsky (85%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Spenard (15%)-----	Yes	depressions on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
591: Kalifonsky (50%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Typic Cryorthents (30%) -----	No	terraces on outwash plains	---	---	---	---
Kichatna (10%) -----	No	terraces on outwash plains	---	---	---	---
Spenard (10%) -----	Yes	moraines on till plains	2B3	Yes	No	No
592: Karluk (80%) -----	Yes	bogs on stream terraces	2B3	Yes	No	No
Nikolai (10%) -----	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Soldotna (10%) -----	No	outwash plains, moraines on till plains	---	---	---	---
593: Kashwitna (85%) -----	No	kame moraines, outwash plains	---	---	---	---
Kalifonsky (10%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Iliamna (5%) -----	No	plains	---	---	---	---
594: Kashwitna (88%) -----	No	outwash plains, kame moraines	---	---	---	---
Kalifonsky (6%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (6%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
595: Kashwitna (85%) -----	No	kame moraines, outwash plains	---	---	---	---
Tlikakila (10%) -----	No	depressions on terraces, depressions on till plains	---	---	---	---
Redoubt (5%) -----	No	hills	---	---	---	---
596: Kashwitna, moderately steep (50%) -----	No	kame moraines, outwash plains	---	---	---	---
Kashwitna, strongly sloping (40%) -----	No	outwash plains, kame moraines	---	---	---	---
Spenard (10%) -----	Yes	moraines on till plains	2B3	Yes	No	No
597: Kenai (81%) -----	No	moraines on till plains	---	---	---	---
Cohoe, dry (10%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
598: Kenai (82%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Redoubt (9%) -----	No	hills	---	---	---	---
599: Kenai (85%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Soldotna (6%) -----	No	moraines on till plains, outwash plains	---	---	---	---
600: Kenai (88%) -----	No	moraines on till plains	---	---	---	---
Soldotna (10%) -----	No	moraines on till plains, outwash plains	---	---	---	---
Clam Gulch (2%) -----	Yes	depressions on till plains	2B3	Yes	No	No
601: Kenai (86%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Redoubt (5%) -----	No	hills	---	---	---	---
602: Kenai, moderately steep (45%) -----	No	moraines on till plains	---	---	---	---
Kenai, gently sloping (40%) -----	No	moraines on till plains	---	---	---	---
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Redoubt (6%) -----	No	hills	---	---	---	---
603: Kenai (60%) -----	No	moraines on till plains	---	---	---	---
Starichkof (31%) -----	Yes	fens	1	Yes	No	No
Clam Gulch (9%) -----	Yes	depressions on till plains	2B3	Yes	No	No
604: Kichatna (70%) -----	No	terraces on outwash plains	---	---	---	---
Soldotna (15%) -----	No	moraines on till plains, outwash plains	---	---	---	---
Tangerra (10%) -----	Yes	depressions on outwash plains, depressions on moraines	2B3	Yes	No	No
Longmare (3%) -----	No	moraines, outwash plains	---	---	---	---
Nikolai (2%) -----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
605: Kichatna (75%) -----	No	hills on outwash plains	---	---	---	---
Soldotna (15%) -----	No	moraines on till plains, outwash plains	---	---	---	---
Coal Creek (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%) -----	Yes	fens	1	Yes	No	No
606: Kichatna (75%) -----	No	hills on outwash plains	---	---	---	---
Soldotna (20%) -----	No	outwash plains, moraines on till plains	---	---	---	---
Karluk (3%) -----	Yes	bogs on stream terraces	2B3	Yes	No	No
Doroshin (2%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
607: Kichatna (85%) -----	No	hills on outwash plains	---	---	---	---
Kalifonsky (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Soldotna (5%) -----	No	outwash plains, moraines on till plains	---	---	---	---
Tlikakila (5%) -----	No	depressions on till plains, depressions on terraces	---	---	---	---
608: Kichatna (70%) -----	No	hills on outwash plains	---	---	---	---
Benka (15%) -----	No	moraines	---	---	---	---
Qutal (5%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
Redoubt (5%) -----	No	hills	---	---	---	---
Spenard (5%) -----	Yes	moraines on till plains	2B3	Yes	No	No
609: Kichatna (50%) -----	No	terraces on outwash plains	---	---	---	---
Killey (50%) -----	Yes	flood plains	2B3	Yes	No	No
610: Kidazqeni (85%) -----	No	stream terraces	---	---	---	---
Riverwash (10%) -----	Unranked	flood plains	---	---	---	---
Susitna (5%) -----	No	stream terraces	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
611:						
Killey (45%)-----	Yes	flood plains	2B3	Yes	No	No
Moose River (45%)-----	Yes	flood plains	2B3	Yes	No	No
Chuniina (4%)-----	Yes	till plains	2B3	Yes	No	No
Slikok (3%)-----	Yes	flood plains	2B3	Yes	No	No
Doroshin (2%)-----	Yes	depressions on alluvial flats	1	Yes	No	No
Water, fresh (1%)-----	Unranked	NO DATA	---	---	---	---
612:						
Liten (85%)-----	No	dunes	---	---	---	---
Slikok (10%)-----	Yes	flood plains	2B3	Yes	No	No
Cohoe, dry (5%)-----	No	moraines on till plains	---	---	---	---
613:						
Lithic Haplocryands (55%)-----	No	mountains	---	---	---	---
Alic Haplocryands (20%)-----	No	mountains	---	---	---	---
Rock outcrop (17%)-----	Unranked	mountains, hills	---	---	---	---
Typic Cryaquands (8%)-----	Yes	mountains	2B3	Yes	No	No
614:						
Lithic Haplocryands (55%)-----	No	mountains	---	---	---	---
Alic Haplocryands (20%)-----	No	mountains	---	---	---	---
Rock outcrop (20%)-----	Unranked	mountains, hills	---	---	---	---
Typic Cryaquands (5%)-----	Yes	mountains	2B3	Yes	No	No
615:						
Longmare (80%)-----	No	outwash plains, moraines	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Kalifonsky (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Tangerra (5%)-----	Yes	depressions on moraines, depressions on outwash plains	2B3	Yes	No	No
616:						
Longmare (80%)-----	No	outwash plains, moraines	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Kalifonsky (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Tangerra (5%)-----	Yes	depressions on moraines, depressions on outwash plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
617: Mutnala (75%)-----	No	moraines on till plains	---	---	---	---
Qutal (10%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Redoubt (10%)-----	No	hills	---	---	---	---
Spenard (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
618: Mutnala (80%)-----	No	moraines on till plains	---	---	---	---
Spenard (10%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (5%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Redoubt (5%)-----	No	hills	---	---	---	---
619: Mutnala (85%)-----	No	moraines on till plains	---	---	---	---
Spenard (10%)-----	Yes	moraines on till plains	2B3	Yes	No	No
Qutal (5%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
620: Mutnala (85%)-----	No	moraines on till plains	---	---	---	---
Spenard (10%)-----	Yes	moraines on till plains	2B3	Yes	No	No
Qutal (5%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
621: Mutnala (85%)-----	No	moraines on till plains	---	---	---	---
Kichatna (5%)-----	No	terraces on outwash plains	---	---	---	---
Qutal (5%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
Spenard (5%)-----	Yes	moraines on till plains	2B3	Yes	No	No
622: Mutnala (85%)-----	No	moraines on till plains	---	---	---	---
Kichatna (5%)-----	No	terraces on outwash plains	---	---	---	---
Qutal (5%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Spenard (5%)-----	Yes	moraines on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
623: Mutnala (45%)-----	No	moraines on till plains	---	---	---	---
Starichkof (35%)-----	Yes	fens	1	Yes	No	No
Slikok (20%)-----	Yes	depressions on till plains	2B3	Yes	No	No
624: Naptowne (80%)-----	No	moraines, till plains	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Nikolai (2%)-----	Yes	depressions on till plains	1	Yes	No	No
625: Naptowne (80%)-----	No	moraines, till plains	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Nikolai (2%)-----	Yes	depressions on till plains	1	Yes	No	No
626: Naptowne (80%)-----	No	moraines	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Nikolai (2%)-----	Yes	depressions on till plains	1	Yes	No	No
627: Naptowne (80%)-----	No	moraines	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (8%)-----	No	till plains	---	---	---	---
Nikolai (2%)-----	Yes	depressions on till plains	1	Yes	No	No
628: Naptowne (80%)-----	No	moraines	---	---	---	---
Soldotna (10%)-----	No	moraines on till plains	---	---	---	---
Tuxedni (6%)-----	No	till plains	---	---	---	---
Nikolai (4%)-----	Yes	depressions on moraines, depressions on till plains	1	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
629: Naptowne (80%) -----	No	till plains, moraines	---	---	---	---
Soldotna (10%) -----	No	moraines on till plains	---	---	---	---
Tuxedni (6%) -----	No	till plains	---	---	---	---
Nikolai (4%) -----	Yes	depressions on till plains	1	Yes	No	No
630: Naptowne, moderately steep (45%) -----	No	moraines	---	---	---	---
Naptowne, strongly sloping (40%) -----	No	moraines	---	---	---	---
Soldotna (7%) -----	No	moraines on till plains	---	---	---	---
Nikolai (4%) -----	Yes	depressions on moraines, depressions on till plains	1	Yes	No	No
Tuxedni (4%) -----	No	till plains	---	---	---	---
631: Naptowne, strongly sloping (45%) -----	No	moraines	---	---	---	---
Naptowne, gently sloping (40%) -----	No	moraines	---	---	---	---
Soldotna (7%) -----	No	moraines on till plains	---	---	---	---
Nikolai (4%) -----	Yes	depressions on till plains	1	Yes	No	No
Tuxedni (4%) -----	No	till plains	---	---	---	---
632: Niklason (85%) -----	No	flood plains	---	---	---	---
Kidazqeni (15%) -----	No	stream terraces	---	---	---	---
633: Nikolaevsk (85%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Tokositna (13%) -----	No	till plains	---	---	---	---
Doroshin (2%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
634: Nikolaevsk (83%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Tokositna (15%) -----	No	till plains	---	---	---	---
Doroshin (2%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
635: Nikolaevsk (85%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Tokositna (14%) -----	No	till plains, hills	---	---	---	---
Doroshin (1%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
636: Nikolai (90%) -----	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Starichkof (5%) -----	Yes	fens	1	Yes	No	No
Truuli (5%) -----	Yes	depressions on till plains, depressions on terraces	2B3	Yes	No	No
637: Nikolai, somewhat poorly drained (60%)	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Tuxedni (25%) -----	No	till plains	---	---	---	---
Cohoe, dry (8%) -----	No	moraines on till plains	---	---	---	---
Soldotna (7%) -----	No	outwash plains, moraines on till plains	---	---	---	---
638: Puntilla (80%) -----	No	moraines on till plains	---	---	---	---
Kachemak (15%) -----	No	moraines on till plains	---	---	---	---
Tuxedni (5%) -----	No	till plains	---	---	---	---
639: Puntilla (85%) -----	No	moraines on till plains	---	---	---	---
Snowdance (8%) -----	Yes	till plains	2B3	Yes	No	No
Spenard (7%) -----	Yes	depressions on till plains	2B3	Yes	No	No
640: Qutal (77%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
Spenard (10%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Whitsol (10%) -----	No	till plains	---	---	---	---
Starichkof (3%) -----	Yes	fens	1	Yes	No	No
641: Qutal (80%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
Spenard (10%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Whitsol (10%) -----	No	till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
642: Qutal (80%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
Spenard (10%)-----	Yes	moraines on till plains	2B3	Yes	No	No
Whitsol (10%)-----	No	till plains	---	---	---	---
643: Redoubt, terraces (85%)-----	No	hills	---	---	---	---
Iliamna, terraces (10%)-----	No	plains	---	---	---	---
Tuxedni (5%)-----	No	till plains	---	---	---	---
644: Redoubt (85%)-----	No	hills	---	---	---	---
Spenard (9%)-----	Yes	moraines on till plains	2B3	Yes	No	No
Iliamna (6%)-----	No	hills	---	---	---	---
645: Redoubt (85%)-----	No	hills	---	---	---	---
Iliamna (8%)-----	No	hills	---	---	---	---
Tuxedni (7%)-----	No	till plains	---	---	---	---
646: Redoubt, cool (80%)-----	No	hills	---	---	---	---
Benka (10%)-----	No	outwash plains	---	---	---	---
Spenard (10%)-----	Yes	depressions on till plains	2B3	Yes	No	No
647: Redoubt, moderately steep (45%)-----	No	hills	---	---	---	---
Redoubt, gently sloping (40%)-----	No	hills	---	---	---	---
Starichkof (10%)-----	Yes	fens	1	Yes	No	No
Slikok (3%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Water, fresh (2%)-----	Unranked	NO DATA	---	---	---	---
648: Redoubt, cool (55%)-----	No	hills	---	---	---	---
Tuxedni (35%)-----	No	hills, till plains	---	---	---	---
Chunilna (10%)-----	Yes	till plains	2B3	Yes	No	No
649: Riverwash (100%)-----	Unranked	flood plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
650: Salamatof (70%) -----	Yes	fens on till plains	1	Yes	No	No
Doroshin (22%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Slikok (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Water, fresh (3%) -----	Unranked	NO DATA	---	---	---	---
651: Salamatof (80%) -----	Yes	fens on till plains	1	Yes	No	No
Doroshin (15%) -----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
Water, fresh (5%) -----	Unranked	NO DATA	---	---	---	---
652: Slikok (85%) -----	Yes	depressions on till plains, flood plains	2B3	Yes	No	No
Doroshin (10%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Qutal (4%) -----	No	moraines on till plains, depressions on till plains	---	---	---	---
Water, fresh (1%) -----	Unranked	NO DATA	---	---	---	---
653: Slikok (82%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Mutnala (10%) -----	No	moraines on till plains	---	---	---	---
Doroshin (8%) -----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
654: Smithfha (85%) -----	No	plains	---	---	---	---
Cohoe, dry (10%) -----	No	moraines on till plains	---	---	---	---
Nikolai (5%) -----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
655: Smithfha (90%) -----	No	hills	---	---	---	---
Coal Creek (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%) -----	Yes	fens	1	Yes	No	No
656: Smokey Bay (77%) -----	No	alluvial fans	---	---	---	---
Beluga (23%) -----	Yes	alluvial fans	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
657: Smokey Bay (77%)-----	No	alluvial fans	---	---	---	---
Beluga (23%)-----	Yes	alluvial fans	2B3	Yes	No	No
658: Snowdance (90%)-----	Yes	till plains	2B3	Yes	No	No
Kachemak, cool (10%)-----	No	moraines on till plains	---	---	---	---
659: Soldotna (90%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Tlikakila (7%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---
Doroshin (3%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
660: Soldotna (90%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Kalifonsky (7%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (3%)-----	Yes	fens	1	Yes	No	No
661: Soldotna (85%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Kalifonsky (7%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
Foreland (3%)-----	Yes	kame moraines	2B3	Yes	No	No
662: Soldotna (85%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Kalifonsky (7%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
Foreland (3%)-----	Yes	kame moraines	2B3	Yes	No	No
663: Soldotna, sandy substratum (80%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Cohoe, dry (15%)-----	No	moraines on till plains	---	---	---	---
Spenard (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
664: Soldotna, sandy substratum (75%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Cohoe, dry (15%)-----	No	moraines on till plains	---	---	---	---
Kenai (3%) -----	No	moraines on till plains	---	---	---	---
Tangerra (3%)-----	Yes	depressions on outwash plains, depressions on moraines	2B3	Yes	No	No
Nikolai (2%) -----	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Spenard (2%)-----	Yes	depressions on till plains	2B3	Yes	No	No
665: Soldotna, sandy substratum (80%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Naptowne (10%)-----	No	moraines	---	---	---	---
Kenai (5%) -----	No	moraines on till plains	---	---	---	---
Tangerra (5%)-----	Yes	depressions on moraines, depressions on outwash plains	2B3	Yes	No	No
666: Soldotna, sandy substratum (80%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Cohoe, dry (10%)-----	No	moraines on till plains	---	---	---	---
Tangerra (5%)-----	Yes	depressions on moraines, depressions on outwash plains	2B3	Yes	No	No
Tuxedni, warm (3%) -----	No	till plains	---	---	---	---
Coal Creek (2%)-----	Yes	depressions on stream terraces on till plains	2B3	Yes	No	No
667: Soldotna, strongly sloping (45%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Soldotna, gently sloping (40%) -----	No	outwash plains, moraines on till plains	---	---	---	---
Kalifonsky (7%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
Foreland (3%) -----	Yes	stream terraces	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
668: Soldotna, sandy substratum (55%)-----	No	moraines on till plains	---	---	---	---
Kenai (40%)-----	No	moraines on till plains	---	---	---	---
Naptowne (5%)-----	No	moraines	---	---	---	---
Clam Gulch (0%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Cohoe, dry (0%)-----	No	moraines on till plains	---	---	---	---
669: Soldotna, sandy substratum (55%)-----	No	outwash plains	---	---	---	---
Kenai (40%)-----	No	moraines on till plains	---	---	---	---
Clam Gulch (5%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Cohoe, dry (0%)-----	No	moraines on till plains	---	---	---	---
Naptowne, gently sloping (0%)-----	No	moraines	---	---	---	---
Naptowne, steep (0%)-----	No	moraines	---	---	---	---
670: Soldotna (50%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Kichatna (40%)-----	No	hills on outwash plains	---	---	---	---
Foreland (10%)-----	Yes	kame moraines	2B3	Yes	No	No
671: Soldotna (50%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Kichatna (40%)-----	No	hills on outwash plains	---	---	---	---
Foreland (10%)-----	Yes	kame moraines	2B3	Yes	No	No
672: Soldotna (55%)-----	No	outwash plains, moraines on till plains	---	---	---	---
Nikolai (45%)-----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
673: Spenard (89%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Qutal (9%)-----	No	depressions on till plains, moraines on till plains	---	---	---	---
Water, fresh (2%)-----	Unranked	NO DATA	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
674: Spenard (67%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Mutnala (15%) -----	No	moraines on till plains	---	---	---	---
Qutal (15%) -----	No	depressions on till plains, moraines on till plains	---	---	---	---
Doroshin (3%) -----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
675: Spenard (87%) -----	Yes	moraines on till plains	2B3	Yes	No	No
Mutnala (10%) -----	No	moraines on till plains	---	---	---	---
Doroshin (3%) -----	Yes	fens on till plains, depressions on till plains	1	Yes	No	No
676: Starichkof (60%) -----	Yes	fens	1	Yes	No	No
Doroshin (35%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Slikok (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
677: Starichkof (75%) -----	Yes	fens	1	Yes	No	No
Doroshin (15%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Slikok (5%) -----	Yes	depressions on till plains, flood plains	2B3	Yes	No	No
Water, fresh (5%) -----	Unranked	NO DATA	---	---	---	---
678: Starichkof (82%) -----	Yes	fens	1	Yes	No	No
Doroshin (15%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Water, fresh (3%) -----	Unranked	NO DATA	---	---	---	---
679: Starichkof, forested (85%) -----	Yes	fens	1	Yes	No	No
Doroshin (10%) -----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Water, fresh (5%) -----	Unranked	NO DATA	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
680: Starichkof (45%)-----	Yes	fens	1	Yes	No	No
Slikok (30%)-----	Yes	flood plains, depressions on till plains	2B3	Yes	No	No
Naptowne (25%)-----	No	moraines	---	---	---	---
681: Starichkof (50%)-----	Yes	fens	1	Yes	No	No
Spenard (42%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Mutnala (6%)-----	No	moraines on till plains	---	---	---	---
Water, fresh (2%)-----	Unranked	NO DATA	---	---	---	---
682: Susitna (85%)-----	No	stream terraces	---	---	---	---
Aquic Cryofluvents (10%)-----	No	alluvial fans on alluvial flats, channels on alluvial flats	---	---	---	---
Riverwash (5%)-----	Unranked	flood plains	---	---	---	---
683: Susitna (85%)-----	No	stream terraces	---	---	---	---
Aquic Cryofluvents (15%)-----	No	alluvial fans on alluvial flats, channels on alluvial flats	---	---	---	---
684: Talkeetna (94%)-----	No	till plains	---	---	---	---
Starichkof (3%)-----	Yes	fens	1	Yes	No	No
Tuxedni (3%)-----	No	till plains	---	---	---	---
685: Talkeetna (90%)-----	No	hills	---	---	---	---
Chunilna (6%)-----	Yes	till plains	2B3	Yes	No	No
Qutal (4%)-----	No	depressions on moraines on till plains	---	---	---	---
686: Talkeetna (55%)-----	No	hills	---	---	---	---
Starichkof (40%)-----	Yes	fens	1	Yes	No	No
Chunilna (5%)-----	Yes	till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
687: Tangerra (80%)-----	Yes	depressions on outwash plains, depressions on moraines	2B3	Yes	No	No
Soldotna (10%)-----	No	moraines on till plains, outwash plains	---	---	---	---
Nikolai (5%)-----	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Qutal (3%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Kalifonsky (2%)-----	Yes	depressions on till plains	2B3	Yes	No	No
688: Beaches, tidal flats (90%)-----	Unranked	beaches	---	---	---	---
Water, saline (10%)-----	Unranked	NO DATA	---	---	---	---
689: Tlikakila (90%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---
Nikolai (10%)-----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
690: Tlikakila (87%)-----	No	depressions on terraces, depressions on till plains	---	---	---	---
Nikolai (8%)-----	Yes	depressions on till plains, depressions on coastal plains	1	Yes	No	No
Kashwitna (5%)-----	No	outwash plains, kame moraines	---	---	---	---
691: Tlikakila (85%)-----	No	depressions on till plains, depressions on terraces	---	---	---	---
Chuniilna (10%)-----	Yes	till plains	2B3	Yes	No	No
Cohoe (5%)-----	No	moraines on till plains	---	---	---	---
692: Tokositna (85%)-----	No	till plains	---	---	---	---
Spenard (8%)-----	Yes	depressions on till plains	2B3	Yes	No	No
Tuxedni (7%)-----	No	till plains	---	---	---	---
693: Tokositna (90%)-----	No	till plains	---	---	---	---
Tuxedni (10%)-----	No	till plains	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
694: Tokositna (90%) -----	No	till plains, hills	---	---	---	---
Spenard (10%) -----	Yes	moraines on till plains	2B3	Yes	No	No
695: Truuli (88%) -----	Yes	depressions on terraces, depressions on till plains	2B3	Yes	No	No
Nikolai (8%) -----	Yes	depressions on coastal plains, depressions on till plains	1	Yes	No	No
Tuxedni (4%) -----	No	till plains	---	---	---	---
696: Tutka (45%) -----	No	mountain slopes	---	---	---	---
Kasitsna (40%) -----	No	mountain slopes	---	---	---	---
Rock outcrop (15%) -----	Unranked	mountains, hills	---	---	---	---
697: Tutka (55%) -----	No	mountain slopes	---	---	---	---
Portgraham (30%) -----	No	mountain slopes	---	---	---	---
Typic Cryaquands (15%) -----	Yes	mountains	2B3	Yes	No	No
698: Tuxedni (85%) -----	No	till plains	---	---	---	---
Redoubt (10%) -----	No	hills	---	---	---	---
Spenard (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
699: Tuxedni (85%) -----	No	hills, till plains	---	---	---	---
Redoubt (10%) -----	No	hills	---	---	---	---
Spenard (5%) -----	Yes	moraines on till plains	2B3	Yes	No	No
700: Tuxedni, warm (85%) -----	No	till plains	---	---	---	---
Truuli (12%) -----	Yes	depressions on till plains, depressions on terraces	2B3	Yes	No	No
Whitsol (3%) -----	No	till plains	---	---	---	---
701: Typic Cryaquents (95%) -----	Yes	deltas, estuaries	2B3	Yes	No	No
Killey (3%) -----	Yes	flood plains	2B3	Yes	No	No
Clunie (2%) -----	Yes	tidal flats	3,1	Yes	No	Yes
Water, saline (0%) -----	Unranked	NO DATA	---	---	---	---

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
702: Typic Cryopsamments (84%) -----	No	dunes	---	---	---	---
Smithfha (10%)-----	No	plains	---	---	---	---
Starichkof (4%)-----	Yes	fens	1	Yes	No	No
Kalifonsky (2%) -----	Yes	depressions on till plains	2B3	Yes	No	No
703: Typic Cryorthents (80%)-----	No	sea cliffs	---	---	---	---
Badland, sea cliffs (10%)-----	Unranked	cliffs	---	---	---	---
Beluga (5%)-----	Yes	alluvial fans	2B3	Yes	No	No
Kachemak (5%)-----	No	moraines on till plains	---	---	---	---
704: Urban land (85%)-----	Unranked	NO DATA	---	---	---	---
Cohoe (5%) -----	No	moraines on till plains	---	---	---	---
Kalifonsky (5%) -----	Yes	depressions on till plains	2B3	Yes	No	No
Starichkof (5%)-----	Yes	fens	1	Yes	No	No
705: Water, fresh (100%) -----	Unranked	NO DATA	---	---	---	---
706: Whitsol (90%)-----	No	till plains	---	---	---	---
Qutal (6%)-----	No	moraines on till plains	---	---	---	---
Spenard (4%)-----	Yes	depressions on till plains	2B3	Yes	No	No
707: Whitsol (90%)-----	No	till plains	---	---	---	---
Qutal (6%)-----	No	moraines on till plains, depressions on till plains	---	---	---	---
Spenard (4%)-----	Yes	depressions on till plains	2B3	Yes	No	No
708: Whitsol (85%)-----	No	till plains, hills	---	---	---	---
Kashwitna (10%)-----	No	outwash plains, kame moraines	---	---	---	---
Spenard (5%)-----	Yes	moraines on till plains	2B3	Yes	No	No
709: Whitsol (85%)-----	No	hills	---	---	---	---
Kashwitna (10%)-----	No	kame moraines, outwash plains	---	---	---	---
Spenard (5%)-----	Yes	moraines on till plains	2B3	Yes	No	No

Table 23. Hydric Soils List—Continued

Map symbol and soil name (percent composition)	Hydric soil	Local landform	Hydric soils criteria			
			Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
710: Whitsol (85%)-----	No	hills	---	---	---	---
Kashwitna (5%)-----	No	kame moraines, outwash plains	---	---	---	---
Redoubt (5%)-----	No	hills	---	---	---	---
Spenard (5%)-----	Yes	moraines on till plains	2B3	Yes	No	No
711: Whitsol (55%)-----	No	till plains	---	---	---	---
Doroshin (30%)-----	Yes	depressions on till plains, fens on till plains	1	Yes	No	No
Spenard (15%)-----	Yes	depressions on till plains	2B3	Yes	No	No

Table 24. Classification of the Soils

Soil name	Family or higher taxonomic class
Alic Haplocryands	Alic Haplocryands
Aquic Cryofluvents	Aquic Cryofluvents
Beluga	Coarse-loamy, mixed, superactive, nonacid Typic Cryaquents
Benka	Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods
Boxcar	Medial over sandy or sandy-skeletal, amorphic over mixed Alic Haplocryands
Chenega	Sandy-skeletal, mixed Typic Cryofluvents
Chulitna	Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods
Chunilna	Medial over loamy-skeletal, amorphic over mixed, superactive, acid Typic Cryaquands
Clam Gulch	Fine-silty, mixed, superactive, nonacid Humic Cryaquepts
Clunie	Loamy, mixed, euic Terric Cryofibrists
Coal Creek	Coarse-loamy, mixed, superactive, acid Humic Cryaquepts
Cohoe	Medial over loamy, amorphic over mixed, superactive Andic Haplocryods
Cytex Creek	Medial over sandy or sandy-skeletal, amorphic over mixed Aquandic Haplocryods
Doroshin	Loamy, mixed, euic Terric Cryohemists
Dystrocryepts	Dystrocryepts
Foreland	Sandy, mixed Histic Cryaquepts
Iliamna	Medial over sandy or sandy-skeletal, amorphic over mixed Andic Humicryods
Island	Medial over loamy, amorphic over mixed, superactive Pachic Fulvicryands
Kachemak	Medial over loamy, mixed, superactive Vitric Fulvicryands
Kalifonsky	Coarse-silty over sandy or sandy-skeletal, mixed, superactive, acid Typic Cryaquents
Karluk	Fine-silty, siliceous, semiactive, acid Humic Cryaquepts
Kashwitna	Medial over sandy or sandy-skeletal, amorphic over mixed, superactive Andic Haplocryods
Kasitsna	Medial over loamy-skeletal, amorphic over mixed, superactive, acid Andic Humicryods
Kenai	Medial over loamy, amorphic over mixed, superactive Andic Haplocryods
Kichatna	Sandy-skeletal, mixed Typic Haplocryods
Kidazqeni	Sandy-skeletal, mixed Typic Cryofluvents
Killey	Coarse-loamy over sandy or sandy-skeletal, mixed, active, acid Typic Cryaquents
Liten	Sandy, mixed Typic Haplocryods
Lithic Haplocryands	Lithic Haplocryands
Longmare	Medial over sandy or sandy-skeletal, amorphic over mixed Aquandic Haplocryods
Moose River	Coarse-loamy, mixed, active, nonacid Typic Cryaquents
Mutnala	Medial over loamy, amorphic over mixed, superactive Andic Haplocryods
Naptowne	Medial over loamy, amorphic over mixed, superactive Andic Haplocryods
Niklason	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryofluvents
Nikolaevsk	Medial over sandy or sandy-skeletal, amorphic over mixed Andic Cryaquods
Nikolai	Loamy, mixed, dysic Terric Cryosapristis
Portgraham	Medial, amorphic, superactive Andic Humicryods
Puntilla	Medial over loamy, amorphic over mixed, superactive Andic Humicryods
Qutal	Medial over loamy, amorphic over mixed, superactive Aquandic Haplocryods
Redoubt	Medial over loamy, amorphic over mixed, superactive Andic Humicryods
Salamatof	Dysic Sphagmic Cryofibrists
Slikok	Coarse-silty, mixed, superactive, acid Histic Cryaquepts
Smithfha	Coarse-loamy, mixed, superactive Typic Dystrocryepts
Smokey Bay	Coarse-loamy, mixed, active, nonacid Oxyaquic Cryorthents
Snowdance	Medial over loamy-skeletal, amorphic over mixed, superactive, nonacid Typic Cryaquands
Soldotna	Medial over sandy or sandy-skeletal, amorphic over mixed Andic Haplocryods
Spenard	Medial over loamy, amorphic over mixed, superactive Andic Cryaquods
Starichkof	Dysic Fluvaquentic Cryohemists
Susitna	Coarse-loamy, mixed, superactive, nonacid Typic Cryofluvents
Talkeetna	Medial over loamy-skeletal, amorphic over mixed, superactive Andic Humicryods
Tangerra	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive Typic Cryaquods
Tlikakila	Medial over sandy or sandy-skeletal, amorphic over mixed, acid Typic Cryaquands
Tokositna	Medial over loamy-skeletal, amorphic over mixed, superactive Andic Haplocryods
Truuli	Medial over loamy, amorphic over mixed, superactive, acid Histic Cryaquands
Tutka	Medial, amorphic Lithic Humicryods
Tuxedni	Medial over loamy, amorphic over mixed, active Aquic Haplocryands
Typic Cryaquands	Typic Cryaquands
Typic Cryaquents	Typic Cryaquents
Typic Cryopsamments	Typic Cryopsamments
Typic Cryorthents	Typic Cryorthents
Whitsol	Medial over loamy, amorphic over mixed, superactive Andic Haplocryods

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