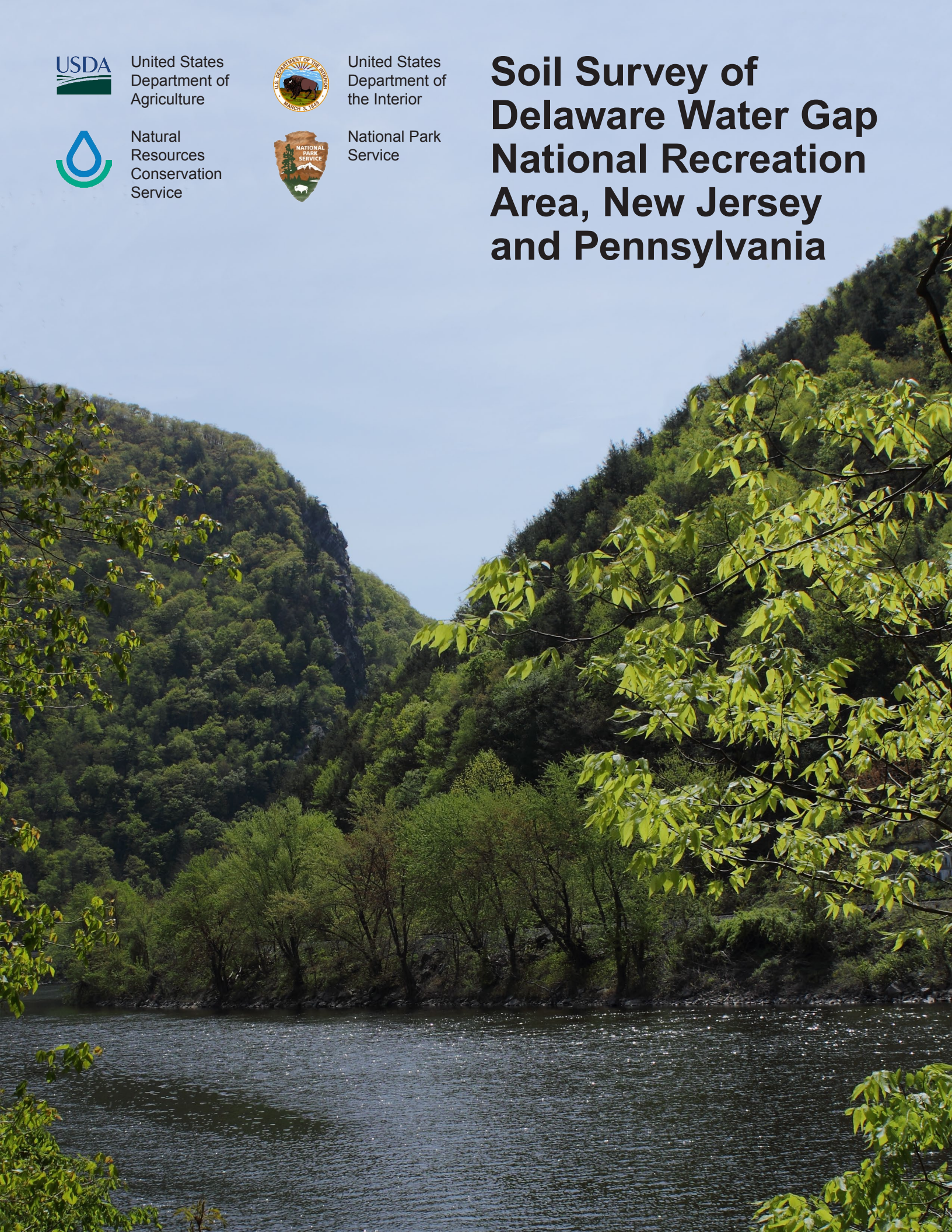
United States Department of Agriculture

Natural Resources Conservation Service

United States Department of the Interior

National Park Service

Soil Survey of Delaware Water Gap National Recreation Area, New Jersey and Pennsylvania



How To Use This Soil Survey

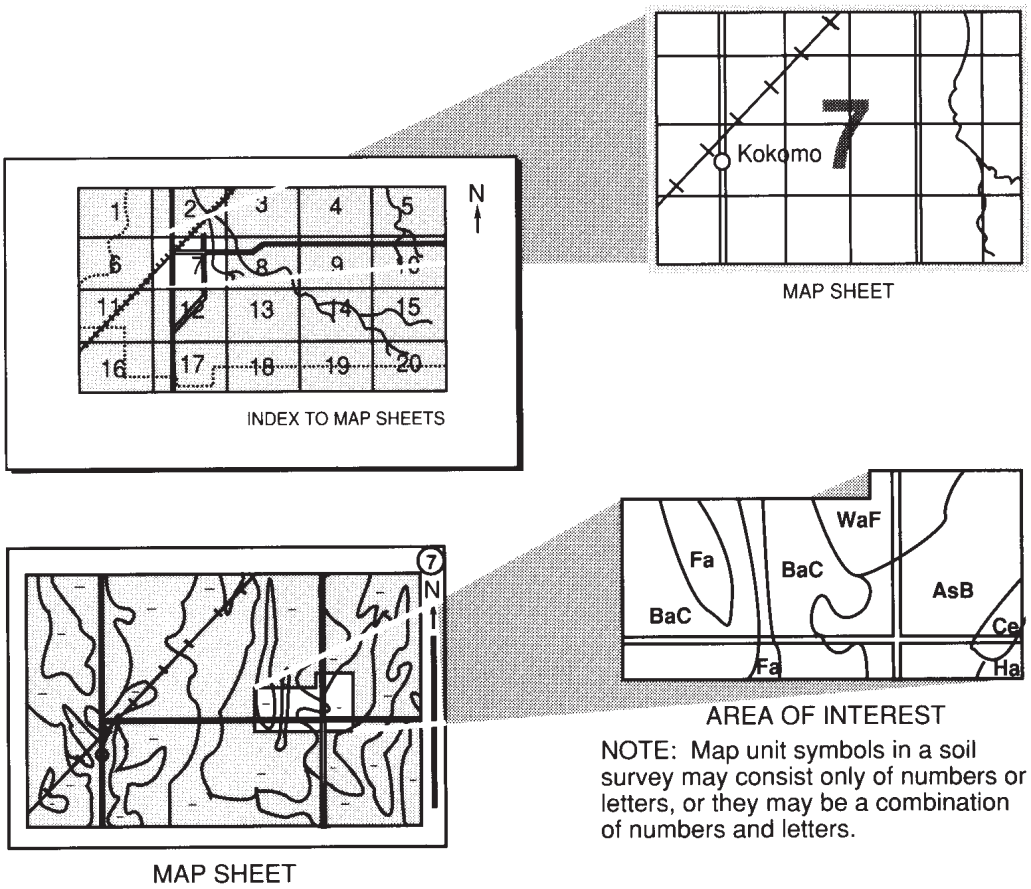
Detailed Soil Maps

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.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

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Citation

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Cover Caption

The Delaware Water Gap along the New Jersey-Pennsylvania border. The geologic formations and geomorphic processes that created the gap also determined the types of soils found in the park. The steep areas along the river consist of Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes. The Arnot soil is shallow and rock-filled. It is derived from residuum and colluvium.

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Issued June 2013

Preface

This soil survey was developed in conjunction with the National Park Service's Soil Inventory and Monitoring Program and is intended to serve as the official source document for soils occurring within Delaware Water Gap National Recreation Area.

This soil survey contains information that affects current and future land use planning in the park. It contains predictions of soil behavior for selected land uses. The survey highlights soil limitations, actions needed to overcome the limitations, and the impact of selected land uses on the environment. It is designed to meet the needs of the National Park Service and its partners to better understand the properties of the soils in the park and the effects of these soil properties on various natural ecological characteristics. This knowledge can help the National Park Service and its partners to 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. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each map unit is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or at the local headquarters of the National Park Service.

Soil Survey of
Delaware Water Gap National Recreation Area, New Jersey and Pennsylvania

United States Department of Agriculture, Natural Resources Conservation Service, and United States Department of the Interior, National Park Service

Delaware Water Gap National Recreation Area is located along the Delaware River in New Jersey and Pennsylvania (fig. 1). This survey was made in conjunction with the National Park Service's Soil Inventory and Monitoring Program to provide information about the soils and miscellaneous areas within Delaware Water Gap National Recreation Area.

How This Survey Was Made

The soil survey data was extracted in May 2012 from county-based soil survey data for Pike, Monroe, and Northampton Counties in Pennsylvania and for Warren and Sussex Counties in New Jersey. The project scale was 1:24,000 for Sussex and Pike Counties, 1:20,000 for Monroe County, and 1:12,000 for Northampton and Warren Counties. Correlation dates range from 1975 to 2007. Quality assurance for the data regarding Northampton County was performed at the soil survey regional office in Morgantown, West Virginia. Quality assurance for the rest of the data was performed at the soil survey regional office in Amherst, Massachusetts. A total of 236 map units are included in this survey, including 611 named components. Because data was clipped from more than one county-based set of soil maps, this survey includes some detailed soil map units that have the same name but different map symbols and properties. Water units were combined.

The information in this survey includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

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

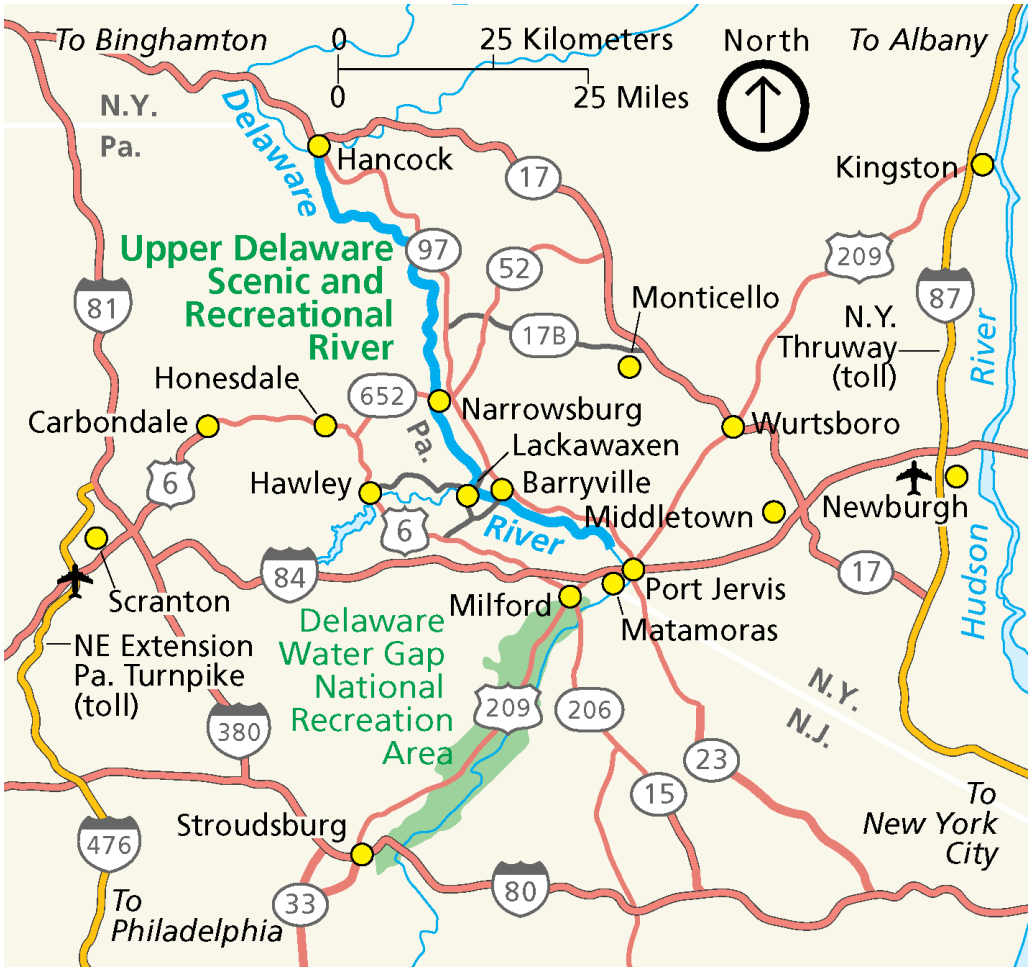

Figure 1.—Location of Delaware Water Gap National Recreation Area near the New Jersey, New York, and Pennsylvania borders.

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

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units).

Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they delineated the boundaries of these bodies on digital imagery and identified each as a specific map unit.

Detailed Soil Map Units

The map units delineated on the detailed soil map in this survey represent the soils or miscellaneous areas in the park. The map unit descriptions in this section, along with the soil 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.

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

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

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

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. The soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name

of a soil phase commonly indicates a feature that affects use or management. For example, Bath channery silt loam, 3 to 8 percent slopes, is a phase of the Bath series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes 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. Hoosic-Otisville complex, 25 to 60 percent slopes, very stony, 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. Alvira and Watson very stony loams, 0 to 12 percent slopes, 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. Urban land is an example.

Table 1 lists each map unit in the park, its major and minor components, and the percentage of each component in the unit. Because not all minor components were fully identified at the time of mapping, the map unit compositions do not add up to 100 percent for all units in the table and in the map unit descriptions. 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.

290836—Hoosic-Otisville complex, 25 to 60 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hoosic, very stony, and similar soils: 50 percent
Otisville, very stony, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Description of Otisville, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Typic Udorthents

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly sandy loam
Bw1—2 to 7 inches; very gravelly loamy sand
Bw2—7 to 11 inches; very gravelly loamy coarse sand
BC—11 to 19 inches; very gravelly loamy coarse sand
C1—19 to 31 inches; extremely gravelly coarse sand
C2—31 to 43 inches; extremely gravelly coarse sand
C3—43 to 60 inches; stratified sand to loamy sand

Minor Components

Hazen, very stony
Percent of map unit: 10 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

296265—Alden mucky silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,495 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 140 to 180 days

Map Unit Composition

Alden and similar soils: 100 percent

Description of Alden Soil

Soil Classification
Fine-loamy, mixed, active, nonacid, mesic Mollic Endoaquepts

Setting
Landform: Depressions on till plains
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Head slope, base slope, interfluve
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Till
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None

Frequency of ponding: Frequent
Depth to water table: At the surface
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
0 to 9 inches; mucky silt loam
9 to 35 inches; silty clay loam
35 to 60 inches; gravelly loam

296269—Alluvial land

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,000 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 130 to 200 days

Map Unit Composition

Fluvents (alluvial land) and similar soils: 70 percent
Dissimilar minor components: 20 percent

Description of Fluvents (Alluvial Land)

Soil Classification
Fluvents

Setting
Landform: Flood plains
Slope: 0 to 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Runoff: Very high
Parent material: Alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: At the surface to a depth of 36 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 6.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s

Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
0 to 6 inches; sandy loam
6 to 42 inches; sandy loam
42 to 60 inches; gravelly silt loam

Minor Components

Holly
Percent of map unit: 20 percent
Landform: Depressions on flood plains, backswamps
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

296271—Alvira and Watson very stony loams, 0 to 12 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 56 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Alvira and similar soils: 55 percent
Watson and similar soils: 35 percent
Dissimilar minor components: 10 percent

Description of Alvira Soil

Soil Classification
Fine-loamy, mixed, active, mesic Aeric Fragiaquults

Setting
Landform: Glaciated hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Interfluve
Slope: 0 to 12 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Till
Restrictive feature(s): Fragipan at a depth of 15 to 28 inches

Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 10 inches; gravelly loam
10 to 21 inches; gravelly silt loam
21 to 60 inches; very gravelly silt loam

Description of Watson Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiudults

Setting
Landform: Valley sides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 0 to 12 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Old till derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 18 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 36 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Moderate (about 4.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 10 inches; gravelly loam
10 to 27 inches; gravelly silty clay loam
27 to 60 inches; gravelly clay loam

Minor Components

Shelmadine
Percent of map unit: 10 percent

Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296272—Bath channery silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Bath and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam

8 to 27 inches; channery silt loam
27 to 60 inches; channery silt loam
60 to 64 inches; very channery loam

Minor Components

Lackawanna
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Mardin
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296273—Bath channery silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Bath and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)

Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam
8 to 27 inches; channery silt loam
27 to 60 inches; channery silt loam
60 to 64 inches; very channery loam

Minor Components

Lackawanna
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Mardin
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

296274—Bath channery silt loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Bath and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 15 to 25 percent
Down-slope shape: Convex

Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam
8 to 27 inches; channery silt loam
27 to 60 inches; channery silt loam
60 to 64 inches; very channery loam

Minor Components

Lackawanna
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

Mardin
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

296275—Bath very stony silt loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 140 days

Map Unit Composition

Bath and similar soils: 90 percent

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived mainly from gray and brown siltstone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam
8 to 27 inches; channery loam
27 to 60 inches; very channery loam
60 to 64 inches; flaggy loam

296276—Bath very stony silt loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 140 days

Map Unit Composition

Bath and similar soils: 90 percent

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 8 to 25 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived mainly from gray and brown siltstone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam
8 to 27 inches; channery loam
27 to 60 inches; very channery loam
60 to 64 inches; flaggy loam

296277—Benson-Rock outcrop complex, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 85 to 1,000 feet
Mean annual precipitation: 28 to 45 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 180 days

Map Unit Composition

Benson and similar soils: 55 percent
Rock outcrop: 15 percent

Description of Benson Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Eutrudepts

Setting
Landscape: Glaciated uplands

Landform: Hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve, side slope
Slope: 0 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Loamy till
Restrictive feature(s): Lithic bedrock at a depth of 12 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
0 to 8 inches; channery silt loam
8 to 18 inches; very channery silt loam
18 to 22 inches; unweathered bedrock

296278—Benson-Rock outcrop complex, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 85 to 1,000 feet
Mean annual precipitation: 28 to 51 inches
Mean annual air temperature: 40 to 55 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Benson and similar soils: 60 percent
Rock outcrop: 20 percent

Description of Benson Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Eutrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Side slope, interfluve
Slope: 8 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till
Restrictive feature(s): Lithic bedrock at a depth of 12 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
0 to 8 inches; channery silt loam
8 to 18 inches; very channery silt loam

Description of Rock Outcrop

Setting
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: D

296279—Benson-Rock outcrop complex, 25 to 70 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 85 to 1,000 feet
Mean annual precipitation: 28 to 51 inches

Mean annual air temperature: 40 to 55 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Benson and similar soils: 60 percent
Rock outcrop: 25 percent

Description of Benson Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Eutrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve
Slope: 25 to 70 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till
Restrictive feature(s): Lithic bedrock at a depth of 12 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
0 to 8 inches; channery silt loam
8 to 18 inches; very channery silt loam
18 to 22 inches; unweathered bedrock

Description of Rock Outcrop

Setting
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

296280—Braceville gravelly loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 36 to 56 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 145 to 175 days

Map Unit Composition

Braceville and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Braceville Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Outwash terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy outwash
Restrictive feature(s): Fragipan at a depth of 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 36 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 3 inches; gravelly loam
3 to 30 inches; gravelly silt loam
30 to 55 inches; very gravelly loam
55 to 60 inches; stratified sand and gravel

Minor Components

Rexford, poorly drained
Percent of map unit: 10 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: Yes

296281—Braceville gravelly loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 56 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 175 days

Map Unit Composition

Braceville and similar soils: 90 percent
Dissimilar minor components: 5 percent

Description of Braceville Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Outwash terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy outwash
Restrictive feature(s): Fragipan at a depth of 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 36 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 3 inches; gravelly loam
3 to 30 inches; gravelly silt loam
30 to 55 inches; very gravelly loam
55 to 60 inches; stratified sand and gravel

Minor Components

Rexford, poorly drained
Percent of map unit: 5 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296283—Buchanan extremely stony loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,400 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 57 degrees F
Frost-free period: 100 to 170 days

Map Unit Composition

Buchanan and similar soils: 90 percent
Dissimilar minor components: 5 percent

Description of Buchanan Soil

Soil Classification
Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults

Setting
Landform: Valley sides, mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank, base slope
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Mountain slope colluvium derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None

Depth to water table: About 18 to 36 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 4 inches; channery loam
4 to 25 inches; gravelly loam
25 to 60 inches; gravelly loam

Minor Components

Shelmadine
Percent of map unit: 5 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296288—Chippewa and Norwich silt loams, 0 to 5 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 500 to 1,000 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Chippewa and similar soils: 48 percent
Norwich and similar soils: 48 percent

Description of Chippewa Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 5 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast

Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 10 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Ap—0 to 8 inches; silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; gravelly silt loam
C—48 to 80 inches; very gravelly loam

Description of Norwich Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 5 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 10 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Ap—0 to 8 inches; silt loam
Eg—8 to 16 inches; channery silt loam

Bxg—16 to 48 inches; channery silt loam
C—48 to 80 inches; channery silt loam

296289—Chippewa and Norwich extremely stony soils, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Chippewa and similar soils: 47 percent
Norwich and similar soils: 47 percent

Description of Chippewa Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 10 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
A—0 to 8 inches; channery silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; gravelly silt loam
C—48 to 80 inches; very gravelly loam

Description of Norwich Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 10 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
A—0 to 8 inches; channery silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; channery silt loam
C—48 to 80 inches; channery silt loam

296295—Cut and fill land

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Udorthents, cut and fill, and similar soils: 90 percent

Description of Udorthents, Cut and Fill

Setting
Slope: 0 to 25 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Parent material: Manmade and altered materials from mixed rock types
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Hydric soil status: No
Hydrologic soil group: B/D

296297—Dekalb extremely stony loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,000 to 2,795 feet
Mean annual precipitation: 36 to 60 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Dekalb and similar soils: 100 percent

Description of Dekalb Soil

Soil Classification
Loamy-skeletal, mixed, siliceous, active, mesic Typic Dystrudepts

Setting
Landform: Mountains
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Mountain flank
Slope: 8 to 25 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Residuum weathered from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s

Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 7 inches; very channery loam
7 to 24 inches; very channery sandy loam
24 to 32 inches; very channery sandy loam
32 to 36 inches; unweathered bedrock

296298—Dekalb extremely stony loam, 25 to 80 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,000 to 2,795 feet
Mean annual precipitation: 36 to 60 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Dekalb and similar soils: 100 percent

Description of Dekalb Soil

Soil Classification
Loamy-skeletal, mixed, siliceous, active, mesic Typic Dystrudepts

Setting
Landform: Mountains
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Mountain flank
Slope: 25 to 80 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Residuum weathered from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 7 inches; very channery loam
7 to 24 inches; very channery sandy loam
24 to 32 inches; very channery sandy loam
32 to 36 inches; unweathered bedrock

296303—Hazleton extremely stony sandy loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 2,495 feet
Mean annual precipitation: 36 to 55 inches
Mean annual air temperature: 46 to 55 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Hazleton and similar soils: 100 percent

Description of Hazleton Soil

Soil Classification
Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Gray and red sandstone mountain slopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Upper third of mountain flank
Slope: 8 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Residuum weathered from sandstone
Restrictive feature(s): Lithic bedrock at a depth of 40 to 96 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
0 to 5 inches; very channery sandy loam

5 to 31 inches; channery sandy loam
31 to 58 inches; very channery coarse sandy loam
58 to 69 inches; unweathered bedrock

296304—Holly silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 835 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 133 to 187 days

Map Unit Composition

Holly and similar soils: 100 percent

Description of Holly Soil

Soil Classification
Fine-loamy, mixed, superactive, nonacid, mesic Typic Fluvaquents

Setting
Landform: Depressions on flood plains, backswamps
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Loamy alluvium derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 10.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
0 to 8 inches; silt loam
8 to 28 inches; very fine sandy loam
28 to 41 inches; loam
41 to 60 inches; stratified gravelly sand to silt loam

296311—Lackawanna and Bath extremely stony soils, steep

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Lackawanna and similar soils: 40 percent
Bath and similar soils: 30 percent
Dissimilar minor components: 20 percent

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 25 to 70 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery silt loam

Description of Bath Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Glaciated mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Upper third of mountain flank, side slope
Slope: 25 to 70 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 21 to 38 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 8 inches; channery silt loam
8 to 27 inches; channery silt loam
27 to 60 inches; channery silt loam
60 to 64 inches; very channery loam

Minor Components

Lordstown
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Mardin
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

296312—Lackawanna channery loam, 2 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Lackawanna and similar soils: 80 percent
Dissimilar minor components: 10 percent

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 17 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery silt loam

Minor Components

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296313—Lackawanna channery loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Lackawanna and similar soils: 80 percent
Dissimilar minor components: 10 percent

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 17 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery silt loam

Minor Components

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Lackawanna
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

296315—Lackawanna extremely stony loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Lackawanna and similar soils: 80 percent
Dissimilar minor components: 10 percent

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery silt loam

Minor Components

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296316—Lackawanna extremely stony loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Lackawanna and similar soils: 80 percent
Dissimilar minor components: 10 percent

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 8 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery silt loam

Minor Components

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

296317—Laidig extremely stony loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 40 inches

Mean annual air temperature: 50 to 57 degrees F
Frost-free period: 120 to 175 days

Map Unit Composition

Laidig and similar soils: 100 percent

Description of Laidig Soil

Soil Classification
Fine-loamy, siliceous, active, mesic Typic Fragiudults

Setting
Landform: Mountains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Colluvium derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 30 to 50 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 6 inches; very gravelly loam
6 to 33 inches; gravelly loam
33 to 65 inches; very gravelly loam

296326—Lordstown extremely stony silt loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Lordstown and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Crest, side slope
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; channery silt loam
Bw—7 to 26 inches; channery silt loam
C—26 to 30 inches; very channery silt loam
2R—30 to 42 inches; unweathered bedrock

Minor Components

Arnot
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 15 percent
Hydric soil status: No

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296327—Lordstown extremely stony silt loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Lordstown and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Crest, side slope
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; channery silt loam
Bw—7 to 26 inches; channery silt loam

C—26 to 30 inches; very channery silt loam
2R—30 to 42 inches; unweathered bedrock

Minor Components

Arnot
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 15 percent
Hydric soil status: No

Bath
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

296328—Lordstown and Oquaga extremely stony soils, 25 to 70 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Lordstown and similar soils: 40 percent
Oquaga and similar soils: 35 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Crest, side slope
Slope: 25 to 70 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; very channery silt loam
Bw—7 to 26 inches; very channery loam
C—26 to 30 inches; very channery silt loam
2R—30 to 42 inches; unweathered bedrock

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; very channery loam
Bw—7 to 30 inches; very channery loam
R—30 to 42 inches; unweathered bedrock

296329—Mardin channery silt loam, 2 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 17 inches; channery silt loam
BE—17 to 21 inches; channery silt loam
Bx—21 to 60 inches; channery loam
C—60 to 80 inches; channery loam

Minor Components

Volusia
Percent of map unit: 5 percent

Landform: Hills
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Convex, concave
Hydric soil status: No

Chippewa
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Bath
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296330—Mardin channery silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast

Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 17 inches; channery silt loam
BE—17 to 21 inches; channery silt loam
Bx—21 to 60 inches; channery loam
C—60 to 80 inches; channery loam

Minor Components

Volusia
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 18 percent
Down-slope shape: Concave
Across-slope shape: Convex, concave
Hydric soil status: No

Bath
Percent of map unit: 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Chippewa
Percent of map unit: 2 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296331—Mardin very stony silt loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 750 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 160 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very stony silt loam
Bw—8 to 17 inches; channery silt loam
BE—17 to 21 inches; channery silt loam
Bx—21 to 60 inches; channery silt loam
C—60 to 80 inches; very channery silt loam

Minor Components

Lordstown
Percent of map unit: 6 percent

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Volusia
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Chippewa
Percent of map unit: 4 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296332—Mardin very stony silt loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 750 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 160 days

Map Unit Composition

Mardin and similar soils: 87 percent
Dissimilar minor components: 12 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 8 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till

Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very stony silt loam
Bw—8 to 17 inches; channery silt loam
BE—17 to 21 inches; channery silt loam
Bx—21 to 60 inches; channery silt loam
C—60 to 80 inches; very channery silt loam

Minor Components

Lordstown
Percent of map unit: 8 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

Volusia
Percent of map unit: 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Chippewa
Percent of map unit: 1 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 12 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296335—Meckesville gravelly loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,795 feet
Mean annual precipitation: 34 to 48 inches

Mean annual air temperature: 46 to 55 degrees F
Frost-free period: 130 to 190 days

Map Unit Composition

Meckesville and similar soils: 100 percent

Description of Meckesville Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiudults

Setting
Landform: Mountain valleys
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank
Slope: 8 to 15 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Sandstone, siltstone, and shale colluvium derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 25 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 9 inches; gravelly loam
9 to 36 inches; channery loam
36 to 60 inches; channery loam
60 to 64 inches; very channery loam

296337—Meckesville very stony loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,795 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 46 to 55 degrees F
Frost-free period: 130 to 190 days

Map Unit Composition

Meckesville and similar soils: 100 percent

Description of Meckesville Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiudults

Setting
Landform: Mountain valleys
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank
Slope: 8 to 25 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Sandstone, siltstone, and shale colluvium derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 25 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
0 to 9 inches; gravelly loam
9 to 36 inches; channery loam
36 to 60 inches; channery loam
60 to 64 inches; very channery loam

296338—Morris channery silt loam, 2 to 10 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 120 to 165 days

Map Unit Composition

Morris and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Morris Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landscape: Glaciated uplands
Landform: Till plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 11 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 3 to 10 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 6.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 17 inches; channery silt loam
Bx—17 to 70 inches; channery silt loam
C—70 to 80 inches; channery silt loam

Minor Components

Norwich
Percent of map unit: 20 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296339—Morris extremely stony silt loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 49.2 to 1,801 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 120 to 180 days

Map Unit Composition

Morris and similar soils: 75 percent
Dissimilar minor components: 25 percent

Description of Morris Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landscape: Glaciated uplands
Landform: Till plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 11 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 3 to 10 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very channery silt loam
Bw—8 to 17 inches; very channery silt loam
Bx—17 to 70 inches; gravelly loam
C—70 to 80 inches; gravelly loam

Minor Components

Norwich
Percent of map unit: 25 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 5 percent
Down-slope shape: Concave

Across-slope shape: Concave
Hydric soil status: Yes

296340—Morris extremely stony silt loam, 8 to 20 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 120 to 165 days

Map Unit Composition

Morris and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Morris Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landscape: Glaciated uplands
Landform: Till plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 20 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 11 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 3 to 10 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very channery silt loam
Bw—8 to 17 inches; very channery silt loam

Bx—17 to 70 inches; gravelly loam
C—70 to 80 inches; gravelly loam

Minor Components

Norwich
Percent of map unit: 20 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

296341—Mucky peat, deep

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Freetown, mucky peat, and similar soils: 100 percent

Description of Freetown Mucky Peat

Soil Classification
Dysic, mesic Typic Medisaprists

Setting
Landform: Swamps (fig. 2)
Slope: 0 to 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Highly decomposed organic material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 28.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: D

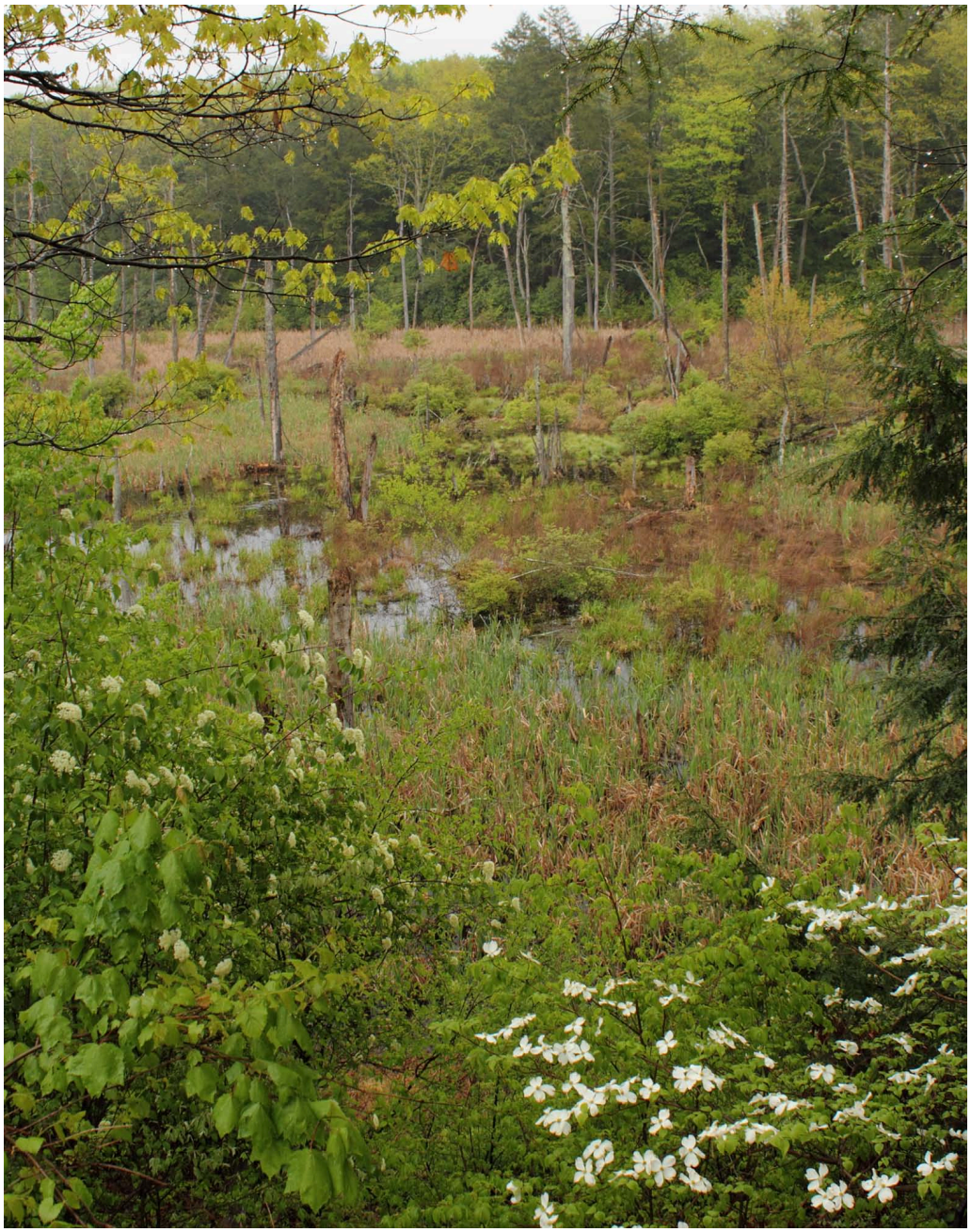

Figure 2.—An area of Mucky peat, deep, behind the park headquarters.

Typical Profile
Oe—0 to 6 inches; mucky peat
Oa—6 to 72 inches; muck

296342—Mucky peat, shallow

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 800 to 2,000 feet
Mean annual precipitation: 42 to 47 inches
Mean annual air temperature: 46 to 48 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Paupack, mucky peat (shallow), and similar soils: 100 percent

Description of Paupack Mucky Peat (Shallow)

Soil Classification
Loamy-skeletal or clayey-skeletal, mixed, dysic, mesic Terric Medisaprists

Setting
Landform: Swamps
Slope: 0 to 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Woody organic material over gravelly alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 18.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: D

Vegetation
Existing plants: Silky dogwood, tamarack, rhododendron, and highbush blueberry

Typical Profile
Oe—0 to 3 inches; mucky peat
Oa1—3 to 26 inches; muck
Oa2—26 to 36 inches; very stony muck
Cg—36 to 70 inches; extremely stony sandy loam

296343—Oquaga-Lackawanna channery loams, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Oquaga and similar soils: 50 percent
Lackawanna and similar soils: 35 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 7 inches; very channery loam
Bw—7 to 30 inches; very channery loam
R—30 to 42 inches; unweathered bedrock

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery loam

296344—Oquaga-Lackawanna channery loams, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Oquaga and similar soils: 55 percent
Lackawanna and similar soils: 30 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium

Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 7 inches; very channery loam
Bw—7 to 30 inches; very channery loam
R—30 to 42 inches; unweathered bedrock

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery loam

296346—Oquaga-Lackawanna extremely stony loams, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Oquaga and similar soils: 50 percent
Lackawanna and similar soils: 35 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; very channery loam
Bw—7 to 30 inches; very channery loam
R—30 to 42 inches; unweathered bedrock

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery loam

296347—Oquaga-Lackawanna extremely stony loams, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Oquaga and similar soils: 60 percent
Lackawanna and similar soils: 30 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes

Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 8 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 7 inches; very channery loam
Bw—7 to 30 inches; very channery loam
R—30 to 42 inches; unweathered bedrock

Description of Lackawanna Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Ridges, glaciated hillslopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, side slope
Slope: 8 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 21 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 21 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; very channery loam
Bw—8 to 25 inches; channery loam
Bx—25 to 60 inches; channery loam

296348—Philo silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,995 feet
Mean annual precipitation: 30 to 55 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 130 to 187 days

Map Unit Composition

Philo and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Philo Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Fluvaquentic Dystrudepts

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Mountainbase
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 48 to 99 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: About 18 to 36 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
0 to 10 inches; silt loam
10 to 40 inches; fine sandy loam
40 to 60 inches; gravelly fine sandy loam

Minor Components

Holly
Percent of map unit: 10 percent
Landform: Depressions on flood plains, backswamps
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

296349—Pope silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 835 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 187 days

Map Unit Composition

Pope and similar soils: 90 percent
Dissimilar minor components: 8 percent

Description of Pope Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts

Setting
Landform: Flood plains
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium derived from sandstone and siltstone
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: About 48 to 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
0 to 10 inches; silt loam
10 to 30 inches; silt loam
30 to 60 inches; loamy very fine sand

Minor Components

Holly
Percent of map unit: 8 percent
Landform: Depressions on flood plains, backswamps
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

296350—Pope silt loam, high bottom

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 835 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 187 days

Map Unit Composition

Pope and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Pope Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts

Setting
Landform: Flood plains
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium derived from sandstone and siltstone

Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: About 48 to 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
0 to 10 inches; silt loam
10 to 30 inches; silt loam
30 to 60 inches; loamy very fine sand

Minor Components

Holly
Percent of map unit: 10 percent
Landform: Depressions on flood plains, backswamps
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

296351—Rexford gravelly silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Rexford, somewhat poorly drained, and similar soils: 40 percent
Rexford, poorly drained, and similar soils: 35 percent

Description of Rexford, Somewhat Poorly Drained, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast

Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy outwash derived from sandstone and shale
Restrictive feature(s): Fragipan at a depth of 15 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 2 to 10 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam
Bw—8 to 18 inches; silt loam
Bx—18 to 40 inches; gravelly loam
2C—40 to 63 inches; stratified gravel and very gravelly loam

Description of Rexford, Poorly Drained, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Coarse-loamy outwash derived from sandstone and shale
Restrictive feature(s): Fragipan at a depth of 15 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam

Bw—8 to 18 inches; silt loam
Bx—18 to 40 inches; gravelly loam
2C—40 to 63 inches; stratified gravel and very gravelly loam

296355—Sheffield silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 925 to 1,085 feet
Mean annual precipitation: 34 to 44 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 133 to 182 days

Map Unit Composition

Sheffield and similar soils: 100 percent

Description of Sheffield Soil

Soil Classification
Fine-silty, mixed, mesic Typic Fragiaqualfs

Setting
Landform: Depressions on till plains
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Head slope, base slope, interfluve
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Till
Restrictive feature(s): Fragipan at a depth of 15 to 26 inches; paralithic bedrock at a depth of 48 to 99 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Depth to water table: At the surface
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
0 to 7 inches; silt loam
7 to 19 inches; silty clay loam
19 to 38 inches; silty clay loam
38 to 66 inches; very channery silty clay loam

296363—Very stony land and Rock outcrops, steep

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 2,495 feet
Mean annual precipitation: 36 to 55 inches
Mean annual air temperature: 46 to 55 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Dystrochrepts, very stony, and similar soils: 85 percent

Description of Dystrochrepts, Very Stony

Soil Classification
Typic Dystrochrepts

Setting
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 25 to 99 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): Lithic bedrock at a depth of 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
0 to 6 inches; very channery loam
6 to 32 inches; very channery loam
32 to 56 inches; extremely channery loam
56 to 60 inches; unweathered bedrock

296369—Wayland silty clay loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 200 to 1,495 feet
Mean annual precipitation: 30 to 40 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wayland and similar soils: 100 percent

Description of Wayland Soil

Soil Classification
Fine-silty, mixed, active, nonacid, mesic Mollic Fluvaquents

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Recent alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Depth to water table: At the surface
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 10.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: C/D

Typical Profile
0 to 9 inches; silty clay loam
9 to 41 inches; silty clay loam
41 to 60 inches; very gravelly loam

296376—Wellsboro channery loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wellsboro and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Wellsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx—21 to 60 inches; channery silt loam
C—60 to 80 inches; channery loam

Minor Components

Morris
Percent of map unit: 8 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Norwich
Percent of map unit: 8 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent

Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Lackawanna
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

296379—Wellsboro extremely stony loam, 8 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 165 days

Map Unit Composition

Wellsboro and similar soils: 85 percent
Dissimilar minor components: 13 percent

Description of Wellsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 8 to 25 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s

Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx—21 to 60 inches; channery silt loam
C—60 to 80 inches; channery loam

Minor Components

Lackawanna
Percent of map unit: 8 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

Norwich
Percent of map unit: 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 12 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Morris
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Hydric soil status: No

296385—Wyoming gravelly sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 56 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wyoming and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
0 to 7 inches; gravelly sandy loam
7 to 25 inches; very gravelly sandy loam
25 to 60 inches; extremely gravelly loamy coarse sand

Minor Components

Braceville
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 2 to 6 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

296386—Wyoming gravelly sandy loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 56 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wyoming and similar soils: 85 percent
Dissimilar minor components: 10 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
0 to 7 inches; gravelly sandy loam
7 to 25 inches; very gravelly sandy loam
25 to 60 inches; extremely gravelly loamy coarse sand

Minor Components

Braceville
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope

Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 2 to 6 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

296387—Wyoming gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 56 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wyoming and similar soils: 85 percent
Dissimilar minor components: 12 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None

Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
0 to 7 inches; gravelly sandy loam
7 to 25 inches; very gravelly sandy loam
25 to 60 inches; extremely gravelly loamy coarse sand

Minor Components

Braceville
Percent of map unit: 7 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 2 to 6 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

296388—Wyoming gravelly sandy loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Wyoming and similar soils: 85 percent
Dissimilar minor components: 5 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 15 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
0 to 7 inches; gravelly sandy loam
7 to 25 inches; very gravelly sandy loam
25 to 60 inches; extremely gravelly loamy coarse sand

Minor Components

Unadilla
Percent of map unit: 5 percent
Landform: Outwash terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

296389—Wyoming gravelly sandy loam, 25 to 70 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 1,800 feet
Mean annual precipitation: 42 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 110 to 145 days

Map Unit Composition

Wyoming and similar soils: 100 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 25 to 70 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Water-sorted gravelly outwash derived from sandstone, siltstone, and/or shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
0 to 8 inches; very gravelly sandy loam
8 to 26 inches; very gravelly sandy loam
26 to 60 inches; stratified sand to very gravelly loamy sand

296390 (W)—Water

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Water: 100 percent

Description of Water

Setting
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Hydric soil status: Unranked

297185—Edgemere-Shohola complex, 3 to 15 percent slopes, very rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Edgemere and similar soils: 42 percent
Shohola and similar soils: 42 percent
Dissimilar minor components: 16 percent

Description of Edgemere Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Mountainbase, base slope, flat
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Restrictive feature(s): Fragipan at a depth of 15 to 25 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Very poorly drained

Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oe—0 to 2 inches; extremely stony mucky peat
A/E—2 to 5 inches; extremely stony loam
Bg—5 to 24 inches; very stony loam
Bx—24 to 66 inches; very gravelly sandy loam

Description of Shohola Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Aeric Fragiaquepts

Setting
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 3 to 15 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; very flaggy loam
B—3 to 24 inches; very flaggy loam
Bx—24 to 72 inches; very flaggy fine sandy loam

Minor Components

Mardin
Percent of map unit: 11 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Freetown
Percent of map unit: 5 percent
Landform: Swamps
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 2 percent
Hydric soil status: Yes

297186—Edgemere extremely stony loam, 0 to 3 percent slopes, very rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Edgemere and similar soils: 75 percent
Dissimilar minor components: 25 percent

Description of Edgemere Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Restrictive feature(s): Fragipan at a depth of 15 to 25 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oe—0 to 2 inches; extremely stony mucky peat
A/E—2 to 5 inches; extremely stony loam

Bw—5 to 24 inches; very stony loam
C—24 to 66 inches; very gravelly sandy loam

Minor Components

Shohola
Percent of map unit: 10 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Mardin
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Freetown
Percent of map unit: 4 percent
Landform: Swamps
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 1 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Wyalusing
Percent of map unit: 4 percent
Landform: Flood plains
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil status: Yes

297188—Manlius-Arnot-Rock outcrop complex, 15 to 30 percent slopes, rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 52 degrees F
Frost-free period: 100 to 200 days

Map Unit Composition

Manlius and similar soils: 40 percent
Arnot and similar soils: 35 percent
Rock outcrop: 15 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 15 to 30 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Channery till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 5 inches; very channery silt loam
Bw—5 to 24 inches; very channery loam
C—24 to 30 inches; extremely channery loam
R—30 to 40 inches; unweathered bedrock

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope
Slope: 15 to 30 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None

Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
A—0 to 3 inches; very channery loam
Bw—3 to 14 inches; very channery loam
2R—14 to 24 inches; unweathered bedrock

Description of Rock Outcrop

Setting
Slope: 15 to 30 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Restrictive feature(s): Bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Hydric soil status: No

Minor Components

Mardin
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Rubble land
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

297189—Manlius-Arnot-Rock outcrop complex, 30 to 80 percent slopes, rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet

Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 52 degrees F
Frost-free period: 100 to 200 days

Map Unit Composition

Manlius and similar soils: 40 percent
Arnot and similar soils: 35 percent
Rock outcrop: 15 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 30 to 80 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Channery till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 5 inches; very channery silt loam
Bw—5 to 24 inches; very channery loam
C—24 to 30 inches; extremely channery loam
R—30 to 40 inches; unweathered bedrock

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope

Slope: 30 to 80 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
A—0 to 3 inches; very channery loam
Bw—3 to 14 inches; very channery loam
2R—14 to 24 inches; unweathered bedrock

Description of Rock Outcrop

Setting
Slope: 30 to 80 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Restrictive feature(s): Bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Hydric soil status: No

Minor Components

Mardin
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Rubble land
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

297190—Braceville fine sandy loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 52 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Braceville and similar soils: 82 percent
Dissimilar minor components: 18 percent

Description of Braceville Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Outwash terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): Fragipan at a depth of 15 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 11 inches; fine sandy loam
Bw—11 to 27 inches; fine sandy loam
Bx—27 to 48 inches; fine sandy loam
C—48 to 70 inches; loamy sand

Minor Components

Wyoming
Percent of map unit: 9 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Slope: 0 to 8 percent
Hydric soil status: No

Chenango
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Rexford, poorly drained
Percent of map unit: 3 percent
Landform: Outwash terraces
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

297191—Wyalusing fine sandy loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,500 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 110 to 190 days

Map Unit Composition

Wyalusing and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wyalusing Soil

Soil Classification
Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Fluvaquents

Setting
Landform: Flood plains
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy alluvium over sandy and gravelly alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Poorly drained

Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
A—0 to 6 inches; fine sandy loam
Bg—6 to 31 inches; fine sandy loam
2C—31 to 70 inches; very cobbly loamy sand

Minor Components

Barbour
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Craigsville
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 5 percent
Hydric soil status: No

Pope
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297192—Pope fine sandy loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Pope and similar soils: 95 percent
Dissimilar minor components: 5 percent

Description of Pope Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts

Setting
Landform: Flood plains

Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Riser
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Parent material: Acid alluvium derived from sedimentary rock
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 6 inches; fine sandy loam
Bw—6 to 33 inches; fine sandy loam
C—33 to 70 inches; sandy loam

Minor Components

Wyalusing
Percent of map unit: 5 percent
Landform: Flood plains
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: Yes

297193—Paupack mucky peat

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,000 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Paupack and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Paupack Soil

Soil Classification
Loamy-skeletal or clayey-skeletal, mixed, dysic, mesic Terric Medisaprists

Setting
Landform: Swamps
Slope: 0 to 2 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Woody organic material over gravelly alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 18.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: D

Vegetation
Existing plants: Silky dogwood, tamarack, rhododendron, and highbush blueberry

Typical Profile
Oe—0 to 3 inches; mucky peat
Oa1—3 to 26 inches; muck
Oa2—26 to 36 inches; very stony muck
Cg—36 to 70 inches; extremely stony sandy loam

Minor Components

Edgemere
Percent of map unit: 8 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Kimbles
Percent of map unit: 2 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 2 percent
Down-slope shape: Concave

Across-slope shape: Concave
Hydric soil status: Yes

297196—Freetown mucky peat

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 50 degrees F
Frost-free period: 100 to 200 days

Map Unit Composition

Freetown and similar soils: 94 percent
Dissimilar minor components: 6 percent

Description of Freetown Soil

Soil Classification
Dysic, mesic Typic Medisaprists

Setting
Landform: Swamps
Slope: 0 to 1 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Parent material: Highly decomposed organic material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 28.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oe—0 to 6 inches; mucky peat
Oa—6 to 72 inches; muck

Minor Components

Gleneyre
Percent of map unit: 6 percent
Landform: Relict lakebeds

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 1 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

297197—Manlius very channery silt loam, 3 to 8 percent slopes, very bouldery

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Manlius and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Side slope, interfluve
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Channery till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 5 inches; very channery silt loam
Bw—5 to 24 inches; very channery loam
C—24 to 30 inches; extremely channery loam
R—30 to 40 inches; unweathered bedrock

Minor Components

Mardin
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Edgemere
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

297198—Manlius very channery silt loam, 8 to 15 percent slopes, very bouldery

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Manlius and similar soils: 86 percent
Dissimilar minor components: 14 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Channery till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 5 inches; very channery silt loam
Bw—5 to 24 inches; very channery loam
C—24 to 30 inches; extremely channery loam
R—30 to 40 inches; unweathered bedrock

Minor Components

Mardin
Percent of map unit: 10 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Edgemere
Percent of map unit: 2 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 10 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Rock outcrop
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

297201—Oquaga very stony loam, 15 to 30 percent slopes, extremely bouldery

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet

Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Oquaga and similar soils: 75 percent
Dissimilar minor components: 20 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Glaciated uplands
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Slope: 15 to 30 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Reddish ablation till derived from sandstone and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 2 inches; very channery loam
Bw—2 to 26 inches; very stony loam
C—26 to 32 inches; extremely stony sandy loam
R—32 to 42 inches; unweathered bedrock

Minor Components

Wellsboro
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Hydric soil status: No

Rock outcrop
Percent of map unit: 6 percent

Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

Lackawanna
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Shohola
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297203—Delaware fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,095 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Delaware and similar soils: 93 percent
Dissimilar minor components: 7 percent

Description of Delaware Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Low to middle river terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial alluvium derived from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches

Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 9.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 14 inches; fine sandy loam
Bw—14 to 48 inches; fine sandy loam
C—48 to 72 inches; fine sandy loam

Minor Components

Pope
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Chenango
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Barbour
Percent of map unit: 1 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297204—Delaware fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,095 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Delaware and similar soils: 82 percent
Dissimilar minor components: 18 percent

Description of Delaware Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Low to middle river terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Postglacial alluvium derived from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 9.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 14 inches; fine sandy loam
Bw—14 to 48 inches; fine sandy loam
C—48 to 72 inches; fine sandy loam

Minor Components

Chenango
Percent of map unit: 9 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Pope
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Barbour
Percent of map unit: 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297205—Delaware fine sandy loam, 8 to 20 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,095 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Delaware and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Delaware Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Low to middle river terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Slope: 8 to 20 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Postglacial alluvium derived from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 9.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 14 inches; fine sandy loam
Bw—14 to 48 inches; fine sandy loam
C—48 to 72 inches; fine sandy loam

Minor Components

Pope
Percent of map unit: 8 percent

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Barbour
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Chenango
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297209—Philo loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,400 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Philo and similar soils: 85 percent
Dissimilar minor components: 12 percent

Description of Philo Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Fluvaquentic Dystrudepts

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Mountainbase
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium derived from sandstone and siltstone
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: About 18 to 36 inches

Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: B

Vegetation
Existing plants: Red maple, American hornbeam, sedge, white ash, and hollyfern

Typical Profile
Ap—0 to 6 inches; loam
Bw—6 to 36 inches; fine sandy loam
C—36 to 70 inches; stratified sand to very gravelly sandy loam

Minor Components

Barbour
Percent of map unit: 8 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Chenango
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Wyalusing
Percent of map unit: 2 percent
Landform: Flood plains
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

297210—Barbour fine sandy loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,400 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 57 degrees F
Frost-free period: 100 to 200 days

Map Unit Composition

Barbour and similar soils: 85 percent
Dissimilar minor components: 14 percent

Description of Barbour Soil

Soil Classification
Coarse-loamy over sandy or sandy-skeletal, mixed, active, mesic Fluventic Dystrudepts

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: About 36 to 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 10 inches; fine sandy loam
Bw—10 to 38 inches; fine sandy loam
2C—38 to 72 inches; very cobbly sand

Minor Components

Pope
Percent of map unit: 7 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Philo
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Delaware
Percent of map unit: 3 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast

Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

297216—Wurtsboro stony fine sandy loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 52 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Wurtsboro and similar soils: 92 percent
Dissimilar minor components: 8 percent

Description of Wurtsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 27 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 4 inches; stony fine sandy loam
Bw—4 to 22 inches; gravelly fine sandy loam
Bx—22 to 70 inches; gravelly fine sandy loam

Minor Components

Edgemere
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 3 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Oquaga
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

297217—Wurtsboro stony fine sandy loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 34 to 51 inches
Mean annual air temperature: 40 to 52 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Wurtsboro and similar soils: 88 percent
Dissimilar minor components: 12 percent

Description of Wurtsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope

Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 27 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 4 inches; stony fine sandy loam
Bw—4 to 22 inches; gravelly fine sandy loam
Bx—22 to 70 inches; gravelly fine sandy loam

Minor Components

Oquaga
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Rock outcrop
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

Edgemere
Percent of map unit: 1 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 10 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 1 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Slope: 8 to 15 percent
Hydric soil status: No

297227—Arnot very channery loam, 3 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Arnot and similar soils: 88 percent
Dissimilar minor components: 11 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope
Slope: 3 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
A—0 to 3 inches; very channery loam
Bw—3 to 10 inches; very channery loam
C—10 to 14 inches; extremely channery loam
2R—14 to 24 inches; unweathered bedrock

Minor Components

Rock outcrop
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

Mardin
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Lackawanna
Percent of map unit: 1 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297228—Arnot very channery loam, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Arnot and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope, side slope
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches

Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
A—0 to 3 inches; very channery loam
Bw—3 to 10 inches; very channery loam
C—10 to 14 inches; extremely channery loam
2R—14 to 24 inches; unweathered bedrock

Minor Components

Rock outcrop
Percent of map unit: 8 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

Mardin
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Swartswood
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 30 percent
Hydric soil status: No

297229—Wyoming very cobbly sandy loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Wyoming and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Ap—0 to 3 inches; very cobbly sandy loam
Bw—3 to 33 inches; very cobbly fine sandy loam
C—33 to 72 inches; extremely cobbly loamy coarse sand

Minor Components

Delaware
Percent of map unit: 6 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Braceville
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Suncook
Percent of map unit: 2 percent

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297230—Wyoming very cobbly sandy loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Wyoming and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Ap—0 to 3 inches; very cobbly sandy loam
Bw—3 to 33 inches; very cobbly fine sandy loam
C—33 to 72 inches; extremely cobbly loamy coarse sand

Minor Components

Delaware
Percent of map unit: 6 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Braceville
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Suncook
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297231—Wyoming very cobbly sandy loam, 15 to 30 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Wyoming and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 15 to 30 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast

Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 3 inches; very cobbly sandy loam
Bw—3 to 33 inches; very cobbly fine sandy loam
C—33 to 72 inches; extremely cobbly loamy coarse sand

Minor Components

Suncook
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Delaware
Percent of map unit: 3 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Braceville
Percent of map unit: 1 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297236—Suncook loamy sand, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 40 to 54 degrees F
Frost-free period: 100 to 180 days

Map Unit Composition

Suncook and similar soils: 91 percent
Dissimilar minor components: 4 percent

Description of Suncook Soil

Soil Classification
Mixed, mesic Typic Udipsamments

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Parent material: Sandy glaciofluvial deposits derived from sandstone
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: A

Vegetation
Existing plants: Striped prince's pine, groundcedar, northern bayberry, hairy moss, and lowbush blueberry

Typical Profile
A—0 to 10 inches; loamy sand
C—10 to 70 inches; sand

Minor Components

Wyalusing
Percent of map unit: 4 percent
Landform: Flood plains
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: Yes

297237—Mardin channery silt loam, 0 to 8 percent slopes, stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx1—21 to 30 inches; channery loam
Bx2—30 to 60 inches; very channery loam
Cd—60 to 80 inches; very channery loam

Minor Components

Manlius
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Edgemere
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

297238—Mardin channery silt loam, 8 to 15 percent slopes, stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx1—21 to 30 inches; channery loam
Bx2—30 to 60 inches; very channery loam
Cd—60 to 80 inches; very channery loam

Minor Components

Manlius
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Edgemere
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 10 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297239—Mardin stony loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A/E—0 to 8 inches; stony loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx1—21 to 30 inches; channery loam
Bx2—30 to 60 inches; very channery loam
Cd—60 to 80 inches; very channery loam

Minor Components

Manlius
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Hydric soil status: No

Oquaga
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

Edgemere
Percent of map unit: 3 percent
Landform: Depressions
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

297240—Mardin stony loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Mardin and similar soils: 85 percent
Dissimilar minor components: 14 percent

Description of Mardin Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: High
Parent material: Loamy till
Restrictive feature(s): Fragipan at a depth of 14 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 11 to 22 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A/E—0 to 8 inches; stony loam
Bw—8 to 17 inches; channery loam
BE—17 to 21 inches; channery loam
Bx1—21 to 30 inches; channery loam
Bx2—30 to 60 inches; very channery loam
Cd—60 to 80 inches; very channery loam

Minor Components

Manlius
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Oquaga
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

Edgemere
Percent of map unit: 3 percent
Landform: Depressions

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 10 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Shohola
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297241—Unadilla silt loam

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 895 feet
Mean annual precipitation: 42 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 145 days

Map Unit Composition

Unadilla and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Unadilla Soil

Soil Classification
Coarse-silty, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Outwash terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Outwash
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 14.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Vegetation
Existing plants: Red maple, buttercup, currant, black raspberry, and summer grape

Typical Profile
Ap—0 to 13 inches; silt loam
Bw—13 to 49 inches; silt loam
C—49 to 80 inches; silt loam

Minor Components

Braceville
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Suncook
Percent of map unit: 4 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297242—Shohola-Edgemere complex, 0 to 8 percent slopes, very rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Shohola and similar soils: 62 percent
Edgemere and similar soils: 29 percent
Dissimilar minor components: 9 percent

Description of Shohola Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Aeric Fragiaquepts

Setting
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast

Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; extremely flaggy loam
B—3 to 24 inches; very flaggy loam
Bx—24 to 72 inches; very gravelly fine sandy loam

Description of Edgemere Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Restrictive feature(s): Fragipan at a depth of 15 to 25 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
O—0 to 2 inches; extremely stony mucky peat
A/E—2 to 5 inches; extremely stony loam
Bg—5 to 24 inches; very stony sandy loam
Bx—24 to 66 inches; very gravelly sandy loam

Minor Components

Mardin
Percent of map unit: 9 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

297243—Shohola-Edgemere complex, 8 to 15 percent slopes, very rubbly

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Shohola and similar soils: 62 percent
Edgemere and similar soils: 29 percent
Dissimilar minor components: 9 percent

Description of Shohola Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Aeric Fragiaquepts

Setting
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 8 to 15 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very high
Restrictive feature(s): Fragipan at a depth of 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; extremely flaggy loam
B—3 to 24 inches; very flaggy loam
Bx—24 to 72 inches; very gravelly fine sandy loam

Description of Edgemere Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts

Setting
Landform: Depressions
Slope: 8 to 15 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Negligible
Restrictive feature(s): Fragipan at a depth of 15 to 25 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
O—0 to 2 inches; extremely stony mucky peat
A/E—2 to 5 inches; extremely stony loam
Bg—5 to 24 inches; very stony sandy loam
Bx—24 to 66 inches; very gravelly sandy loam

Minor Components

Mardin
Percent of map unit: 9 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Hydric soil status: No

297244—Lordstown-Swartswood complex, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 1,800 feet

Mean annual precipitation: 32 to 50 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Lordstown and similar soils: 40 percent
Swartswood and similar soils: 35 percent
Dissimilar minor components: 25 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Crest, side slope
Slope: 0 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; very channery loam
Bw—3 to 28 inches; gravelly fine sandy loam
C—28 to 30 inches; gravelly sandy loam
2R—30 to 40 inches; unweathered bedrock

Description of Swartswood Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Uplands
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Convex, linear

Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 28 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 26 to 35 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 4 inches; stony fine sandy loam
Bw—4 to 32 inches; channery fine sandy loam
Bx—32 to 70 inches; very gravelly fine sandy loam

Minor Components

Arnot
Percent of map unit: 10 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 15 percent
Hydric soil status: No

Rock outcrop
Percent of map unit: 10 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Hydric soil status: No

Shohola
Percent of map unit: 5 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Hydric soil status: No

297247—Chenango gravelly fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,400 feet
Mean annual precipitation: 35 to 50 inches

Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Chenango and similar soils: 86 percent
Dissimilar minor components: 14 percent

Description of Chenango Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landform: Glacial outwash terraces
Landform position (three-dimensional): Riser
Slope: 0 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Ap—0 to 10 inches; gravelly fine sandy loam
Bw—10 to 29 inches; very gravelly fine sandy loam
2C—29 to 70 inches; extremely gravelly loamy coarse sand

Minor Components

Delaware
Percent of map unit: 7 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Braceville
Percent of map unit: 3 percent
Aspect (representative): Southeast

Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Philo
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Unadilla
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297248—Chenango gravelly fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,095 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Chenango and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Chenango Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landform: Glacial outwash terraces
Landform position (three-dimensional): Riser
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Ap—0 to 10 inches; gravelly fine sandy loam
Bw—10 to 29 inches; very gravelly fine sandy loam
2C—29 to 70 inches; extremely gravelly loamy coarse sand

Minor Components

Delaware
Percent of map unit: 9 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Unadilla
Percent of map unit: 6 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297249—Chenango gravelly fine sandy loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,095 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Chenango and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Chenango Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landform: Glacial outwash terraces
Landform position (three-dimensional): Riser

Slope: 15 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Medium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Ap—0 to 10 inches; gravelly fine sandy loam
Bw—10 to 29 inches; very gravelly fine sandy loam
2C—29 to 70 inches; extremely gravelly loamy coarse sand

Minor Components

Delaware
Percent of map unit: 8 percent
Landform: Low to middle river terraces
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Unadilla
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297253—Craigsville-Wyoming complex, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 3,500 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 190 days

Map Unit Composition

Craigsville and similar soils: 50 percent
Wyoming and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Craigsville Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Fluventic Dystrudepts

Setting
Landscape: Mountains
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 5 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: About 36 to 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: B

Vegetation
Existing plants: Flowering dogwood, mountain laurel, sweetgum, tuliptree, shortleaf pine, eastern white pine, white oak, northern red oak, and coralberry

Typical Profile
A—0 to 5 inches; very gravelly loam
Bw—5 to 27 inches; very gravelly sandy loam
C—27 to 77 inches; extremely cobbly loamy sand

Description of Wyoming Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Terraces

Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Riser
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic

Properties and Qualities
Runoff: Very low
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 3 inches; very cobbly sandy loam
Bw—3 to 33 inches; very cobbly fine sandy loam
C—33 to 72 inches; extremely cobbly loamy coarse sand

Minor Components

Wyalusing
Percent of map unit: 6 percent
Landform: Flood plains
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil status: Yes

Philo
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

Pope
Percent of map unit: 2 percent
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Hydric soil status: No

297254—Pits, shale, and gravel

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 36 to 46 inches
Mean annual air temperature: 46 to 56 degrees F
Frost-free period: 135 to 170 days

Map Unit Composition

Pits, shale: 40 percent
Pits, gravel: 40 percent

Description of Pits, Shale

Setting
Slope: 0 to 40 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Runoff: Medium
Restrictive feature(s): Lithic bedrock at the surface to a depth of 2 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8e
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
C—0 to 1 inch; channers
R—1 to 2 inches; bedrock

Description of Pits, Gravel

Setting
Slope: 0 to 40 percent
Aspect (representative): Southeast
Aspect (range): All aspects

Properties and Qualities
Runoff: Medium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8e
Hydric soil status: No
Hydrologic soil group: A

298049—Wurtsboro loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; loam
E—3 to 5 inches; fine sandy loam
Bhs—5 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 30 inches; gravelly sandy loam
Bx2—30 to 60 inches; gravelly sandy loam

Minor Components

Swartswood, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298050—Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 60 percent
Swartswood, extremely stony, and similar soils: 40 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

298051—Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 60 percent
Swartswood, extremely stony, and similar soils: 40 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

298075—Colonie loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Colonie and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Colonie Soil

Soil Classification
Mixed, mesic Lamellic Udipsamments

Setting
Landscape: River valleys
Landform: Outer terraces
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 2 inches; loamy fine sand
Ap—2 to 11 inches; loamy fine sand
E—11 to 24 inches; fine sand
E and Bt1—24 to 40 inches; fine sand
E and Bt2—40 to 62 inches; fine sand

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

298188—Lackawanna cobbly fine sandy loam, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

298189—Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear

Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

298221—Swartswood loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Wurtsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298222—Swartswood loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Wurtsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298223—Swartswood loam, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Arnot, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298255—Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet

Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Delaware, rarely flooded, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Delaware, Rarely Flooded, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Terraces
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap1—1 to 4 inches; fine sandy loam
Ap2—4 to 11 inches; fine sandy loam
Bw1—11 to 20 inches; fine sandy loam
Bw2—20 to 33 inches; fine sandy loam
BC—33 to 41 inches; fine sandy loam
C1—41 to 56 inches; fine sandy loam
C2—56 to 60 inches; loam

Minor Components

Colonie
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

298256—Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Delaware, rarely flooded, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Delaware, Rarely Flooded, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Terraces
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap1—1 to 4 inches; fine sandy loam
Ap2—4 to 11 inches; fine sandy loam
Bw1—11 to 20 inches; fine sandy loam
Bw2—20 to 33 inches; fine sandy loam
BC—33 to 41 inches; fine sandy loam
C1—41 to 56 inches; fine sandy loam
C2—56 to 60 inches; loam

Minor Components

Colonie
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

298257—Wallpack silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam
Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Cambridge
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298258—Wallpack silt loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam
Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Cambridge
Percent of map unit: 10 percent

Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298259—Wallpack silt loam, 3 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None

Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly silt loam
AB—2 to 5 inches; gravelly silt loam
Bt—5 to 18 inches; gravelly silt loam
Btx—18 to 24 inches; gravelly loam
BCtx1—24 to 42 inches; gravelly silt loam
BCtx2—42 to 60 inches; gravelly loam

Minor Components

Cambridge, extremely stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown, extremely stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298260—Wallpack silt loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly silt loam
AB—2 to 5 inches; gravelly silt loam
Bt—5 to 18 inches; gravelly silt loam
Btx—18 to 24 inches; gravelly loam
BCtx1—24 to 42 inches; gravelly silt loam
BCtx2—42 to 60 inches; gravelly loam

Minor Components

Cambridge, extremely stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown, extremely stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects

Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298261—Wallpack silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam

Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Cambridge
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298262—Wallpack silt loam, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly silt loam
AB—2 to 5 inches; gravelly silt loam
Bt—5 to 18 inches; gravelly silt loam
Btx—18 to 24 inches; gravelly loam
BCtx1—24 to 42 inches; gravelly silt loam
BCtx2—42 to 60 inches; gravelly loam

Minor Components

Cambridge, extremely stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown, extremely stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298265—Venango silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,000 feet
Mean annual precipitation: 30 to 64 inches

Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Venango, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Venango, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Aeric Fragiaqualfs

Setting
Landscape: Drumlin fields
Landform: Drumlins
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very high
Parent material: Fine-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 14 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 6 inches; silt loam
Bw—6 to 16 inches; silt loam
Btx1—16 to 22 inches; gravelly silty clay loam
Btx2—22 to 34 inches; gravelly silty clay loam
Btx3—34 to 60 inches; gravelly silty clay loam

Minor Components

Chippewa, extremely stony
Percent of map unit: 10 percent
Landform: Interdrumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: Yes

298266—Venango silt loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Venango, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Venango, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Aeric Fragiaqualfs

Setting
Landscape: Drumlin fields
Landform: Drumlins
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very high
Parent material: Fine-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 14 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 6 inches; silt loam
Bw—6 to 16 inches; silt loam
Btx1—16 to 22 inches; gravelly silty clay loam
Btx2—22 to 34 inches; gravelly silty clay loam
Btx3—34 to 60 inches; gravelly silty clay loam

Minor Components

Nassau, extremely stony
Percent of map unit: 10 percent
Landform: Drumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Manlius, extremely stony
Percent of map unit: 5 percent
Landform: Drumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

298409—Swartswood loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone

Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Wurtsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298411—Swartswood loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Wurtsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

298413—Swartswood loam, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

Minor Components

Arnot, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent

Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lordstown, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

318498—Hazen-Hoosic complex, 3 to 8 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hazen, very stony, and similar soils: 60 percent
Hoosic, very stony, and similar soils: 35 percent
Dissimilar minor components: 5 percent

Description of Hazen, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Mollic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained

Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 10 inches; loam
Bt—10 to 18 inches; sandy loam
2C1—18 to 29 inches; very stony loamy coarse sand
2C2—29 to 41 inches; very gravelly coarse sand
2C3—41 to 60 inches; extremely gravelly coarse sand

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Minor Components

Otisville, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

318533—Hazen-Hoosic complex, 0 to 3 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hazen, very stony, and similar soils: 50 percent
Hoosic, very stony, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Hazen, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Mollic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 10 inches; loam
Bt—10 to 18 inches; sandy loam
2C1—18 to 29 inches; very stony loamy coarse sand
2C2—29 to 41 inches; very gravelly coarse sand
2C3—41 to 60 inches; extremely gravelly coarse sand

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Minor Components

Hero, very stony
Percent of map unit: 10 percent

Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

319783—Catden mucky peat, 0 to 2 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Catden and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Catden Soil

Soil Classification
Euic, mesic Typic Haplosaprists

Setting
Landscape: Till plains
Landform: Depressions
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very low
Parent material: Herbaceous and/or woody organic material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 26.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oe—0 to 2 inches; mucky peat
Oa1—2 to 13 inches; muck
Oa2—13 to 20 inches; woody muck
Oa3—20 to 32 inches; muck
Oa4—32 to 60 inches; muck

Minor Components

Alden
Percent of map unit: 13 percent
Landform: Depressions
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Wallkill
Percent of map unit: 2 percent
Landform: Flood plains
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

319784—Fredon-Halsey complex, 0 to 3 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Fredon, very stony, and similar soils: 50 percent
Halsey, very stony, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Fredon, Very Stony, Soil

Soil Classification
Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting
Landscape: Outwash plains
Landform: Drainageways
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave

Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): Strongly contrasting textural stratification at a depth of 22 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 8 inches; silt loam
Bw1—8 to 14 inches; silt loam
Bw2—14 to 18 inches; loam
Bw3—18 to 23 inches; loam
2C1—23 to 31 inches; extremely gravelly loamy coarse sand
2C2—31 to 36 inches; extremely gravelly coarse sand
2C3—36 to 45 inches; very gravelly coarse sand
2C4—45 to 55 inches; extremely gravelly coarse sand
2C5—55 to 60 inches; very gravelly coarse sand

Description of Halsey, Very Stony, Soil

Soil Classification
Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Humaquepts

Setting
Landscape: Outwash plains
Landform: Drainageways
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): Strongly contrasting textural stratification at a depth of 20 to 40 inches

Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A1—1 to 5 inches; silt loam
A2—5 to 11 inches; silt loam
Bg—11 to 20 inches; silt loam
2Cg1—20 to 25 inches; loamy sand
2Cg2—25 to 35 inches; very gravelly coarse sand
2Cg3—35 to 49 inches; very gravelly coarse sand
2Cg4—49 to 56 inches; extremely gravelly coarse sand
2Cg5—56 to 60 inches; extremely gravelly coarse sand

Minor Components

Hero, very stony
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

543222—Andover-Buchanan gravelly loams, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 55 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Andover, extremely stony, and similar soils: 55 percent
Buchanan, extremely stony, and similar soils: 40 percent
Dissimilar minor components: 5 percent

Description of Andover, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquults

Setting
Landscape: Colluvial valleys
Landform: Sandstone and shale hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Brown fine-loamy colluvium derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 16 to 28 inches; lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
A—0 to 8 inches; gravelly loam
Btg—8 to 17 inches; gravelly clay loam
Btx—17 to 53 inches; gravelly clay loam
C—53 to 65 inches; very gravelly loam

Description of Buchanan, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults

Setting
Landscape: Colluvial valleys
Landform: Sandstone and shale hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Colluvium derived from sandstone and shale

Restrictive feature(s): Fragipan at a depth of 20 to 36 inches; lithic bedrock at a depth of 60 to 99 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 17 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Sedge, woodfern, New York fern, and lowbush blueberry

Typical Profile
Ap—0 to 6 inches; gravelly loam
Bt—6 to 23 inches; gravelly loam
Bx—23 to 47 inches; gravelly loam
C—47 to 61 inches; gravelly loam

Minor Components

Laidig
Percent of map unit: 3 percent
Landform: Sandstone, conglomerate, quartzite, and shale colluvial mountain slopes
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Mountaintop
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Hazleton
Percent of map unit: 2 percent
Landform: Gray and red sandstone mountain slopes
Geomorphic position (two-dimensional): Shoulder, backslope
Geomorphic position (three-dimensional): Upper third of mountain flank
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543243—Berks-Weikert complex, 25 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,600 feet

Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 120 to 214 days

Map Unit Composition

Berks and similar soils: 65 percent
Weikert and similar soils: 25 percent
Dissimilar minor components: 9 percent

Description of Berks Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valleys and ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 25 to 60 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Acid brown residuum weathered from shale and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 10 inches; channery loam
Bw—10 to 26 inches; very channery silt loam
C—26 to 33 inches; extremely channery loam
R—33 to 43 inches; bedrock

Description of Weikert Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Valleys
Landform: Shale hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Slope: 25 to 60 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Acid brown residuum weathered from shale and siltstone
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; channery silt loam
Bw—8 to 15 inches; very channery silt loam
C—15 to 18 inches; extremely channery silt loam
R—18 to 20 inches; bedrock

Minor Components

Bedington
Percent of map unit: 4 percent
Landform: Shale hillslopes
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Comly
Percent of map unit: 3 percent
Landform: Shale hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

Brinkerton
Percent of map unit: 2 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Head slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

543246—Buchanan gravelly loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 60 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Buchanan and similar soils: 75 percent
Dissimilar minor components: 25 percent

Description of Buchanan Soil

Soil Classification
Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults

Setting
Landform: Valley sides and mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Colluvium derived from sandstone and shale
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches; lithic bedrock at a depth of 60 to 99 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 14 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 7 inches; gravelly loam
Bt—7 to 21 inches; gravelly loam
Btx—21 to 65 inches; cobbly clay loam

Minor Components

Andover
Percent of map unit: 10 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope, toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): East
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Wharton
Percent of map unit: 10 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope
Geomorphic position (three-dimensional): Head slope, side slope, interfluve
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Laidig
Percent of map unit: 5 percent
Landform: Mountains
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Lower third of mountain flank
Aspect (representative): East
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

543247—Buchanan gravelly loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 3,795 feet

Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 101 to 180 days

Map Unit Composition

Buchanan, extremely stony, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Buchanan, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults

Setting
Landform: Valley sides and mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Lower third of mountain flank
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): East
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Stony colluvium derived from sandstone and shale
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches; lithic bedrock at a depth of 60 to 99 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 14 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; gravelly loam
Bt—3 to 21 inches; gravelly loam
Btx—21 to 65 inches; cobbly clay loam

Minor Components

Andover, extremely stony
Percent of map unit: 5 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope, toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): East
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave

Across-slope shape: Concave
Hydric soil status: Yes

Cookport
Percent of map unit: 5 percent
Landform: Broad ridges, plateaus
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Upper third of mountain flank
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil status: No

Laidig
Percent of map unit: 5 percent
Landform: Mountains
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Lower third of mountain flank
Aspect (representative): East
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Murrill
Percent of map unit: 5 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

543257—Chippewa silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Chippewa and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Chippewa Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Till derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 8 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Ap—0 to 8 inches; silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; channery loam
C—48 to 80 inches; channery loam

Minor Components

Swartswood
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills

Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

543258—Chippewa silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Chippewa and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Chippewa Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Till derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 8 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4w

Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Ap—0 to 8 inches; silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; channery loam
C—48 to 80 inches; channery loam

Minor Components

Swartswood
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

543259—Chippewa gravelly silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Chippewa, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Chippewa, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Till derived from sedimentary rock
Restrictive feature(s): Fragipan at a depth of 8 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 2 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
A—0 to 8 inches; gravelly silt loam
Eg—8 to 16 inches; channery silt loam
Bxg—16 to 48 inches; channery loam
C—48 to 80 inches; channery loam

Minor Components

Swartswood
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

543271—Delaware fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 0.0 to 909 feet
Mean annual precipitation: 28 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 210 days

Map Unit Composition

Delaware and similar soils: 90 percent
Dissimilar minor components: 9 percent

Description of Delaware Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Low to middle river terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial alluvium derived from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 10 inches; fine sandy loam
Bw—10 to 40 inches; very fine sandy loam
C—40 to 87 inches; loamy fine sand

Minor Components

Alton
Percent of map unit: 5 percent
Landform: Terraces and alluvial fans
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Hatboro
Percent of map unit: 1 percent
Landform: Flood plains
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil status: Yes

Nanticoke
Percent of map unit: 1 percent
Landform: Tidal flats
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Talf
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 1 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: Yes

543276—Fluvaquents

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 0.0 to 1,601 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 130 to 210 days

Map Unit Composition

Fluvaquents and similar soils: 85 percent
Dissimilar minor components: 8 percent

Description of Fluvaquents

Soil Classification
Fluvaquents

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Rise
Slope: 0 to 2 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Alluvium derived from sedimentary rock
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches
Drainage class: Poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: D

Vegetation
Existing plants: Red maple, sedge, silky dogwood, green ash, northern spicebush, and skunk cabbage

Typical Profile
A—0 to 6 inches; silt loam
C—6 to 62 inches; clay

Minor Components

Towhee
Percent of map unit: 5 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope, toeslope
Geomorphic position (three-dimensional): Head slope, side slope

Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear, concave
Across-slope shape: Concave
Hydric soil status: Yes

Mount Lucas
Percent of map unit: 1 percent
Landform: Nearly level to moderately steep hillslopes
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil status: No

Nanticoke
Percent of map unit: 1 percent
Landform: Tidal flats
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Talf
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 1 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: Yes

Neshaminy
Percent of map unit: 1 percent
Landform: Hillslopes
Geomorphic position (two-dimensional): Summit, shoulder, backslope
Geomorphic position (three-dimensional): Nose slope, side slope, interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

543292—Hazleton very channery loam, 8 to 25 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,495 feet
Mean annual precipitation: 36 to 55 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Hazleton, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 5 percent

Description of Hazleton, Extremely Stony, Soil

Soil Classification
Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Gray and red sandstone mountain slopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Upper third of mountain flank
Slope: 8 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Loamy residuum weathered from sandstone
Restrictive feature(s): Lithic bedrock at a depth of 40 to 80 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
A—0 to 6 inches; very channery loam
Bw—6 to 43 inches; very channery loam
C—43 to 55 inches; extremely channery loam
R—55 to 80 inches; bedrock

Minor Components

Buchanan
Percent of map unit: 5 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

543293—Hazleton very channery loam, 25 to 60 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 600 to 2,495 feet
Mean annual precipitation: 36 to 55 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Hazleton, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 5 percent

Description of Hazleton, Extremely Stony, Soil

Soil Classification
Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Gray and red sandstone mountain slopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Upper third of mountain flank
Slope: 25 to 60 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy residuum weathered from sandstone
Restrictive feature(s): Lithic bedrock at a depth of 40 to 80 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 6.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
A—0 to 6 inches; very channery loam
Bw—6 to 43 inches; very channery loam
C—43 to 60 inches; extremely channery loam
R—60 to 80 inches; bedrock

Minor Components

Buchanan
Percent of map unit: 5 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

543299—Laidig very gravelly loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 55 inches
Mean annual air temperature: 46 to 59 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Laidig, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Laidig, Extremely Stony, Soil

Soil Classification
Fine-loamy, siliceous, active, mesic Typic Fragiudults

Setting
Landscape: Mountains
Landform: Sandstone, conglomerate, quartzite, and shale colluvial mountain slopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Brown fine-loamy colluvium derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 30 to 50 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; very gravelly loam
Bt—3 to 38 inches; gravelly loam
Bx—38 to 62 inches; very channery loam

Minor Components

Andover
Percent of map unit: 4 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: Yes

Buchanan
Percent of map unit: 4 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

Hazleton
Percent of map unit: 2 percent
Landform: Gray and red sandstone mountain slopes
Geomorphic position (two-dimensional): Shoulder, backslope
Geomorphic position (three-dimensional): Upper third of mountain flank
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543300—Laidig very gravelly loam, 8 to 25 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 55 inches
Mean annual air temperature: 46 to 57 degrees F
Frost-free period: 110 to 180 days

Map Unit Composition

Laidig, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Laidig, Extremely Stony, Soil

Soil Classification
Fine-loamy, siliceous, active, mesic Typic Fragiudults

Setting
Landscape: Mountains
Landform: Sandstone, conglomerate, quartzite, and shale colluvial mountain slopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Upper third of mountain flank
Slope: 8 to 25 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Brown fine-loamy colluvium derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 30 to 50 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; very gravelly loam
Bt—3 to 38 inches; gravelly loam
Bx—38 to 62 inches; very channery loam

Minor Components

Andover, extremely stony
Percent of map unit: 4 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects

Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: Yes

Buchanan
Percent of map unit: 4 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

Hazleton
Percent of map unit: 2 percent
Landform: Gray and red sandstone mountain slopes
Geomorphic position (two-dimensional): Shoulder, backslope
Geomorphic position (three-dimensional): Upper third of mountain flank
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543304—Laidig-Rubble land complex, 25 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 120 to 180 days

Map Unit Composition

Laidig and similar soils: 50 percent
Rubble land: 40 percent
Dissimilar minor components: 10 percent

Description of Laidig Soil

Soil Classification
Fine-loamy, siliceous, active, mesic Typic Fragiudults

Setting
Landscape: Mountains
Landform: Sandstone, conglomerate, quartzite, and shale colluvial mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Upper third of mountain flank
Slope: 25 to 60 percent

Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Brown fine-loamy colluvium derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 30 to 50 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 30 to 48 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 3 inches; very gravelly loam
Bt—3 to 38 inches; gravelly loam
Bx—38 to 62 inches; very channery loam

Description of Rubble Land

Setting
Landscape: Mountains
Landform: Sandstone, conglomerate, quartzite, and shale colluvial mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Upper third of mountain flank
Slope: 25 to 60 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): East
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Stones and boulder fields of sandstone
Restrictive feature(s): Lithic bedrock at a depth of 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s

Hydric soil status: No
Hydrologic soil group: A

Typical Profile
C—0 to 60 inches; fragmental material

Minor Components

Andover
Percent of map unit: 5 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: Yes

Buchanan
Percent of map unit: 5 percent
Landform: Sandstone and shale hillslopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

543318—Rubble land

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 3,795 feet
Mean annual precipitation: 34 to 55 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 175 days

Map Unit Composition

Rubble land: 75 percent
Dissimilar minor components: 25 percent

Description of Rubble Land

Setting
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 0 to 90 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex

Aspect (representative): East
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Stones and boulder fields of sandstone
Restrictive feature(s): Lithic bedrock at a depth of 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
C—0 to 60 inches; fragmental material

Minor Components

Hazleton
Percent of map unit: 10 percent
Landform: Mountains and mountain slopes
Geomorphic position (two-dimensional): Summit, backslope
Geomorphic position (three-dimensional): Upper third of mountain flank, mountaintop, and mountain flank
Aspect (representative): East
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil status: No

Buchanan
Percent of map unit: 5 percent
Landform: Valley sides and mountain slopes
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Lower third of mountain flank
Aspect (representative): East
Aspect (range): All aspects
Slope: 8 to 25 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

Clymer
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Shoulder, backslope
Geomorphic position (three-dimensional): Side slope

Aspect (representative): East
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Laidig
Percent of map unit: 5 percent
Landform: Mountains
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Lower third of mountain flank
Aspect (representative): East
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

543327—Swartswood gravelly loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Swartswood and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Uplands
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone

Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 33 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 11 inches; gravelly loam
Bw—11 to 34 inches; channery loam
Bx—34 to 47 inches; very gravelly fine sandy loam

Minor Components

Conotton
Percent of map unit: 4 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Chippewa
Percent of map unit: 3 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Manlius
Percent of map unit: 3 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Side slope, interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543328—Swartswood gravelly loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Swartswood and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Swartswood Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Uplands
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 33 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 11 inches; gravelly loam
Bw—11 to 34 inches; channery loam
Bx—34 to 47 inches; very gravelly fine sandy loam

Minor Components

Conotton
Percent of map unit: 4 percent

Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Chippewa
Percent of map unit: 3 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Manlius
Percent of map unit: 3 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Shoulder
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543330—Swartswood and Wurtsboro soils, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 50 percent
Wurtsboro, extremely stony, and similar soils: 30 percent
Dissimilar minor components: 11 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Uplands
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 33 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 11 inches; gravelly loam
Bw—11 to 34 inches; channery loam
Bx—34 to 47 inches; very gravelly fine sandy loam

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches; lithic bedrock at a depth of 60 to 120 inches

Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 10 inches; gravelly loam
Bw—10 to 20 inches; gravelly loam
Bx—20 to 64 inches; very gravelly loam

Minor Components

Conotton
Percent of map unit: 4 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Manlius
Percent of map unit: 4 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Side slope, interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Chippewa, extremely stony
Percent of map unit: 3 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

543331—Swartswood and Wurtsboro soils, 8 to 25 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 620 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 193 days

Map Unit Composition

Swartswood, extremely stony, and similar soils: 50 percent
Wurtsboro, extremely stony, and similar soils: 30 percent
Dissimilar minor components: 7 percent

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Uplands
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Slope: 8 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 33 to 36 inches (perched)
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 11 inches; gravelly loam
Bw—11 to 34 inches; channery loam
Bx—34 to 47 inches; very gravelly fine sandy loam

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 8 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches; lithic bedrock at a depth of 60 to 120 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 10 inches; gravelly loam
Bw—10 to 20 inches; gravelly loam
Bx—20 to 64 inches; very gravelly loam

Minor Components

Conotton
Percent of map unit: 4 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Chippewa, extremely stony
Percent of map unit: 3 percent
Landform: Depressions

Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

543359—Volusia gravelly silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Volusia and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Volusia Soil

Soil Classification
Fine-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landscape: Plateaus
Landform: Valley sides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Fine-loamy basal till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 10 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w

Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; gravelly silt loam
Bw—8 to 15 inches; channery loam
Bx—15 to 70 inches; channery loam
C—70 to 80 inches; very channery loam

Minor Components

Chippewa
Percent of map unit: 10 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Swartswood
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543360—Volusia gravelly silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 800 to 1,800 feet
Mean annual precipitation: 30 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 150 days

Map Unit Composition

Volusia, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Volusia, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Aeric Fragiaquepts

Setting
Landscape: Plateaus
Landform: Valley sides
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Slope: 0 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Fine-loamy basal till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 10 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
A—0 to 8 inches; gravelly silt loam
Bw—8 to 15 inches; channery loam
Bx—15 to 70 inches; channery loam
C—70 to 80 inches; very channery loam

Minor Components

Chippewa, extremely stony
Percent of map unit: 10 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Swartswood
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects

Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

543374—Wurtsboro gravelly silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Wurtsboro and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wurtsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches; lithic bedrock at a depth of 60 to 120 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 10 inches; gravelly silt loam
Bw—10 to 20 inches; gravelly loam
Bx—20 to 64 inches; very channery loam

Minor Components

Chippewa
Percent of map unit: 2 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Halsey
Percent of map unit: 2 percent
Landform: Flood plains
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 2 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Manlius
Percent of map unit: 2 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Side slope, interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Phelps
Percent of map unit: 2 percent

Landform: Terraces
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 2 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

543375—Wurtsboro gravelly silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Wurtsboro and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wurtsboro Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Glaciated uplands
Landform: Hills
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Glacial till derived from quartzite, conglomerate, and/or sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches; lithic bedrock at a depth of 60 to 120 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 30 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 10 inches; gravelly silt loam
Bw—10 to 20 inches; gravelly loam
Bx—20 to 64 inches; very channery loam

Minor Components

Chippewa
Percent of map unit: 2 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Halsey
Percent of map unit: 2 percent
Landform: Flood plains
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 2 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Manlius
Percent of map unit: 2 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Shoulder
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex, linear

Across-slope shape: Linear, convex
Hydric soil status: No

Phelps
Percent of map unit: 2 percent
Landform: Terraces
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 2 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

612280—Scio silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 95 to 1,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Scio and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Scio Soil

Soil Classification
Coarse-silty, mixed, active, mesic Aquic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 24 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 13.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap1—0 to 6 inches; silt loam
Ap2—6 to 13 inches; silt loam
Bw1—13 to 23 inches; silt loam
Bw2—23 to 28 inches; silt loam
BC—28 to 50 inches; silt loam
C1—50 to 59 inches; silt loam
C2—59 to 72 inches; silt loam

Minor Components

Aeric Endoaquepts, postglacial alluvium
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

612666—Colonie loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Colonie and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Colonie Soil

Soil Classification
Mixed, mesic Lamellic Udipsamments

Setting
Landscape: River valleys
Landform: Outer terraces
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 2 inches; loamy fine sand
Ap—2 to 11 inches; loamy fine sand
E—11 to 24 inches; fine sand
E and Bt1—24 to 40 inches; fine sand
E and Bt2—40 to 62 inches; fine sand

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent

Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

612668—Hoosic-Hazen complex, 8 to 15 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,745 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hoosic, very stony, and similar soils: 60 percent
Hazen, very stony, and similar soils: 30 percent
Dissimilar minor components: 10 percent

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam

Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Description of Hazen, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Mollic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 10 inches; loam
Bt—10 to 18 inches; sandy loam
2C1—18 to 29 inches; very stony loamy coarse sand
2C2—29 to 41 inches; very gravelly coarse sand
2C3—41 to 60 inches; extremely gravelly coarse sand

Minor Components

Colonie, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Otisville, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

612724—Lordstown-Wallpack complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lordstown, very rocky, and similar soils: 50 percent
Wallpack, very rocky, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Lordstown, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Wallpack, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly silt loam
AB—2 to 5 inches; gravelly silt loam
Bt—5 to 18 inches; gravelly silt loam
Btx—18 to 24 inches; gravelly loam
BCtx1—24 to 42 inches; gravelly silt loam
BCtx2—42 to 60 inches; gravelly loam

Minor Components

Chadakoin, very rocky
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Rock outcrop
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

612732—Atherton mucky silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 49.2 to 1,499 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Atherton, very poorly drained, and similar soils: 60 percent
Atherton, poorly drained, and similar soils: 30 percent
Dissimilar minor components: 10 percent

Description of Atherton, Very Poorly Drained, Soil

Soil Classification
Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting
Landscape: River valleys
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Medium

Parent material: Postglacial fine-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 10.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 4 inches; moderately decomposed plant material
A—4 to 8 inches; mucky silt loam
Bg1—8 to 10 inches; silt loam
Bg2—10 to 18 inches; silt loam
Bg3—18 to 29 inches; silt loam
BC1—29 to 32 inches; silt loam
BC2—32 to 41 inches; silt loam
C1—41 to 45 inches; fine sandy loam
C2—45 to 50 inches; loam
C3—50 to 60 inches; very fine sandy loam
C4—60 to 70 inches; fine sandy loam

Description of Atherton, Poorly Drained, Soil

Soil Classification
Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting
Landscape: River valleys
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Medium
Parent material: Postglacial fine-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
A—0 to 6 inches; loam
Bg1—6 to 12 inches; loam
Bg2—12 to 30 inches; loam
2Cg1—30 to 40 inches; sandy clay loam
2Cg2—40 to 60 inches; sandy clay loam

Minor Components

Aeric Endoaquepts, postglacial alluvium
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

612738—Fluvaquents, loamy, 0 to 3 percent slopes, occasionally flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Fluvaquents, occasionally flooded, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Fluvaquents, Occasionally Flooded

Soil Classification
Fluvaquents

Setting
Landscape: River valleys
Landform: Flood plains
Landform position (three-dimensional): Talf
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Recent alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: At the surface to a depth of 18 inches
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
A1—0 to 5 inches; silt loam
A2—5 to 12 inches; silt loam
C1—12 to 18 inches; sandy clay loam
C2—18 to 24 inches; sandy clay loam
C3—24 to 60 inches; sandy loam

Minor Components

Udifluvents, occasionally flooded
Percent of map unit: 10 percent
Landform: Flood plains
Geomorphic position (three-dimensional): Riser
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: No

612753—Wallpack fine sandy loam, aeolian mantle, 8 to 15 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, aeolian mantle, very stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Aeolian Mantle, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Hapludalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; fine sandy loam
Ap—2 to 8 inches; fine sandy loam
Bw1—8 to 14 inches; fine sandy loam
2Bw2—14 to 21 inches; fine sandy loam
2Bw3—21 to 26 inches; gravelly fine sandy loam
2BC1—26 to 31 inches; very gravelly fine sandy loam
2BC2—31 to 36 inches; very gravelly fine sandy loam
2BC3—36 to 60 inches; gravelly fine sandy loam

Minor Components

Lordstown, very stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Aquic Dystrudepts, aeolian mantle, very stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects

Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

612756—Wallpack fine sandy loam, aeolian mantle, 0 to 8 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, aeolian mantle, very stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Aeolian Mantle, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Hapludalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; fine sandy loam
Ap—2 to 8 inches; fine sandy loam
Bw1—8 to 14 inches; fine sandy loam
2Bw2—14 to 21 inches; fine sandy loam
2Bw3—21 to 26 inches; gravelly fine sandy loam
2BC1—26 to 31 inches; very gravelly fine sandy loam
2BC2—31 to 36 inches; very gravelly fine sandy loam
2BC3—36 to 60 inches; gravelly fine sandy loam

Minor Components

Lordstown, very stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Aquic Dystrudepts, aeolian mantle, very stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

612757—Wallpack fine sandy loam, aeolian mantle, 15 to 35 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wallpack, aeolian mantle, very stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wallpack, Aeolian Mantle, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Hapludalfs

Setting
Landscape: Till plains

Landform: Ridges
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; fine sandy loam
Ap—2 to 8 inches; fine sandy loam
Bw1—8 to 14 inches; fine sandy loam
2Bw2—14 to 21 inches; fine sandy loam
2Bw3—21 to 26 inches; gravelly fine sandy loam
2BC1—26 to 31 inches; very gravelly fine sandy loam
2BC2—31 to 36 inches; very gravelly fine sandy loam
2BC3—36 to 60 inches; gravelly fine sandy loam

Minor Components

Lordstown, very stony
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Aquic Dystrudepts, aeolian mantle, very stony
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Convex

Across-slope shape: Linear
Hydric soil status: No

612767—Wellsboro silt loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wellsboro, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wellsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 12 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 32 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam
Bw1—8 to 15 inches; cobbly silt loam
Bw2—15 to 24 inches; cobbly loam

Bw3—24 to 29 inches; cobbly loam
Bx1—29 to 37 inches; cobbly sandy loam
Bx2—37 to 60 inches; cobbly sandy loam

Minor Components

Morris, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lackawanna, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

612768—Wellsboro silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wellsboro, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wellsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 12 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 32 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam
Bw1—8 to 15 inches; cobbly silt loam
Bw2—15 to 24 inches; cobbly loam
Bw3—24 to 29 inches; cobbly loam
Bx1—29 to 37 inches; cobbly sandy loam
Bx2—37 to 60 inches; cobbly sandy loam

Minor Components

Morris, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lackawanna, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

613393—Alden silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet

Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Alden, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Alden, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, nonacid, mesic Mollic Endoaquepts

Setting
Landscape: Till plains
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Silty colluvium derived from sandstone over fine-loamy till derived from sandstone
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 7 inches; silt loam
Bg1—7 to 14 inches; silt loam
Bg2—14 to 28 inches; silty clay loam
Bg3—28 to 43 inches; loam
C—43 to 60 inches; silt loam

Minor Components

Chippewa, extremely stony
Percent of map unit: 10 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope

Geomorphic position (three-dimensional): Base slope
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

613447—Unadilla silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Unadilla and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Unadilla Soil

Soil Classification
Coarse-silty, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 8 inches; silt loam
Ap2—8 to 14 inches; silt loam
Bw—14 to 25 inches; silt loam
BC—25 to 39 inches; silt loam
C—39 to 60 inches; very fine sandy loam

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Colonie
Percent of map unit: 5 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

613448—Unadilla silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Unadilla and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Unadilla Soil

Soil Classification
Coarse-silty, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Riser
Slope: 3 to 8 percent

Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 8 inches; silt loam
Ap2—8 to 14 inches; silt loam
Bw—14 to 25 inches; silt loam
BC—25 to 39 inches; silt loam
C—39 to 60 inches; very fine sandy loam

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Riser
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Colonie
Percent of map unit: 5 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

614075—Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 80 percent
Swartswood, extremely stony, and similar soils: 20 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam

Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

620179—Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot, very rocky, and similar soils: 55 percent
Lordstown, very rocky, and similar soils: 40 percent
Dissimilar minor components: 5 percent

Description of Arnot, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop

Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 5 percent
Landform: Ground moraines
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Mountaintop
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: Unranked

620180—Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches

Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot and similar soils: 45 percent
Lordstown and similar soils: 40 percent
Rock outcrop: 15 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s

Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

620181—Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot and similar soils: 60 percent
Lordstown and similar soils: 25 percent
Rock outcrop: 15 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

623089—Chippewa silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Chippewa, extremely stony, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Chippewa, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landscape: Drumlin fields
Landform: Interdrumlins
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very high

Parent material: Fine-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 8 to 20 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 4 inches; silt loam
Eg—4 to 8 inches; silt loam
Bg—8 to 13 inches; silt loam
Bgx1—13 to 21 inches; silt loam
Bgx2—21 to 29 inches; silt loam
Cg1—29 to 34 inches; silt loam
Cg2—34 to 60 inches; fine sandy loam

Minor Components

Alden, extremely stony
Percent of map unit: 10 percent
Landform: Interdrumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Venango, extremely stony
Percent of map unit: 10 percent
Landform: Drumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

623109—Farmington-Rock outcrop complex, 0 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 900 feet
Mean annual precipitation: 30 to 64 inches

Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Farmington and similar soils: 50 percent
Rock outcrop: 40 percent
Dissimilar minor components: 10 percent

Description of Farmington Soil

Soil Classification
Loamy, mixed, active, mesic Lithic Eutrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from limestone and dolomite
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; silt loam
Bw1—3 to 9 inches; silt loam
Bw2—9 to 15 inches; silt loam
2R—15 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Till plains
Landform: Ground moraines
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Limestone and dolomite
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Galway
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624811—Galway loam, 35 to 60 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 900 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Galway, very rocky, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Galway, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, superactive, mesic Typic Eutrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from limestone and dolomite
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 5 inches; loam
Bw1—5 to 15 inches; gravelly loam
Bw2—15 to 24 inches; gravelly loam
2R—24 to 80 inches; bedrock

Minor Components

Farmington, very rocky
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Rock outcrop
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

Wallpack, aeolian mantle, very rocky
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624813—Lackawanna cobbly fine sandy loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam

Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

624816—Lordstown-Wallpack complex, 8 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lordstown, very rocky, and similar soils: 50 percent
Wallpack, very rocky, and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Lordstown, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Wallpack, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly silt loam
AB—2 to 5 inches; gravelly silt loam
Bt—5 to 18 inches; gravelly silt loam
Btx—18 to 24 inches; gravelly loam
BCtx1—24 to 42 inches; gravelly silt loam
BCtx2—42 to 60 inches; gravelly loam

Minor Components

Cambridge, very rocky
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Chadakoin, very rocky
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Rock outcrop
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

624822—Lordstown-Wallpack complex, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lordstown and similar soils: 50 percent
Wallpack and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear

Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam
Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Chadakoin
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Cambridge
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624823—Lordstown-Wallpack complex, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lordstown and similar soils: 50 percent
Wallpack and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam
Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Chadakoin
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Cambridge
Percent of map unit: 5 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624824—Lordstown-Wallpack complex, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lordstown and similar soils: 50 percent
Wallpack and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam

C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Wallpack Soil

Soil Classification
Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Setting
Landscape: Till plains
Landform: Ridges
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap1—0 to 3 inches; silt loam
Ap2—3 to 9 inches; gravelly silt loam
Bt—9 to 16 inches; gravelly silt loam
Btx1—16 to 25 inches; gravelly silt loam
Btx2—25 to 65 inches; very gravelly silt loam

Minor Components

Chadakoin
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Cambridge
Percent of map unit: 5 percent
Landform: Ridges

Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624826—Manlius-Nassau complex, 35 to 60 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Manlius, very rocky, and similar soils: 60 percent
Nassau, very rocky, and similar soils: 25 percent
Dissimilar minor components: 15 percent

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; very channery silt loam
Bw—2 to 18 inches; extremely channery silt loam
C—18 to 27 inches; extremely channery silt loam
2R—27 to 80 inches; bedrock

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ridges
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; very channery silt loam
Bw—2 to 15 inches; extremely channery silt loam
2R—15 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

Wallpack, very rocky
Percent of map unit: 5 percent

Landform: Ridges
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

624827—Nassau-Manlius complex, 0 to 8 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau, very rocky, and similar soils: 55 percent
Manlius, very rocky, and similar soils: 44 percent
Dissimilar minor components: 1 percent

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s

Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Ap—0 to 7 inches; very channery silt loam
Bw—7 to 13 inches; extremely channery silt loam
2R—13 to 80 inches; bedrock

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 9 inches; very channery silt loam
Bw—9 to 20 inches; extremely channery silt loam
CB—20 to 29 inches; extremely channery silt loam
2R—29 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 1 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

624828—Nassau-Manlius complex, 8 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau, very rocky, and similar soils: 55 percent
Manlius, very rocky, and similar soils: 44 percent
Dissimilar minor components: 1 percent

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Ap—0 to 7 inches; very channery silt loam
Bw—7 to 13 inches; extremely channery silt loam
2R—13 to 80 inches; bedrock

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 9 inches; very channery silt loam
Bw—9 to 20 inches; extremely channery silt loam
CB—20 to 29 inches; extremely channery silt loam
2R—29 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 1 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

624829—Nassau-Manlius complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau, very rocky, and similar soils: 55 percent
Manlius, very rocky, and similar soils: 44 percent
Dissimilar minor components: 1 percent

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Ap—0 to 7 inches; very channery silt loam
Bw—7 to 13 inches; extremely channery silt loam
2R—13 to 80 inches; bedrock

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 9 inches; very channery silt loam
Bw—9 to 20 inches; extremely channery silt loam
CB—20 to 29 inches; extremely channery silt loam
2R—29 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 1 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

624832—Nassau-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau and similar soils: 50 percent
Rock outcrop: 45 percent
Dissimilar minor components: 5 percent

Description of Nassau Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains

Landform: Ground moraines
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; very channery silt loam
Bw—2 to 15 inches; extremely channery silt loam
2R—15 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Till plains
Landform: Ground moraines
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Acid shale
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Manlius
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

624841—Oquaga-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga and similar soils: 60 percent
Rock outcrop: 25 percent
Dissimilar minor components: 15 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Sandstone
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Arnot
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

Lackawanna
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

624845—Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 900 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Rock outcrop: 45 percent
Farmington and similar soils: 35 percent
Galway and similar soils: 20 percent

Description of Rock Outcrop

Setting
Landscape: Till plains
Landform: Ground moraines
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Limestone and dolomite
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Description of Farmington Soil

Soil Classification
Loamy, mixed, active, mesic Lithic Eutrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from limestone and dolomite
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 3 inches; silt loam
Bw1—3 to 9 inches; silt loam
Bw2—9 to 15 inches; silt loam
2R—15 to 80 inches; bedrock

Description of Galway Soil

Soil Classification
Coarse-loamy, mixed, superactive, mesic Typic Eutrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from limestone and dolomite
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material

Oe—2 to 3 inches; moderately decomposed plant material
A—3 to 5 inches; loam
Bw1—5 to 15 inches; gravelly loam
Bw2—15 to 24 inches; gravelly loam
2R—24 to 80 inches; bedrock

624846—Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Rock outcrop: 40 percent
Arnot and similar soils: 30 percent
Rubble land: 20 percent
Dissimilar minor components: 10 percent

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 60 to 80 percent

Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Rubble Land

Setting
Landscape: Mountains
Landform: Talus slopes
Slope: 60 to 80 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Runoff: Low
Parent material: Talus derived from conglomerate
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
C—0 to 60 inches; stones

Minor Components

Lordstown
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 60 to 80 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

626816—Udifluvents, 0 to 3 percent slopes, occasionally flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Udifluvents, occasionally flooded, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Udifluvents, Occasionally Flooded

Soil Classification
Udifluvents

Setting
Landscape: River valleys
Landform: Flood plains
Landform position (three-dimensional): Rise
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: About 18 to 60 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 3 inches; loamy sand
C1—3 to 16 inches; loamy sand
C2—16 to 22 inches; sandy loam
C3—22 to 27 inches; sandy loam
C4—27 to 32 inches; sandy loam
C5—32 to 60 inches; stratified loamy sand to sandy loam

Minor Components

Fluvaquents, occasionally flooded
Percent of map unit: 10 percent
Landform: Flood plains
Geomorphic position (three-dimensional): Talf
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: Yes

635458—Oquaga-Lackawanna complex, 8 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga, very rocky, and similar soils: 55 percent
Lackawanna, very rocky, and similar soils: 30 percent
Dissimilar minor components: 15 percent

Description of Oquaga, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Lackawanna, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

Wellsboro, very rocky
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

635459—Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga, very rocky, and similar soils: 50 percent
Lackawanna, very rocky, and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Oquaga, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Lackawanna, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high

Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: Unranked

Wellsboro, very rocky
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

740953—Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Delaware, rarely flooded, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Delaware, Rarely Flooded, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Terraces
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap1—1 to 4 inches; fine sandy loam
Ap2—4 to 11 inches; fine sandy loam
Bw1—11 to 20 inches; fine sandy loam
Bw2—20 to 33 inches; fine sandy loam
BC—33 to 41 inches; fine sandy loam
C1—41 to 56 inches; fine sandy loam
C2—56 to 60 inches; loam

Minor Components

Colonie
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects

Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

740968—Nassau-Manlius complex, 8 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau, very rocky, and similar soils: 55 percent
Manlius, very rocky, and similar soils: 44 percent
Dissimilar minor components: 1 percent

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained

Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Ap—0 to 7 inches; very channery silt loam
Bw—7 to 13 inches; extremely channery silt loam
2R—13 to 80 inches; bedrock

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 9 inches; very channery silt loam
Bw—9 to 20 inches; extremely channery silt loam
CB—20 to 29 inches; extremely channery silt loam
2R—29 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 1 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects

Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

740969—Nassau-Manlius complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,550 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Nassau, very rocky, and similar soils: 55 percent
Manlius, very rocky, and similar soils: 44 percent
Dissimilar minor components: 1 percent

Description of Nassau, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Ap—0 to 7 inches; very channery silt loam
Bw—7 to 13 inches; extremely channery silt loam
2R—13 to 80 inches; bedrock

Description of Manlius, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from acid shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 9 inches; very channery silt loam
Bw—9 to 20 inches; extremely channery silt loam
CB—20 to 29 inches; extremely channery silt loam
2R—29 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 1 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

740971—Oquaga-Lackawanna complex, 8 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga, very rocky, and similar soils: 55 percent
Lackawanna, very rocky, and similar soils: 30 percent
Dissimilar minor components: 15 percent

Description of Oquaga, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Lackawanna, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines

Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: Unranked

Wellsboro, very rocky
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear

Across-slope shape: Convex
Hydric soil status: No

740972—Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga, very rocky, and similar soils: 50 percent
Lackawanna, very rocky, and similar soils: 35 percent
Dissimilar minor components: 15 percent

Description of Oquaga, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam

Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Lackawanna, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Linear

Across-slope shape: Convex
Hydric soil status: Unranked

Wellsboro, very rocky
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

740974—Oquaga-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga and similar soils: 60 percent
Rock outcrop: 25 percent
Dissimilar minor components: 15 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Sandstone
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Arnot
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

Lackawanna
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 35 to 60 percent

Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

740975—Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Rock outcrop: 40 percent
Arnot and similar soils: 30 percent
Rubble land: 20 percent
Dissimilar minor components: 10 percent

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 60 to 80 percent
Down-slope shape: Linear

Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Rubble Land

Setting
Landscape: Mountains
Landform: Talus slopes
Slope: 60 to 80 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Runoff: Low
Parent material: Talus derived from conglomerate
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 3.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
C—0 to 60 inches; stones

Minor Components

Lordstown
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 60 to 80 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

740987—Scio silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 95 to 1,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Scio and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Scio Soil

Soil Classification
Coarse-silty, mixed, active, mesic Aquic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 24 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 13.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap1—0 to 6 inches; silt loam
Ap2—6 to 13 inches; silt loam
Bw1—13 to 23 inches; silt loam
Bw2—23 to 28 inches; silt loam
BC—28 to 50 inches; silt loam
C1—50 to 59 inches; silt loam
C2—59 to 72 inches; silt loam

Minor Components

Aeric Endoaquepts, postglacial alluvium
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

740988—Udifluvents, 0 to 3 percent slopes, occasionally flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Udifluvents, occasionally flooded, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Udifluvents, Occasionally Flooded

Soil Classification
Udifluvents

Setting
Landscape: River valleys
Landform: Flood plains
Landform position (three-dimensional): Rise
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Depth to water table: About 18 to 60 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2w
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 3 inches; loamy sand
C1—3 to 16 inches; loamy sand
C2—16 to 22 inches; sandy loam
C3—22 to 27 inches; sandy loam
C4—27 to 32 inches; sandy loam
C5—32 to 60 inches; stratified loamy sand to sandy loam

Minor Components

Fluvaquents, occasionally flooded
Percent of map unit: 10 percent
Landform: Flood plains
Geomorphic position (three-dimensional): Talf
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: Yes

740991—Unadilla silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains

Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Unadilla and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Unadilla Soil

Soil Classification
Coarse-silty, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 1
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 8 inches; silt loam
Ap2—8 to 14 inches; silt loam
Bw—14 to 25 inches; silt loam
BC—25 to 39 inches; silt loam
C—39 to 60 inches; very fine sandy loam

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects

Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Colonie
Percent of map unit: 5 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

740992—Unadilla silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Unadilla and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Unadilla Soil

Soil Classification
Coarse-silty, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Inner terraces
Landform position (three-dimensional): Riser
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Postglacial coarse-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained

Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap1—0 to 8 inches; silt loam
Ap2—8 to 14 inches; silt loam
Bw—14 to 25 inches; silt loam
BC—25 to 39 inches; silt loam
C—39 to 60 inches; very fine sandy loam

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Riser
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Colonie
Percent of map unit: 5 percent
Landform: Inner terraces
Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

740995—Wellsboro silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wellsboro, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wellsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 12 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 32 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam
Bw1—8 to 15 inches; cobbly silt loam
Bw2—15 to 24 inches; cobbly loam
Bw3—24 to 29 inches; cobbly loam
Bx1—29 to 37 inches; cobbly sandy loam
Bx2—37 to 60 inches; cobbly sandy loam

Minor Components

Morris, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lackawanna, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North

Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

740996—Wellsboro silt loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,095 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wellsboro, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Wellsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 12 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 32 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; silt loam
Bw1—8 to 15 inches; cobbly silt loam
Bw2—15 to 24 inches; cobbly loam
Bw3—24 to 29 inches; cobbly loam
Bx1—29 to 37 inches; cobbly sandy loam
Bx2—37 to 60 inches; cobbly sandy loam

Minor Components

Morris, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

Lackawanna, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

741149—Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear

Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

741150—Lackawanna cobbly fine sandy loam, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam
Bhs—7 to 8 inches; cobbly fine sandy loam

Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

801114—Oquaga-Rock outcrop complex, 0 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga and similar soils: 75 percent
Rock outcrop: 15 percent
Dissimilar minor components: 10 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Sandstone
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Arnot
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North

Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

810906—Oquaga-Rock outcrop complex, 0 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Oquaga and similar soils: 75 percent
Rock outcrop: 15 percent
Dissimilar minor components: 10 percent

Description of Oquaga Soil

Soil Classification
Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches

Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 4 inches; channery loam
Bw—4 to 20 inches; very channery loam
C—20 to 25 inches; extremely channery loam
2R—25 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Sandstone
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

Minor Components

Arnot
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

Wellsboro
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects

Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: No

1147465—Alden silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Alden, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Alden, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, nonacid, mesic Mollic Endoaquepts

Setting
Landscape: Till plains
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Silty colluvium derived from sandstone over fine-loamy till derived from sandstone
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 7 inches; silt loam
Bg1—7 to 14 inches; silt loam
Bg2—14 to 28 inches; silty clay loam
Bg3—28 to 43 inches; loam
C—43 to 60 inches; silt loam

Minor Components

Chippewa, extremely stony
Percent of map unit: 10 percent
Landform: Depressions
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

1147467—Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot, very rocky, and similar soils: 55 percent
Lordstown, very rocky, and similar soils: 40 percent
Dissimilar minor components: 5 percent

Description of Arnot, Very Rocky, Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown, Very Rocky, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Slope: 0 to 15 percent
Down-slope shape: Linear
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s

Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Minor Components

Rock outcrop
Percent of map unit: 5 percent
Landform: Ground moraines
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Mountaintop
Aspect (representative): North
Aspect (range): All aspects
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil status: Unranked

1147468—Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot and similar soils: 45 percent
Lordstown and similar soils: 40 percent
Rock outcrop: 15 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North

Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 15 to 35 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

1147469—Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Arnot and similar soils: 60 percent
Lordstown and similar soils: 25 percent
Rock outcrop: 15 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; fine sandy loam
Bw1—4 to 12 inches; very gravelly loam
Bw2—12 to 17 inches; extremely gravelly loam
2R—17 to 80 inches; bedrock

Description of Lordstown Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank

Slope: 35 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from conglomerate
Restrictive feature(s): Lithic bedrock at a depth of 20 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bw1—3 to 5 inches; loam
Bw2—5 to 17 inches; gravelly loam
Bw3—17 to 22 inches; gravelly loam
C—22 to 36 inches; very gravelly fine sandy loam
2R—36 to 80 inches; bedrock

Description of Rock Outcrop

Setting
Landscape: Mountains
Landform: Ground moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountain flank
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Parent material: Conglomerate
Restrictive feature(s): Lithic bedrock at the surface
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

Typical Profile
R—0 to 80 inches; bedrock

1147470—Atherton mucky silt loam, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 49.2 to 1,499 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Atherton, very poorly drained, and similar soils: 60 percent
Atherton, poorly drained, and similar soils: 30 percent
Dissimilar minor components: 10 percent

Description of Atherton, Very Poorly Drained, Soil

Soil Classification
Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting
Landscape: River valleys
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Medium
Parent material: Postglacial fine-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 10.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
Oe—2 to 4 inches; moderately decomposed plant material

A—4 to 8 inches; mucky silt loam
Bg1—8 to 10 inches; silt loam
Bg2—10 to 18 inches; silt loam
Bg3—18 to 29 inches; silt loam
BC1—29 to 32 inches; silt loam
BC2—32 to 41 inches; silt loam
C1—41 to 45 inches; fine sandy loam
C2—45 to 50 inches; loam
C3—50 to 60 inches; very fine sandy loam
C4—60 to 70 inches; fine sandy loam

Description of Atherton, Poorly Drained, Soil

Soil Classification
Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting
Landscape: River valleys
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Medium
Parent material: Postglacial fine-silty alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: At the surface to a depth of 6 inches (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
A—0 to 6 inches; loam
Bg1—6 to 12 inches; loam
Bg2—12 to 30 inches; loam
2Cg1—30 to 40 inches; sandy clay loam
2Cg2—40 to 60 inches; sandy clay loam

Minor Components

Aeric Endoaquepts, postglacial alluvium
Percent of map unit: 10 percent
Landform: Inner terraces
Geomorphic position (two-dimensional): Toeslope

Geomorphic position (three-dimensional): Tread
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147471—Catden mucky peat, 0 to 2 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Catden and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Catden Soil

Soil Classification
Euic, mesic Typic Haplosaprists

Setting
Landscape: Till plains
Landform: Depressions
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very low
Parent material: Herbaceous and/or woody organic material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very high (about 26.8 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oe—0 to 2 inches; mucky peat

Oa1—2 to 13 inches; muck
Oa2—13 to 20 inches; woody muck
Oa3—20 to 32 inches; muck
Oa4—32 to 60 inches; muck

Minor Components

Alden
Percent of map unit: 13 percent
Landform: Depressions
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Wallkill
Percent of map unit: 2 percent
Landform: Flood plains
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil status: Yes

1147474—Chippewa silt loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Chippewa, extremely stony, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Chippewa, Extremely Stony, Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Fragiaquepts

Setting
Landscape: Drumlin fields
Landform: Interdrumlins
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Very high
Parent material: Fine-loamy till derived from limestone, sandstone, and shale
Restrictive feature(s): Fragipan at a depth of 8 to 20 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Poorly drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: Yes
Hydrologic soil group: D

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 4 inches; silt loam
Eg—4 to 8 inches; silt loam
Bg—8 to 13 inches; silt loam
Bgx1—13 to 21 inches; silt loam
Bgx2—21 to 29 inches; silt loam
Cg1—29 to 34 inches; silt loam
Cg2—34 to 60 inches; fine sandy loam

Minor Components

Alden, extremely stony
Percent of map unit: 10 percent
Landform: Interdrumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Venango, extremely stony
Percent of map unit: 10 percent
Landform: Drumlins
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

1147475—Colonie loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet

Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Colonie and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Colonie Soil

Soil Classification
Mixed, mesic Lamellic Udipsamments

Setting
Landscape: River valleys
Landform: Outer terraces
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
A—0 to 2 inches; loamy fine sand
Ap—2 to 11 inches; loamy fine sand
E—11 to 24 inches; fine sand
E and Bt1—24 to 40 inches; fine sand
E and Bt2—40 to 62 inches; fine sand

Minor Components

Delaware
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear

Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Outer terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147478—Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Delaware, rarely flooded, and similar soils: 80 percent
Dissimilar minor components: 20 percent

Description of Delaware, Rarely Flooded, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Terraces
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial coarse-loamy alluvium
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.2 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap1—1 to 4 inches; fine sandy loam
Ap2—4 to 11 inches; fine sandy loam
Bw1—11 to 20 inches; fine sandy loam
Bw2—20 to 33 inches; fine sandy loam
BC—33 to 41 inches; fine sandy loam
C1—41 to 56 inches; fine sandy loam
C2—56 to 60 inches; loam

Minor Components

Colonie
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Unadilla
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147482—Fredon-Halsey complex, 0 to 3 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Fredon, very stony, and similar soils: 50 percent
Halsey, very stony, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Fredon, Very Stony, Soil

Soil Classification

Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Aeric Endoaquepts

Setting

Landscape: Outwash plains
Landform: Drainageways
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities

Runoff: Low
Parent material: Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): Strongly contrasting textural stratification at a depth of 22 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 6 to 18 inches (perched)
Drainage class: Somewhat poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups

Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: D

Typical Profile

Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 8 inches; silt loam
Bw1—8 to 14 inches; silt loam
Bw2—14 to 18 inches; loam
Bw3—18 to 23 inches; loam
2C1—23 to 31 inches; extremely gravelly loamy coarse sand
2C2—31 to 36 inches; extremely gravelly coarse sand
2C3—36 to 45 inches; very gravelly coarse sand
2C4—45 to 55 inches; extremely gravelly coarse sand
2C5—55 to 60 inches; very gravelly coarse sand

Description of Halsey, Very Stony, Soil

Soil Classification

Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Humaquepts

Setting

Landscape: Outwash plains
Landform: Drainageways
Slope: 0 to 3 percent
Down-slope shape: Linear

Across-slope shape: Concave
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Aquic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): Strongly contrasting textural stratification at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Depth to water table: At the surface (perched)
Drainage class: Very poorly drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 5w
Hydric soil status: Yes
Hydrologic soil group: B/D

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A1—1 to 5 inches; silt loam
A2—5 to 11 inches; silt loam
Bg—11 to 20 inches; silt loam
2Cg1—20 to 25 inches; loamy sand
2Cg2—25 to 35 inches; very gravelly coarse sand
2Cg3—35 to 49 inches; very gravelly coarse sand
2Cg4—49 to 56 inches; extremely gravelly coarse sand
2Cg5—56 to 60 inches; extremely gravelly coarse sand

Minor Components

Hero, very stony
Percent of map unit: 10 percent
Landform: Terraces
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147485—Hazen-Hoosic complex, 3 to 8 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet

Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hazen, very stony, and similar soils: 60 percent
Hoosic, very stony, and similar soils: 35 percent
Dissimilar minor components: 5 percent

Description of Hazen, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Mollic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 10 inches; loam
Bt—10 to 18 inches; sandy loam
2C1—18 to 29 inches; very stony loamy coarse sand
2C2—29 to 41 inches; very gravelly coarse sand
2C3—41 to 60 inches; extremely gravelly coarse sand

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains

Landform: Valley trains
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Minor Components

Otisville, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147490—Hoosic-Hazen complex, 8 to 15 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,745 feet

Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hoosic, very stony, and similar soils: 60 percent
Hazen, very stony, and similar soils: 30 percent
Dissimilar minor components: 10 percent

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand
2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Description of Hazen, Very Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Mollic Hapludalfs

Setting
Landscape: Outwash plains

Landform: Valley trains
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 10 inches; loam
Bt—10 to 18 inches; sandy loam
2C1—18 to 29 inches; very stony loamy coarse sand
2C2—29 to 41 inches; very gravelly coarse sand
2C3—41 to 60 inches; extremely gravelly coarse sand

Minor Components

Colonie, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Otisville, very stony
Percent of map unit: 5 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147491—Hoosic-Otisville complex, 25 to 60 percent slopes, very stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Hoosic, very stony, and similar soils: 50 percent
Otisville, very stony, and similar soils: 40 percent
Dissimilar minor components: 10 percent

Description of Hoosic, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Humic Dystrudepts

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Somewhat excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 4.5 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
Ap—1 to 9 inches; gravelly loam
Bw—9 to 21 inches; very gravelly coarse sandy loam
2C1—21 to 27 inches; extremely gravelly loamy coarse sand
2C2—27 to 37 inches; extremely gravelly coarse sand

2C3—37 to 49 inches; extremely gravelly coarse sand
2C4—49 to 60 inches; extremely gravelly coarse sand

Description of Otisville, Very Stony, Soil

Soil Classification
Sandy-skeletal, mixed, mesic Typic Udorthents

Setting
Landscape: Outwash plains
Landform: Valley trains
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Glaciofluvial deposits derived from sandstone and shale
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Excessively drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 2.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: A

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; gravelly sandy loam
Bw1—2 to 7 inches; very gravelly loamy sand
Bw2—7 to 11 inches; very gravelly loamy coarse sand
BC—11 to 19 inches; very gravelly loamy coarse sand
C1—19 to 31 inches; extremely gravelly coarse sand
C2—31 to 43 inches; extremely gravelly coarse sand
C3—43 to 60 inches; stratified sand to loamy sand

Minor Components

Hazen, very stony
Percent of map unit: 10 percent
Landform: Valley trains
Aspect (representative): North
Aspect (range): All aspects
Slope: 25 to 60 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147492—Lackawanna cobbly fine sandy loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 695 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Lackawanna, extremely stony, and similar soils: 85 percent
Dissimilar minor components: 15 percent

Description of Lackawanna, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Mountains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
Restrictive feature(s): Fragipan at a depth of 14 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 6.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Vegetation
Existing plants: Red maple, sedge, rare clubmoss, and northern red oak

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; cobbly fine sandy loam
E—3 to 7 inches; cobbly fine sandy loam

Bhs—7 to 8 inches; cobbly fine sandy loam
Bw1—8 to 16 inches; stony loam
Bw2—16 to 24 inches; stony loam
Bx1—24 to 29 inches; stony fine sandy loam
Bx2—29 to 60 inches; very cobbly fine sandy loam

Minor Components

Wellsboro, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Oquaga, extremely stony
Percent of map unit: 5 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1147500—Wurtsboro loam, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,800 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Coarse-loamy till derived from sandstone
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; loam
E—3 to 5 inches; fine sandy loam
Bhs—5 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 30 inches; gravelly sandy loam
Bx2—30 to 60 inches; gravelly sandy loam

Minor Components

Swartswood, extremely stony
Percent of map unit: 10 percent
Landform: Ground moraines
Aspect (representative): North
Aspect (range): All aspects
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil status: No

1147501—Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 60 percent
Swartswood, extremely stony, and similar soils: 40 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 0 to 8 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

1147502—Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 60 percent
Swartswood, extremely stony, and similar soils: 40 percent

Description of Wurtsboro, extremely stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

1147527—Udorthents-Urban land complex, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Udorthents and similar soils: 60 percent
Urban land: 40 percent

Description of Udorthents

Soil Classification
Udorthents

Setting
Landscape: Uplands
Landform: Low hills
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Fill and/or disturbed soil material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
A—0 to 12 inches; loam
C—12 to 72 inches; loamy sand

Description of Urban Land

Setting
Landscape: Uplands
Landform: Low hills
Landform position (three-dimensional): Lower third of mountain flank
Slope: 0 to 3 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects

Properties and Qualities
Runoff: Very high
Parent material: Buildings, pavement, and other impervious surfaces over fill and/or disturbed soil material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: Unranked
Hydrologic soil group: D

1147532—Udorthents, 0 to 8 percent slopes, smoothed

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,495 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Udorthents and similar soils: 100 percent

Description of Udorthents

Soil Classification
Udorthents

Setting
Landscape: Uplands
Landform: Low hills

Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very low
Parent material: Fill and/or disturbed soil material
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.0 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 8.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3w
Hydric soil status: No
Hydrologic soil group: D

Typical Profile
A—0 to 12 inches; loam
C—12 to 72 inches; loamy sand

1147533—Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 1,100 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days

Map Unit Composition

Wurtsboro, extremely stony, and similar soils: 80 percent
Swartswood, extremely stony, and similar soils: 20 percent

Description of Wurtsboro, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North

Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 17 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 15 to 26 inches (perched)
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 2 inches; slightly decomposed plant material
A—2 to 3 inches; fine sandy loam
E—3 to 4 inches; fine sandy loam
Bhs—4 to 6 inches; fine sandy loam
Bw1—6 to 18 inches; sandy loam
Bw2—18 to 24 inches; gravelly sandy loam
Bx1—24 to 33 inches; gravelly sandy loam
Bx2—33 to 60 inches; gravelly sandy loam

Description of Swartswood, Extremely Stony, Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Setting
Landscape: Till plains
Landform: Ground moraines
Slope: 15 to 35 percent
Down-slope shape: Convex
Across-slope shape: Linear
Aspect (representative): North
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Restrictive feature(s): Fragipan at a depth of 20 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 0.1 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Oi—0 to 1 inch; slightly decomposed plant material
A—1 to 2 inches; loam
E—2 to 3 inches; fine sandy loam
Bhs—3 to 4 inches; gravelly fine sandy loam
Bw—4 to 21 inches; gravelly fine sandy loam
Bx1—21 to 32 inches; gravelly sandy loam
Bx2—32 to 60 inches; gravelly sandy loam

1948749—Arnot channery silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,800 feet
Mean annual precipitation: 35 to 48 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 190 days

Map Unit Composition

Arnot and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, nose slope
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from sedimentary rock
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3s
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 16 inches; very channery silt loam
2R—16 to 26 inches; bedrock

Minor Components

Bedington
Percent of map unit: 5 percent
Landform: Shale hillslopes
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948750—Arnot channery silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,800 feet
Mean annual precipitation: 35 to 48 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 190 days

Map Unit Composition

Arnot and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, nose slope
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Glacial till derived from sedimentary rock
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 16 inches; very channery silt loam
2R—16 to 26 inches; bedrock

Minor Components

Brinkerton
Percent of map unit: 5 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Head slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear

Across-slope shape: Linear
Hydric soil status: No

1948751—Arnot channery silt loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,800 feet
Mean annual precipitation: 35 to 48 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 190 days

Map Unit Composition

Arnot and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Arnot Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, nose slope
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Glacial till derived from sedimentary rock
Restrictive feature(s): Lithic bedrock at a depth of 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 1.9 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6e
Hydric soil status: No
Hydrologic soil group: C/D

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 16 inches; very channery silt loam
2R—16 to 26 inches; bedrock

Minor Components

Brinkerton
Percent of map unit: 5 percent
Landform: Depressions
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Head slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: No

Wurtsboro
Percent of map unit: 5 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948774—Conotton gravelly loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 620 to 905 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 133 to 193 days

Map Unit Composition

Conotton and similar soils: 90 percent

Description of Conotton Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Stream terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Riser, tread
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Stratified sand and gravel outwash
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 5
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 9 inches; gravelly loam
Bt—9 to 45 inches; very gravelly loam
C—45 to 80 inches; stratified very gravelly sand to very gravelly loamy coarse sand

1948775—Conotton gravelly loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 620 to 905 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 133 to 193 days

Map Unit Composition

Conotton and similar soils: 95 percent

Description of Conotton Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Stream terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Riser, tread
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Stratified sand and gravel outwash

Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 5
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 9 inches; gravelly loam
Bt—9 to 45 inches; very gravelly loam
C—45 to 80 inches; stratified very gravelly sand to very gravelly loamy coarse sand

1948776—Conotton gravelly loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 620 to 905 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 133 to 193 days

Map Unit Composition

Conotton and similar soils: 95 percent

Description of Conotton Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Stream terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser, tread
Slope: 15 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Stratified sand and gravel outwash
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None

Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 5
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 6e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 9 inches; gravelly loam
Bt—9 to 45 inches; very gravelly loam
C—45 to 80 inches; stratified very gravelly sand to very gravelly loamy coarse sand

1948777—Conotton gravelly loam, 25 to 65 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 620 to 905 feet
Mean annual precipitation: 32 to 45 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 133 to 193 days

Map Unit Composition

Conotton and similar soils: 95 percent

Description of Conotton Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Stream terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser, tread
Slope: 25 to 65 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Stratified sand and gravel outwash
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches

Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 5
Available water capacity: Low (about 5.4 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 9 inches; gravelly loam
Bt—9 to 45 inches; very gravelly loam
C—45 to 80 inches; stratified very gravelly sand to very gravelly loamy coarse sand

1948797—Manlius channery silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Manlius and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, interfluve, nose slope
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Thin till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)

Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2s
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 24 inches; very channery silt loam
C—24 to 32 inches; very channery silt loam
R—32 to 40 inches; bedrock

Minor Components

Arnot
Percent of map unit: 2 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Backslope
Geomorphic position (three-dimensional): Side slope, nose slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Loudonville
Percent of map unit: 2 percent
Landform: Till plains
Geomorphic position (three-dimensional): Head slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Swartswood
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects

Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948802—Manlius channery silt loam, 8 to 15 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Manlius and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Thin till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches

Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 3e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 24 inches; very channery silt loam
C—24 to 32 inches; very channery silt loam
R—32 to 40 inches; bedrock

Minor Components

Arnot
Percent of map unit: 2 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Backslope
Geomorphic position (three-dimensional): Side slope, nose slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Loudonville
Percent of map unit: 2 percent
Landform: Till plains
Geomorphic position (three-dimensional): Head slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Swartswood
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope

Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948818—Manlius channery silt loam, 15 to 25 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 200 to 1,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 45 to 54 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Manlius and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Manlius Soil

Soil Classification
Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Setting
Landform: Valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Slope: 15 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: High
Parent material: Thin till derived from shale
Restrictive feature(s): Lithic bedrock at a depth of 20 to 40 inches
Frequency of flooding: None

Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 3.2 inches)

Interpretive Groups
Land capability classification (nonirrigated): 4e
Hydric soil status: No
Hydrologic soil group: C

Typical Profile
Ap—0 to 8 inches; channery silt loam
Bw—8 to 24 inches; very channery silt loam
C—24 to 32 inches; very channery silt loam
R—32 to 40 inches; bedrock

Minor Components

Arnot
Percent of map unit: 2 percent
Landform: Valley sides
Geomorphic position (two-dimensional): Backslope
Geomorphic position (three-dimensional): Side slope, nose slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Conotton
Percent of map unit: 2 percent
Landform: Stream terraces
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Riser, tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Loudonville
Percent of map unit: 2 percent
Landform: Till plains
Geomorphic position (three-dimensional): Head slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Swartswood
Percent of map unit: 2 percent
Landform: Hills

Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 15 to 25 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 8 to 15 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948832—Penargyl channery silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 2,095 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 130 to 190 days

Map Unit Composition

Penargyl and similar soils: 90 percent

Description of Penargyl Soil

Soil Classification
Fine-loamy, mixed, active, mesic Typic Hapludults

Setting
Landscape: Uplands
Landform: Valley sides
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium

Parent material: Colluvium derived from shale and siltstone and/or loamy glacial till derived from sedimentary rock
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 10.7 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 12 inches; channery silt loam
Bt—12 to 74 inches; cobbly silty clay loam
C—74 to 80 inches; very channery loam
R—80 to 90 inches; bedrock

1948846—Phelps gravelly silt loam, 3 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 1,000 to 1,800 feet
Mean annual precipitation: 30 to 48 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Phelps and similar soils: 90 percent
Dissimilar minor components: 10 percent

Description of Phelps Soil

Soil Classification
Fine-loamy over sandy or sandy-skeletal, mixed, active, mesic Glossaquic Hapludalfs

Setting
Landscape: Outwash plains
Landform: Terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Medium
Parent material: Silty or loamy over glacial outwash

Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 18 to 24 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Low (about 5.6 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 10 inches; gravelly silt loam
Bt—10 to 22 inches; gravelly loam
BC—22 to 30 inches; gravelly clay loam
2C—30 to 79 inches; stratified very gravelly sand to loamy sand

Minor Components

Halsey
Percent of map unit: 4 percent
Landform: Flood plains
Geomorphic position (two-dimensional): Toeslope
Geomorphic position (three-dimensional): Tread
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 0 to 2 percent
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil status: Yes

Swartswood
Percent of map unit: 4 percent
Landform: Hills
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Wurtsboro
Percent of map unit: 2 percent
Landform: Hills
Geomorphic position (two-dimensional): Footslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): Southeast
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

1948855—Udorthents, loamy

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 295 to 1,600 feet
Mean annual precipitation: 34 to 50 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 140 to 200 days

Map Unit Composition

Udorthents, loamy, and similar soils: 95 percent
Dissimilar minor components: 5 percent

Description of Udorthents, Loamy

Soil Classification
Udorthents

Setting
Landscape: Uplands
Landform: Ridges
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, interfluve
Slope: 0 to 8 percent
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Graded areas of loamy sedimentary rock
Restrictive feature(s): None within a depth of 60 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: About 12 to 36 inches
Drainage class: Moderately well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups
Land capability classification (nonirrigated): 7s
Hydric soil status: No
Hydrologic soil group: A/D

Typical Profile
A—0 to 5 inches; loam
C—5 to 40 inches; gravelly loam
2C—40 to 70 inches; loam

Minor Components

Bedington
Percent of map unit: 1 percent
Landform: Shale hillslopes

Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): South
Aspect (range): All aspects
Slope: 0 to 3 percent
Down-slope shape: Convex, linear
Across-slope shape: Linear, convex
Hydric soil status: No

Clarksburg
Percent of map unit: 1 percent
Landform: Limestone valley flats
Geomorphic position (two-dimensional): Footslope, toeslope
Geomorphic position (three-dimensional): Base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil status: No

Duffield
Percent of map unit: 1 percent
Landform: Hills
Geomorphic position (two-dimensional): Summit
Geomorphic position (three-dimensional): Interfluve
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil status: No

Lansdale
Percent of map unit: 1 percent
Landform: Rolling hillsides
Geomorphic position (two-dimensional): Summit, shoulder, and backslope
Geomorphic position (three-dimensional): Side slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil status: No

Readington
Percent of map unit: 1 percent
Landform: Red shale, siltstone, and sandstone hillslopes
Geomorphic position (two-dimensional): Backslope, footslope
Geomorphic position (three-dimensional): Side slope, head slope, base slope
Aspect (representative): South
Aspect (range): All aspects
Slope: 3 to 8 percent
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil status: No

1948989—Urban land-Delaware complex, 0 to 8 percent slopes

Map Unit Setting

Major land resource area (MLRA): 140—Glaciated Allegheny Plateau and Catskill Mountains
Elevation: 400 to 600 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 44 to 57 degrees F
Frost-free period: 110 to 200 days

Map Unit Composition

Urban land: 65 percent
Delaware and similar soils: 25 percent

Description of Urban Land

Setting
Landscape: Mountains
Landform: Valleys, ridges, and hills
Landform position (two-dimensional): Summit, footslope
Slope: 0 to 8 percent
Down-slope shape: Linear
Across-slope shape: Linear
Aspect (representative): Southeast
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Very high
Parent material: Pavement, buildings, and other artificially covered areas
Restrictive feature(s): Lithic bedrock at a depth of 10 to 100 inches
Frequency of flooding: None
Frequency of ponding: None
Depth to water table: More than 72 inches
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: Very low (about 0.0 inches)

Interpretive Groups
Land capability classification (nonirrigated): 8s
Hydric soil status: No

Typical Profile
C—0 to 6 inches; variable

Description of Delaware Soil

Soil Classification
Coarse-loamy, mixed, active, mesic Typic Dystrudepts

Setting
Landscape: River valleys
Landform: Low to middle river terraces
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Tread
Slope: 0 to 8 percent
Down-slope shape: Linear, convex

Across-slope shape: Linear, convex
Aspect (representative): South
Aspect (range): All aspects
Soil temperature regime: Mesic
Soil moisture class: Udic

Properties and Qualities
Runoff: Low
Parent material: Postglacial alluvium derived from sandstone and shale
Restrictive feature(s): Lithic bedrock at a depth of 72 to 99 inches
Frequency of flooding: Rare
Frequency of ponding: None
Depth to water table: More than 72 inches
Drainage class: Well drained
Shrink-swell potential: Low (about 1.5 percent linear extensibility)
Calcium carbonate equivalent (maximum weight percentage): 0
Available water capacity: High (about 9.3 inches)

Interpretive Groups
Land capability classification (nonirrigated): 2e
Hydric soil status: No
Hydrologic soil group: B

Typical Profile
Ap—0 to 10 inches; loam
Bw—10 to 40 inches; very fine sandy loam
C—40 to 87 inches; loamy fine sand

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in Delaware Water Gap National Recreation Area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils as rangeland and as sites for buildings, sanitary facilities, highways and other transportation systems, and recreational facilities. 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 park. 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, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the park for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the 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 *well suited, moderately well suited, poorly suited,* and *unsuited* 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. They indicate gradations between the point at which a soil feature has the greatest negative impact

on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels=capability class, subclass, and unit (USDA–SCS, 1961).

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally

designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4. These units are not given in all soil surveys.

The capability classification of map units in this park is given in the section “Detailed Soil Map Units” and in table 2.

Prime Farmland and Other Important Farmlands

Table 3 lists the map units in the park that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation’s food supply.

Prime farmland is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime farmland or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated

and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Hydric Soils

Table 4 lists the map unit components that are rated as hydric soils in the park. 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; USDA–NRCS, 2010).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 2010) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (USDA–NRCS, 2010).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if saturated hydraulic conductivity (Ksat) is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for periods of long or very long duration during the growing season.
4. Soils that are frequently flooded for periods of long or very long duration during the growing season.

Landscape, Landform, and Parent Material

Table 5 displays information about the relationships between soils and landscapes, landforms, and parent materials.

Percent of map unit is the extent of the named soil in the map unit.

Slope is 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. The table shows the low and high range of slope for the named component or soil.

Elevation is the height of an object or area on the earth's surface in reference to a fixed reference point, such as mean sea level. The typical low and high range of elevation is displayed for each soil.

MAP is the mean annual precipitation for areas of the soil in the map unit.

Landscape refers to the broad shape of the earth in the area where the soil occurs. Examples are a valley and a mountain.

Landform is a specific shape of the earth in the area where a soil typically occurs. Examples are a valley bottom and a mountain summit.

Parent material is the material in which soils formed. Examples are the underlying geological material (including bedrock), a surficial deposit (such as eolian sand), and organic material. Soils inherit their chemical and physical properties from the parent material.

Land Management

In tables 6a through 6d, interpretive ratings are given for various aspects of land management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified land management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified practice. One

or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified practice or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified land management practice (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for *fire damage* and *seedling mortality* are expressed as low, moderate, and high. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

Rating class terms for *hazard of erosion* are expressed as slight, moderate, severe, and very severe. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for erosion is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for land management practices.

Table 6a

Ratings in the columns *suitability for hand planting* and *suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or unsuited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of planting equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Table 6b

Ratings in the column *hazard of erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in areas where 50 to 75 percent of the surface has been exposed by different kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant

erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Table 6c

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Table 6d

Ratings in the column *potential for damage to soil by fire* are based on texture of the surface layer, content of rock fragments and organic matter in the surface layer, thickness of the surface layer, and slope. The soils are described as having a low, moderate, or high potential for this kind of damage. The ratings indicate an evaluation of the potential impact of prescribed fires or wildfires that are intense enough to remove the duff layer and consume organic matter in the surface layer.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Recreation

The soils of the park are rated in tables 7a and 7b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public

sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in the tables can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, and water management.

Table 7a

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Table 7b

Foot traffic and equestrian trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Mountain bike and off-road vehicle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, depth to a water table, ponding, slope, flooding, and texture of the surface layer.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, landscaping, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the “Soil Properties” section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for 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, ponds, 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 map, 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.

Dwellings and Small Commercial Buildings

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. Table 8 shows the degree and kind of soil limitations that affect dwellings and small commercial buildings.

The ratings in the table 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. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Roads and Streets, Shallow Excavations, and Landscaping

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. Table 9 shows the degree and kind of soil limitations that affect local roads and streets, shallow excavations, and landscaping.

The ratings in the table 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. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of

flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Landscaping requires soils on which turf, trees, and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sewage Disposal

Table 10 shows the degree and kind of soil limitations that affect septic tank absorption fields and sewage lagoons. 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. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches or between a depth of 24 inches and a restrictive layer 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. Saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Saturated hydraulic conductivity (Ksat) 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 Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

Source of Gravel and Sand

Table 11 gives information about the soils as potential sources of gravel and sand. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* 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. Only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of gravel or sand are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains gravel or sand, the soil is considered a likely source regardless of thickness. The assumption is that the gravel or sand layer below the depth of observation exceeds the minimum thickness. The ratings are for the whole soil, from the surface to a depth of about 6 feet.

The soils are rated *good, fair,* or *poor* as potential sources of gravel and sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel or sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

Source of Reclamation Material, Roadfill, and Topsoil

Table 12 gives information about the soils as potential sources of reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated *good, fair,* or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. Numerical ratings between 0.00 and 0.99 are given after the specified features. These numbers indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments. The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Ponds and Embankments

Table 13 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. 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. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil

has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the saturated hydraulic conductivity (Ksat) of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of 5 or 6 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, Ksat of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

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 properties, physical and chemical properties, and pertinent soil and water features.

Engineering Properties

Table 14 gives the engineering classifications and the range of engineering properties for the layers of each soil in the park.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.”

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement,

the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

Physical Soil Properties

Table 15 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the park. 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.

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. If a range is not present, a singular representative value is shown.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, 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. In this table, 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. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The 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, saturated hydraulic conductivity (K_{sat}), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil

properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The estimates in the table indicate the rate of water movement, in micrometers per second, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Shrink-swell potential is the potential of the soil to expand and contract with a loss or gain in moisture. Linear extensibility is used to determine the shrink-swell potential of soils. 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. The amount and type of clay minerals in the soil influence volume change.

The shrink-swell potential is *low* if the soil has a linear extensibility of less than 3 percent; *moderate* if 3 to 6 percent; *high* if 6 to 9 percent; and *very high* if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion Properties

Table 16 shows estimates of some erosion factors that affect a soil's potential for different uses. These estimates are given for each layer of every soil for K factors and are given as one rating for the entire soil for the T factor. Values are reported for each soil in the park. Estimates are based on field observations and on test data for these and similar soils.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and K_{sat}. 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.

The procedure for determining the Kf factor is outlined in Agriculture Handbook 703, “Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)” (USDA–ARS, 1997).

Depth to the upper and lower boundaries of each layer is indicated.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments. In horizons where total rock fragments are 15 percent or more, by volume, the Kw factor is always less than the Kf factor.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size. Soil horizons that do not have rock fragments are assigned equal Kw and Kf factors.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the “National Soil Survey Handbook.”

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Total Soil Carbon

Table 17 gives estimates of total soil carbon. Soil carbon occurs as organic and inorganic carbon.

Soil organic carbon (SOC) is carbon (C) in soil that originated from a biological source, such as plants, animals, or microorganisms. SOC is found in both organic and mineral soil layers. The term “soil organic carbon” refers only to the carbon occurring in soil organic matter (SOM). Soil organic carbon makes up about one-half the weight of soil organic matter. The rest of SOM is mostly oxygen, nitrogen, and hydrogen.

Soil inorganic carbon (SIC) is carbon found in soil carbonates, typically as calcium carbonate layers in the soil or as clay-sized fractions throughout the soil. Carbonates in soils are most common in areas where evaporation rates exceed precipitation, as is the case in most desert environments. Typically, the carbonates accumulated from carbonatic dust or from solution during periods of wetter climates. Soil inorganic carbon also occurs in soils that formed in marl in all regions of the country.

The SOC and SIC contents are reported in kilograms per square meter to a depth of 2 meters or to a representative depth of either hard bedrock or a cemented horizon. The SOC and SIC values are on a whole soil basis, corrected for rock fragments.

SOC can be an indicator of overall soil fertility and soil quality that affects ecosystem function. SOM is the main reservoir for most plant nutrients, such as phosphorus and nitrogen. Managing for SOC by managing for SOM increases the content of these elements and improves soil resiliency.

Soil organic matter binds soil particles together and thus increases soil porosity and water infiltration and allows better root penetration and waterflow into the soil. Greater inflow of water reduces the hazard of erosion and the rate of surface water runoff.

Greater SOC levels improve not only soil quality but also the quality of air and water. Soil acts as a filter and improves water quality. Fertile soils that support plant life remove CO_2 from the atmosphere and increase oxygen levels through photosynthesis. Maintaining the level of soil organic carbon reduces C release into the atmosphere and thus can lessen the effects of global warming.

SIC influences the types of plants that will grow. High SIC levels are commonly associated with a higher soil pH, which limits the types of plants that will thrive.

Like SOM, soil carbonates, the source of SIC, also bind soil particles together. They fill voids in the soil and thus can reduce soil porosity. Compacted soil carbonates may restrict root penetration and waterflow into the soil.

Chemical Soil Properties

Table 18 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 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. 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 cations 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.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Water Features

Table 19 gives estimates of various soil 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.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 20 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Kinds of restrictions include 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. If no restriction exists, the

table reports *"No restriction." Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (K_{sat}), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high.* It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

Soils are named and classified on the basis of physical and chemical properties in their horizons (layers). Color, texture, structure, and other properties of the soil to a depth of 2 meters are used to key the soil into a classification system. This system helps people to use soil information and also provides a common language for scientists.

Soils and their horizons differ from one another, depending on how and when they formed. Soil scientists use five soil-forming factors to help predict where different soils may occur. The degree and expression of the soil horizons reflect the extent of interaction of the soil-forming factors with one or more of the soil-forming processes (Simonson, 1959).

When mapping soils, a soil scientist looks for areas with similar soil-forming factors to find similar soils. The properties of the soils are described. Soils are given taxonomic names based on the properties. Soils are classified, mapped, and interpreted on the basis of various kinds of soil horizons and their arrangement. The distribution of soil orders corresponds with the general patterns of the soil-forming factors within the park.

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2010). 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. The categories are defined in the following paragraphs.

ORDER. Soil taxonomy identifies 12 soil orders at the highest hierarchical level. The names for the orders and taxonomic soil properties relate to Greek, Latin, or other root words that reveal something about the soil. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol.* An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. Sixty-four suborders are recognized at this level of classification. The last syllable in the name of a suborder indicates the order. An example is Udalf (*Ud,* meaning humid, plus *alf,* from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. There are about 300 great groups. 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 Hapludalfs (*Hapl,* meaning minimal horizonation, plus *udalf,* the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Soil taxonomy identifies more than 2,400 subgroups. Each great group has a typic subgroup. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Other subgroups are intergrades or extragrades. 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 *Ultic* identifies the subgroup that is more weathered than the typic great group. An example is Ultic Hapludalfs.

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 traditional plow depth. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, active, mesic Ultic Hapludalfs.

SERIES. The soil series is the lowest category in the soil classification system. 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.

Most parks are mapped to the series level. The names of soil series are selected by the soil scientists during the course of mapping. An example is the Loudonville series. The soils of the Loudonville series are fine-loamy, mixed, active, mesic Ultic Hapludalfs. The series names are commonly geographic place names. Because of access limitations and soil variability, some soils are only classified to the great group or subgroup level.

Table 21, “Taxonomic Classification of the Soils,” indicates the order, suborder, great group, subgroup, and family of the soil series in the park. Table 22, “Taxonomic Classification Key,” displays the classifications sorted by order.

Soil Series and Their Morphology

Included in this section are descriptions of 10 soils for which the typical pedon is within Delaware Water Gap National Recreation Area. The soils were described during the mapping of the county-based soil surveys. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993) and in the “Field Book for Describing and Sampling Soils” (Schoeneberger and others, 2002). 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, 2010). Following the pedon description is the range of important characteristics of the soils in the series.

Descriptions of the other soil series in the survey area are available online at http://soils.usda.gov/. Search for “official soil series descriptions.”

Atherton Taxadjunct

Depth class: Very deep
Drainage class: Very poorly drained
Permeability: Moderate or moderately slow in the surface layer and subsoil; moderate or moderately rapid in the substratum
Parent material: Postglacial fine-silty alluvium
Landscape: River valleys
Landform: Depressions
Associated soils: Aeric Endoaquepts and Atherton, poorly drained, soils
Slope: 0 to 3 percent
Taxonomic classification: Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts

Typical Pedon

Atherton mucky silt loam, 0 to 3 percent slopes; Montague Township, Sussex County, Delaware Water Gap National Recreation Area; 6,336 feet northeast of the bridge on U.S. Route 206, about 1,850 feet west of County Route 521, and 1,320 feet south of field entrance road, in an abandoned pasture; USGS Milford, Pennsylvania-New Jersey topographic quadrangle; lat. 41 degrees 19 minutes 3.31 seconds N. and long. 74 degrees 46 minutes 56.47 seconds W.; NAD27.

Oi—0 to 2 inches; black (10YR 2/1) slightly decomposed herbaceous plant material.

Oe—2 to 4 inches; black (10YR 2/1) moderately decomposed herbaceous plant material.

A—4 to 8 inches; very dark grayish brown (10YR 3/2) mucky silt loam; moderate fine granular structure; friable; many medium and fine roots; moderately acid (pH 5.9); clear wavy boundary.

Bg1—8 to 10 inches; dark gray (10YR 4/1) silt loam; moderate fine granular structure; friable; many medium and fine roots; slightly acid (pH 6.3); clear wavy boundary.

Bg2—10 to 18 inches; dark gray (10YR 4/1) silt loam; moderate medium subangular blocky structure parting to moderate fine granular; friable; many fine and common medium roots; slightly acid (pH 6.2); clear wavy boundary.

Bg3—18 to 29 inches; olive gray (5Y 5/2) silt loam; massive; firm; few medium roots; few fine prominent brown (7.5YR 5/2) iron depletions with clear boundaries in the matrix; common medium prominent dark yellowish brown (10YR 3/6) iron accumulations with clear boundaries in the matrix; slightly acid (pH 6.2); gradual wavy boundary.

BC1—29 to 32 inches; brown (7.5YR 5/3) silt loam; massive; firm; common medium prominent olive gray (5Y 5/2) iron depletions with clear boundaries in the matrix; few fine distinct strong brown (7.5YR 4/6) iron accumulations with clear boundaries in the matrix; few fine prominent black (10YR 2/1) manganese accumulations with sharp boundaries in the matrix; moderately acid (pH 6.0); gradual wavy boundary.

BC2—32 to 41 inches; brown (7.5YR 5/4) silt loam; massive; firm; many medium prominent reddish gray (5YR 5/2) and few medium prominent greenish gray (5GY 5/1) iron depletions with clear boundaries in the matrix; common medium prominent yellowish red (5YR 5/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 6.0); gradual wavy boundary.

C1—41 to 45 inches; yellowish brown (10YR 5/4) fine sandy loam; massive; firm; common medium prominent brown (7.5YR 5/2) iron depletions with clear boundaries in the matrix; few medium prominent brown (7.5YR 5/4) iron accumulations with clear boundaries in the matrix; moderately acid (pH 6.0); clear wavy boundary.

C2—45 to 50 inches; brown (7.5YR 4/3) loam; massive; firm; many medium distinct gray (7.5YR 5/1) iron depletions with clear boundaries in the matrix; moderately acid (pH 6.0); clear wavy boundary.

C3—50 to 60 inches; brown (7.5YR 4/2) very fine sandy loam; massive; firm; many coarse distinct dark yellowish brown (10YR 4/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 6.0); clear wavy boundary.

C4—60 to 70 inches; brown (7.5YR 4/2) fine sandy loam; massive; friable; many coarse prominent dark brown (7.5YR 3/4) and many coarse distinct dark yellowish brown (10YR 4/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 6.0).

Range in Characteristics

Thickness of solum: 22 to 44 inches

Coarse fragments: 0 to 15 percent, by volume

Reaction: Strongly acid to neutral in the A horizon, moderately acid to slightly alkaline in the Bg, BC, and C horizons; except where lime has been applied

O horizon (where present):
Color—black or dark brown
Texture—slightly to highly decomposed organic material

A horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 4, and chroma of 2 or less; or neutral in hue and value of 2 to 4
Texture (fine-earth fraction)—silt loam

Bg horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4
Texture (fine-earth fraction)—silty clay loam, silt loam, loam, very fine sandy loam, or fine sandy loam
Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

BC horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4
Texture (fine-earth fraction)—silty clay loam, silt loam, loam, very fine sandy loam, or fine sandy loam
Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

C horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4
Texture (fine-earth fraction)—silty clay loam, silt loam, loam, very fine sandy loam, or fine sandy loam
Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

The Atherton soil in the survey area is mapped as a taxadjunct to the Atherton series because the particle-size family of this soil is fine-silty rather than fine-loamy, which is the typical particle-size family of the Atherton series. Also, ranges for colors and textures differ from the typical ranges for the Atherton series. A poorly drained phase of the Atherton soil is recognized in map units 612732 and 1147470, Atherton mucky silt loam, 0 to 3 percent slopes. Depth to bedrock is greater than 70 inches

Colonie Series

Depth class: Very deep
Drainage class: Somewhat excessively drained
Permeability: Moderately rapid or rapid
Parent material: Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
Landscape: River valleys
Landform: Outer terraces
Associated soils: Delaware and Unadilla soils
Slope: 0 to 8 percent
Taxonomic classification: Mixed, mesic Lamellic Udipsamments

Typical Pedon

Colonie loamy fine sand, 3 to 8 percent slopes; Sandyston Township, Sussex County, Delaware Water Gap National Recreation Area; 3,168 feet north of the intersection of Old Mine Road and Van Ness Road, in a wooded area; USGS Culvers Gap topographic quadrangle; lat. 41 degrees 14 minutes 50.1 seconds N. and long. 74 degrees 50 minutes 37.1 seconds W.; NAD83.

A—0 to 2 inches; dark brown (10YR 3/3) loamy fine sand; weak fine granular structure; very friable; many fine and common medium roots; slightly acid (pH 6.1); clear smooth boundary.

Ap—2 to 11 inches; dark yellowish brown (10YR 3/4) loamy fine sand; weak medium and fine subangular blocky structure; very friable; common fine and medium roots; moderately acid (pH 5.8); clear smooth boundary.

E—11 to 24 inches; strong brown (7.5YR 4/6) fine sand; weak medium subangular blocky structure; very friable; common medium and few coarse and fine roots; strongly acid (pH 5.3); gradual wavy boundary.

E and Bt1—24 to 40 inches; strong brown (7.5YR 4/6) fine sand; weak medium subangular blocky structure; friable; few medium roots; several 2-millimeter-thick, wavy lamellae that are yellowish red (5YR 4/6) fine sandy loam; strongly acid (pH 5.3); gradual wavy boundary.

E and Bt2—40 to 62 inches; yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) fine sand; weak medium and fine subangular blocky structure; very friable; several 2-millimeter-thick, wavy lamellae that are strong brown (7.5YR 4/6) fine sandy loam; strongly acid (pH 5.3).

Range in Characteristics

Thickness of solum: 40 to 75 inches
Depth to bedrock: Greater than 62 inches
Rock fragments: 0 to 5 percent, by volume
Reaction: Strongly acid to slightly acid in the A and E horizons, strongly acid to neutral in the E and Bt horizon, and moderately acid to neutral in the C horizon; except where lime has been applied
Other: In some pedons, contrasting layers of finer or coarser textured deposits are below a depth of 40 inches.

A and Ap horizons:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 or 3
Texture (fine-earth fraction)—loamy fine sand

E horizon:
Color—hue of 5YR to 2.5Y, value of 4 to 6, and chroma of 3 to 6
Texture (fine-earth fraction)—fine sand or loamy fine sand

E and Bt horizon:
Color—hue of 5YR to 2.5Y, value of 3 to 6, and chroma of 3 to 6
Texture (fine-earth fraction)—fine sand to fine sandy loam

C horizon (where present):
Color—hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 2 to 4
Texture (fine-earth fraction)—fine sand or loamy fine sand

Delaware Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderately rapid in the surface layer and subsoil; rapid in the substratum
Parent material: Postglacial coarse-loamy alluvium (fig. 3)
Landscape: River valleys
Landform: Terraces
Associated soils: Colonie and Unadilla soils
Slope: 0 to 8 percent
Taxonomic classification: Coarse-loamy, mixed, active, mesic Typic Dystrudepts

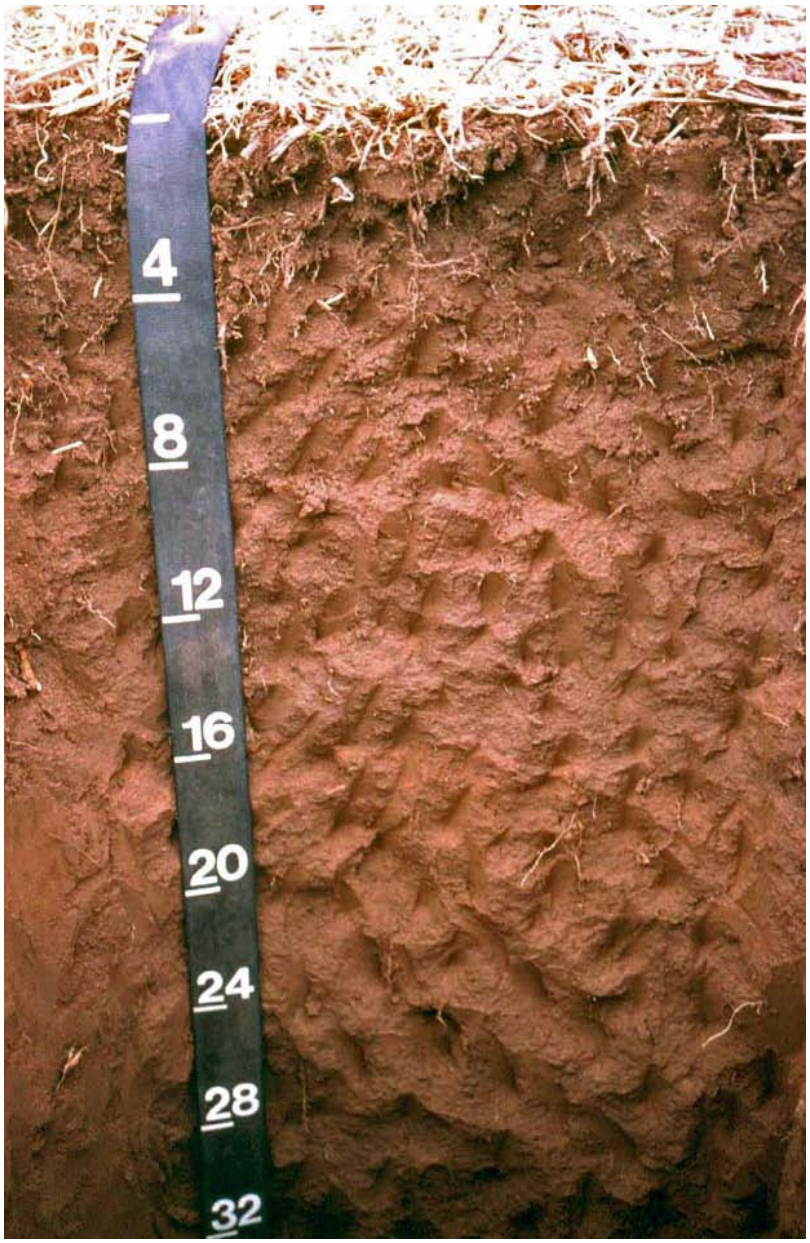

Figure 3.—A profile of a Delaware soil. The Delaware soils are very deep and well drained. They formed in postglacial alluvium deposited along the Delaware River in the Delaware Valley. Note the lack of rock fragments. Map units comprised of Delaware soils are rated as prime farmland. Depths on the tape are in inches (USDA–NRCS, 2009).

Typical Pedon

Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded; Pahaquarry Township, Warren County, Delaware Water Gap National Recreational Area, Depew Island Picnic Area; 2,050 feet northwest of the intersection of Old Mine Road and an access road, 500 feet northeast of the access road, in a crop field; USGS Bushkill topographic quadrangle; lat. 41 degrees 3 minutes 42.7 seconds N. and long. 75 degrees 0 minutes 32.8 seconds W.; NAD83.

Oi—0 to 1 inch; black (10YR 2/1) slightly decomposed organic material.
Ap1—1 to 4 inches; very dark grayish brown (10YR 3/2) fine sandy loam; moderate fine and medium granular structure; very friable; many fine roots; strongly acid (pH 5.3); abrupt smooth boundary.
Ap2—4 to 11 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine subangular blocky structure parting to weak fine granular; very friable; common coarse, medium, and fine roots; strongly acid (pH 5.3); abrupt wavy boundary.
Bw1—11 to 20 inches; dark yellowish brown (10YR 4/4) fine sandy loam; moderate fine and medium subangular blocky structure; very friable; strongly acid (pH 5.3); clear wavy boundary.
Bw2—20 to 33 inches; brown (7.5YR 4/4) fine sandy loam; moderate fine and medium subangular blocky structure; very friable; strongly acid (pH 5.3); clear wavy boundary.
BC—33 to 41 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine and medium subangular blocky structure; very friable; strongly acid (pH 5.3); clear wavy boundary.
C1—41 to 56 inches; 60 percent dark yellowish brown (10YR 4/4) fine sandy loam and 40 percent brown (7.5YR 4/4) fine sandy loam; massive; very friable; strongly acid (pH 5.3); clear wavy boundary.
C2—56 to 60 inches; brown (7.5YR 4/4) loam; massive; friable; strongly acid (pH 5.3).

Range in Characteristics

Thickness of solum: 30 to 60 inches
Depth to bedrock: Greater than 74 inches
Rock fragments: 0 to 5 percent, by volume
Reaction: Strongly acid to slightly acid, except where lime has been applied

O horizon (where present):
Color—black or dark brown
Texture—slightly or moderately decomposed plant material

Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 to 4
Texture (fine-earth fraction)—fine sandy loam

Bw horizon:
Color—hue of 5YR to 10YR, value of 3 to 5, and chroma of 3 to 6
Texture (fine-earth fraction)—fine sandy loam

BC horizon:
Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 to 6
Texture (fine-earth fraction)—fine sandy loam

C horizon:
Color—hue of 5YR to 10YR, value of 4 to 6, and chroma of 2 to 6
Texture (fine-earth fraction)—fine sandy loam to loamy sand

Lackawanna Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate above the fragipan; slow in the fragipan
Parent material: Coarse-loamy till derived from red shale and/or red sandstone and siltstone
Landscape: Mountains
Landform: Ground moraines

Associated components: Oquaga and Wellsboro soils and rock outcrop
Slope: 0 to 35 percent
Taxonomic classification: Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Typical Pedon

Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony; Pahaquarry Township, Warren County, Delaware Water Gap National Recreation Area; 3,168 feet west of the intersection of Brink Road and County Route 602, about 400 feet north of Brink Road, in a wooded area on the shoulder of Kittatinny Mountain; USGS Flatbrookville topographic quadrangle; lat. 41 degrees 3 minutes 45.59 seconds N. and long. 74 degrees 58 minutes 20.00 seconds W.; NAD83.

Oi—0 to 2 inches; black (10YR 2/1) slightly decomposed organic material.

A—2 to 3 inches; black (5YR 2.5/1) cobbly fine sandy loam; weak fine granular structure; friable; many fine and medium roots; 9 percent cobbles (red and gray subangular sandstone); 6 percent stones (red and gray subangular sandstone); 5 percent coarse gravel (red and gray subangular sandstone); extremely acid (pH 4.2); abrupt irregular boundary.

E—3 to 7 inches; pinkish gray (5YR 6/2) cobbly fine sandy loam; weak medium subangular blocky structure parting to weak medium granular; friable; common fine and medium roots; 9 percent cobbles (red and gray subangular sandstone); 6 percent stones (red and gray subangular sandstone); 5 percent coarse gravel (red and gray subangular sandstone); extremely acid (pH 4.2); abrupt irregular boundary.

Bhs—7 to 8 inches; dusky red (2.5YR 3/2) cobbly fine sandy loam; moderate medium subangular blocky structure; friable; common fine and medium roots; 9 percent cobbles (red and gray subangular sandstone); 7 percent coarse gravel (red and gray subangular sandstone); 6 percent stones (red and gray subangular sandstone); extremely acid (pH 4.4); abrupt broken boundary.

Bw1—8 to 16 inches; reddish brown (5YR 5/4) stony loam; moderate medium subangular blocky structure; friable; common fine, medium, and coarse roots; 10 percent coarse gravel (red and gray subangular sandstone); 7 percent cobbles (red and gray subangular sandstone); 5 percent stones (red and gray subangular sandstone); strongly acid (pH 5.3); clear smooth boundary.

Bw2—16 to 24 inches; reddish brown (5YR 5/4) stony loam; moderate medium platy structure; firm; common fine roots; 10 percent coarse gravel (red and gray subangular sandstone); 7 percent cobbles (red and gray subangular sandstone); 5 percent stones (red and gray subangular sandstone); strongly acid (pH 5.3); clear smooth boundary.

Bx1—24 to 29 inches; dusky red (2.5YR 4/4) stony fine sandy loam; few medium faint weak red (2.5YR 5/2) iron depletions with clear boundaries on vertical faces of prisms; strong medium platy structure; very firm; brittle; few faint patchy dusky red (2.5YR 4/4) clay films on surfaces along pores; 20 percent coarse gravel (red and gray subangular sandstone); 7 percent cobbles (red and gray subangular sandstone); 5 percent stones (red and gray subangular sandstone); strongly acid (pH 5.3); clear smooth boundary.

Bx2—29 to 60 inches; dusky red (2.5YR 4/3) very cobbly fine sandy loam; common medium faint weak red (2.5YR 5/2) iron depletions with clear boundaries on vertical faces of prisms; strong medium platy structure; very firm; brittle; few faint patchy dusky red (2.5YR 4/4) clay films on surfaces along pores; 20 percent coarse gravel (red and gray subangular sandstone); 15 percent cobbles (red and gray subangular sandstone); 10 percent stones (red and gray subrounded sandstone); strongly acid (pH 5.3).

Range in Characteristics

Thickness of solum: 40 to more than 75 inches

Depth to fragipan: 17 to 36 inches
Depth to bedrock: Greater than 60 inches
Rock fragments: 10 to 40 percent, by volume, in the A, E, Bhs, and Bw horizons; 15 to 65 percent in the Bx and C horizons
Reaction: Extremely acid to strongly acid, except where lime has been applied

O horizon (where present):
Color—black
Texture—slightly or moderately decomposed plant material

A horizon:
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 3
Texture (fine-earth fraction)—fine sandy loam

E horizon:
Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 or 3
Texture (fine-earth fraction)—fine sandy loam

Bhs horizon:
Color—hue of 2.5YR to 10YR, value of 3, and chroma of 2 or 3
Texture (fine-earth fraction)—fine sandy loam

Bw horizon:
Color—hue of 2.5YR to 10YR, value of 4 or 5, and chroma of 3 to 6
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

Bx horizon:
Color—hue of 10R to 5YR, value of 3 to 5, and chroma of 2 to 4
Texture (fine-earth fraction)—sandy loam, loam, fine sandy loam, or silt loam
Redoximorphic features—iron depletions in shades of gray and iron accumulations in shades of red

Oquaga Series

Depth class: Moderately deep
Drainage class: Somewhat excessively drained
Permeability: Moderate
Parent material: Loamy till derived from red sandstone and siltstone and/or red shale
Landscape: Mountains
Landform: Ground moraines
Associated components: Arnot, Lackawanna, and Wellsboro soils and rock outcrop
Slope: 0 to 60 percent
Taxonomic classification: Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts

Typical Pedon

Oquaga channery loam in an area of Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky; Walpack Township, Sussex County, Delaware Water Gap National Recreation Area; 3,062 feet north of the parking lot for Blue Mountain Lakes, 50 feet southeast of the main trail above Blue Mountain Lakes, in a wooded area; USGS Flatbrookville topographic quadrangle; lat. 41 degrees 6 minutes 15.21 seconds N. and long. 74 degrees 55 minutes 40.58 seconds W.; NAD83.

Oi—0 to 1 inch; black (10YR 2/1) slightly decomposed organic material.
A—1 to 4 inches; very dark brown (7.5YR 2.5/2) channery loam; weak fine granular structure; very friable; many fine and common medium roots; 17 percent channers (red and gray sandstone); very strongly acid (pH 4.6); abrupt wavy boundary.

Bw—4 to 20 inches; brown (7.5YR 4/4) very channery loam; weak medium subangular blocky structure; friable; common fine and medium roots; 40 percent channers (red and gray sandstone); very strongly acid (pH 4.8); clear wavy boundary.

C—20 to 25 inches; brown (7.5YR 4/4) extremely channery loam; massive; friable; few fine and common coarse roots; 70 percent channers (red and gray sandstone); very strongly acid (pH 4.8); abrupt wavy boundary.

2R—25 inches; fractured red sandstone bedrock.

Range in Characteristics

Depth to bedrock: 20 to 40 inches

Rock fragments: 15 to 60 percent, by volume, in the A horizon; 25 to 85 percent, by volume, in the Bw and C horizons

Reaction: Extremely acid to strongly acid, except where lime has been applied

O horizon (where present):
Color—black or brown
Texture—slightly or moderately decomposed plant material

A horizon:
Color—hue of 2.5YR to 10YR, value of 2 to 5, and chroma of 1 to 3
Texture (fine-earth fraction)—loam

Bw horizon:
Color—hue of 2.5YR to 7.5YR, value of 3 to 6, and chroma of 3 to 8
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

C horizon:
Color—hue of 10R to 7.5YR, value of 3 to 5, and chroma of 2 to 4
Texture (fine-earth fraction)—sandy loam, fine sandy loam, loam, or silt loam

2R layer:
Type of bedrock—hard, red sandstone and shale bedrock

Scio Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate
Parent material: Postglacial coarse-silty alluvium
Landscape: River valleys
Landform: Inner terraces
Associated soils: Aeric Endoaquepts and Unadilla soils
Slope: 0 to 3 percent
Taxonomic classification: Coarse-silty, mixed, active, mesic Aquic Dystrudepts

Typical Pedon

Scio silt loam, 0 to 3 percent slopes; Montague Township, Sussex County, Delaware Water Gap National Recreation Area; 3,960 feet northeast of the bridge on U.S. Route 206, about 2,000 feet west of County Route 521, and 2,600 feet south of terrace entrance road, in an abandoned crop field; USGS Milford, Pennsylvania-New Jersey topographic quadrangle; lat. 41 degrees 18 minutes 47.2 seconds N. and long. 74 degrees 47 minutes 20.2 seconds W.; NAD83.

Ap1—0 to 6 inches; dark brown (7.5YR 3/3) silt loam; weak fine subangular blocky structure parting to moderate fine granular; friable; many fine and medium roots; moderately acid (pH 5.6); clear wavy boundary.

Ap2—6 to 13 inches; dark brown (7.5YR 3/3) silt loam; common medium faint brown (7.5YR 4/3) worm channels; weak medium subangular blocky structure parting to moderate fine granular; friable; many fine and medium roots; moderately acid (pH 5.6); clear wavy boundary.

Bw1—13 to 23 inches; brown (7.5YR 4/3) silt loam; moderate medium subangular blocky structure; friable; common fine and medium roots; few fine distinct brown (7.5YR 4/3) clay films on surfaces along pores; many medium distinct strong brown (7.5YR 4/6) and common medium distinct dark brown (7.5YR 3/4) iron accumulations with clear boundaries in the matrix; moderately acid (pH 5.6); gradual wavy boundary.

Bw2—23 to 28 inches; brown (7.5YR 4/3) silt loam; moderate medium subangular blocky structure; friable; common fine and medium roots; few fine distinct brown (7.5YR 4/3) clay films on surfaces along pores; many medium faint brown (7.5YR 4/2) iron depletions with clear boundaries in the matrix; many medium distinct strong brown (7.5YR 4/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 5.6); gradual wavy boundary.

BC—28 to 50 inches; brown (7.5YR 4/2) silt loam; moderate medium subangular blocky structure; friable; common fine and medium roots; many medium distinct strong brown (7.5YR 4/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 5.6); gradual wavy boundary.

C1—50 to 59 inches; brown (7.5YR 4/2) silt loam; massive; friable; common medium distinct strong brown (7.5YR 4/6) iron accumulations with clear boundaries in the matrix; moderately acid (pH 5.8); gradual wavy boundary.

C2—59 to 72 inches; brown (7.5YR 4/2) silt loam; massive; friable; many coarse prominent yellowish red (5YR 4/6) iron accumulations with clear boundaries in the matrix; common medium and fine prominent black (10YR 2/1) manganese accumulations with clear boundaries in the matrix; moderately acid (pH 5.8).

Range in Characteristics

Thickness of solum: 20 to 50 inches

Depth to bedrock: Greater than 72 inches

Coarse fragments: 0 to 5 percent, by volume, in the A, Bw, and BC horizons; 0 to 35 percent, by volume, in the C horizon

Reaction: Extremely acid to strongly acid in the A, Bw, and BC horizons and strongly acid to slightly alkaline in the C horizon; except where lime has been applied

O horizon (where present):

Color—black or brown

Texture—slightly to highly decomposed plant material

Ap horizon:

Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 or 3

Texture (fine-earth fraction)—silt loam

Bw horizon:

Color—hue of 7.5YR to 5Y, value of 4 or 5, and chroma of 3 to 6

Texture (fine-earth fraction)—silt loam or very fine sandy loam

Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

BC horizon:

Color—hue of 7.5YR to 5Y, value of 4 or 5, and chroma of 2 to 6

Texture (fine-earth fraction)—silt loam or very fine sandy loam

Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

C horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 4
Texture (fine-earth fraction)—silt loam or very fine sandy loam
Redoximorphic features—iron depletions in shades of gray, iron concentrations in shades of brown or yellowish red, and manganese concentrations that are black

Udifluvents

Typical Pedon

Udifluvents, 0 to 3 percent slopes, occasionally flooded; Walpack Township, Sussex County, Delaware Water Gap National Recreation Area, Walpack Bend; 4,500 feet southwest of the intersection of County Route 615 and Old Mine Road, 1,400 feet south of Old Mine Road, in a wooded area on a terrace adjacent to the Delaware River; USGS Flatbrookville, New Jersey-Pennsylvania topographic quadrangle; lat. 41 degrees 5 minutes 38 seconds N. and long. 74 degrees 58 minutes 27 seconds W.; NAD27.

A—0 to 3 inches; dark yellowish brown (10YR 3/3) loamy sand; single grain; loose; strongly acid (pH 5.3); clear smooth boundary.
C1—3 to 16 inches; very dark gray (10YR 3/1) loamy sand; single grain; loose; strongly acid (pH 5.5); clear wavy boundary.
C2—16 to 22 inches; dark brown (10YR 3/3) sandy loam; massive; friable; strongly acid (pH 5.5); clear wavy boundary.
C3—22 to 27 inches; dark brown (10YR 3/3) sandy loam; massive; friable; common medium faint brown (10YR 4/3) iron depletions with clear boundaries in the matrix; strongly acid (pH 5.5); clear wavy boundary.
C4—27 to 32 inches; dark brown (10YR 3/3) sandy loam; massive; friable; strongly acid (pH 5.5); clear wavy boundary.
C5—32 to 50 inches; stratified 95 percent dark yellowish brown (10YR 3/4) loamy sand and 5 percent dark yellowish brown (10YR 3/4) fine sandy loam; massive; friable; common medium faint brown (10YR 4/3) iron depletions with clear boundaries in the matrix; strongly acid (pH 5.5).

Range in Characteristics

Thickness of solum: 6 to 30 inches
Depth to bedrock: Greater than 60 inches
Rock fragments: 0 to 35 percent, by volume
Reaction: Very strongly acid to moderately acid

O horizon (where present):
Color—black or dark brown
Texture—slightly to highly decomposed organic material

A horizon:
Color—hue of 7.5YR to 2.5Y, value of 2 to 4, and chroma of 1 to 6
Texture (fine-earth fraction)—loamy sand

C horizon:
Color—hue of 7.5YR to 5Y, value of 4 to 6, and chroma of 1 to 6
Texture (fine-earth fraction)—loamy sand or sandy loam; stratified in some pedons
Redoximorphic features—iron depletions in shades of gray and iron concentrations in shades of brown

Unadilla Series

Depth class: Very deep
Drainage class: Well drained

Permeability: Moderate in the surface layer and subsoil; moderately rapid or rapid in the substratum
Parent material: Postglacial coarse-silty alluvium
Landscape: River valleys
Landform: Inner terraces
Associated soils: Colonie and Delaware soils
Slope: 0 to 8 percent
Taxonomic classification: Coarse-silty, mixed, active, mesic Typic Dystrudepts

Typical Pedon

Unadilla silt loam, 0 to 3 percent slopes; Walpack Township, Sussex County, Delaware Water Gap National Recreational Area, Walpack Landing Field; 250 feet northeast of gravel entrance road, 200 feet west of Old Mine Road, in a crop field; USGS Lake Maskenozha topographic quadrangle; lat. 41 degrees 7 minutes 30.5 seconds N. and long. 74 degrees 56 minutes 38.5 seconds W.; NAD83.

Ap1—0 to 8 inches; dark brown (10YR 3/3) silt loam; moderate fine and medium granular structure; friable; common very fine and fine roots; neutral (pH 7.0); clear smooth boundary.
Ap2—8 to 14 inches; dark brown (10YR 4/3) silt loam; moderate medium granular structure; friable; common very fine and fine roots; neutral (pH 6.6); abrupt smooth boundary.
Bw—14 to 25 inches; dark yellowish brown (10YR 3/4) silt loam; weak medium subangular blocky structure; friable; common very fine roots; neutral (pH 6.6); gradual wavy boundary.
BC—25 to 39 inches; dark yellowish brown (10YR 4/4) silt loam; weak medium and coarse subangular blocky structure; friable; neutral (pH 6.6); gradual wavy boundary.
C—39 to 60 inches; dark yellowish brown (10YR 4/4) very fine sandy loam; massive; friable; slightly acid (pH 6.5).

Range in Characteristics

Thickness of solum: 20 to more than 50 inches
Depth to bedrock: Greater than 60 inches
Rock fragments: 0 to 5 percent, by volume, in the A, Bw, and BC horizons; 0 to 15 percent, by volume, in the C horizon
Reaction: Very strongly acid to neutral, except where lime has been applied

O horizon (where present):
Color—black or brown
Texture—slightly or moderately decomposed plant material

Ap horizon:
Color—hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 2 to 4
Texture (fine-earth fraction)—silt loam

Bw horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 6, and chroma of 4 to 8
Texture (fine-earth fraction)—silt loam to very fine sandy loam

BC horizon:
Color—hue of 7.5YR to 2.5Y, value of 3 to 5, and chroma of 4 to 6
Texture (fine-earth fraction)—silt loam to very fine sandy loam

C horizon:
Color—hue of 7.5YR to 5Y, value of 4 or 5, and chroma of 2 to 6

Texture (fine-earth fraction)—loamy very fine sand, very fine sandy loam, or silt loam to a depth of 40 inches; very fine sandy loam or fine sandy loam below a depth of 40 inches

Wallpack Series

Depth class: Very deep
Drainage class: Well drained
Permeability: Moderate or moderately rapid above the fragipan; moderately slow to very slow in the fragipan
Parent material: Coarse-loamy till derived from limestone, sandstone, and shale
Landscape: Till plains
Landform: Ridges
Associated components: Cambridge, Chadakoin, and Lordstown soils and rock outcrop
Slope: 0 to 35 percent
Taxonomic classification: Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs

Typical Pedon

Wallpack silt loam, 8 to 15 percent slopes; Walpack Township, Sussex County, Delaware Water Gap National Recreation Area; 2,300 feet northwest of Walpack Center, 200 feet southwest of intersection of old township roads, and 100 feet east of an old north-south township road, in an abandoned crop field; USGS Lake Maskenozha topographic quadrangle; lat. 41 degrees 9 minutes 39.5 seconds N. and long. 74 degrees 53 minutes 15.3 seconds W.; NAD83.

Ap1—0 to 3 inches; brown (10YR 4/3) silt loam; moderate fine and medium granular structure; friable; common fine and medium roots; 5 percent medium gravel (subangular shale and limestone); 5 percent medium gravel (subrounded shale and limestone); strongly acid (pH 5.3); abrupt smooth boundary.

Ap2—3 to 9 inches; dark yellowish brown (10YR 4/4) gravelly silt loam; moderate fine granular and subangular blocky structure; friable; common fine and medium roots; 10 percent coarse gravel (subangular shale and limestone); 5 percent medium gravel (subrounded shale and limestone); strongly acid (pH 5.3); abrupt smooth boundary.

Bt—9 to 16 inches; yellowish brown (10YR 5/6) gravelly silt loam; moderate medium subangular blocky structure; friable; few fine roots; common distinct discontinuous brown (7.5YR 4/4) clay films on rock fragments; 10 percent medium gravel (subangular shale and limestone); 10 percent medium gravel (subrounded shale and limestone); moderately acid (pH 5.8); clear wavy boundary.

Btx1—16 to 25 inches; dark yellowish brown (10YR 4/4) gravelly silt loam; moderate coarse prismatic structure parting to moderate medium subangular blocky and weak medium platy; very firm; brittle; common distinct patchy brown (7.5YR 4/4) clay films on rock fragments; many coarse prominent light brownish gray (2.5Y 6/2) iron depletions with clear boundaries between prisms; many coarse distinct yellowish brown (10YR 5/8) iron accumulations with clear boundaries on vertical faces of prisms; 20 percent fine gravel (subrounded shale and limestone); 5 percent medium gravel (subangular shale and limestone); slightly acid (pH 6.4); clear wavy boundary.

Btx2—25 to 65 inches; dark yellowish brown (10YR 4/4) very gravelly silt loam; strong very coarse prismatic structure parting to moderate medium subangular blocky and weak medium platy; very firm; brittle; common distinct patchy brown (7.5YR 4/4) clay films on rock fragments; common medium distinct light olive brown (2.5Y

5/4) iron accumulations with clear boundaries between prisms; common medium distinct strong brown (7.5YR 5/6) iron accumulations with clear boundaries on vertical faces of prisms; 20 percent coarse gravel (subangular shale and limestone); 20 percent fine gravel (subrounded shale and limestone); neutral (pH 7.0).

Range in Characteristics

Thickness of solum: 24 to more than 60 inches
Depth to fragipan: 12 to 36 inches
Depth to bedrock: Greater than 65 inches
Rock fragments: 5 to 25 percent, by volume, in the A or Ap, AB or BA, and Bt horizons and 15 to 45 percent, by volume, in the Btx and C horizons
Reaction: Strongly acid to slightly acid in the A or Ap, AB or BA, and Bt horizons and moderately acid to slightly alkaline in the Btx and C horizons; except where lime has been applied
Other: Some pedons have an A horizon that is thinner than that of the typical pedon and has colors and textures similar to those of the Ap horizon.

O horizon (where present):
Color—black
Texture—slightly or moderately decomposed plant material

Ap or A horizon:
Color—hue of 10YR, value from 3 to 5, and chroma of 1 to 4
Texture (fine-earth fraction)—silt loam

AB or BA horizon (where present):
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 to 6
Texture (fine-earth fraction)—sandy loam to silt loam

Bt horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 8
Texture (fine-earth fraction)—sandy loam to silt loam

Btx horizon:
Color—hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 6
Texture (fine-earth fraction)—sandy loam to silt loam
Redoximorphic features—iron depletions in shades of gray and iron accumulations in shades of brown

C horizon (where present):
Color—hue of 5Y to 7.5YR, value of 4 or 5, and chroma of 4 to 6
Texture (fine-earth fraction)—sandy loam to silt loam

Wellsboro Series

Depth class: Very deep
Drainage class: Moderately well drained
Permeability: Moderate above the fragipan; slow in the fragipan
Parent material: Coarse-loamy till derived from red shale and/or red sandstone and siltstone
Landscape: Mountains
Landform: Ground moraines
Associated soils: Lackawanna and Morris soils
Slope: 0 to 15 percent
Taxonomic classification: Coarse-loamy, mixed, active, mesic Typic Fragiudepts

Typical Pedon

Wellsboro silt loam, 0 to 8 percent slopes, extremely stony; Pahaquarry Township, Warren County, Delaware Water Gap National Recreation Area, Millbrook Village; 528 feet west of the intersection of Old Mine Road and County Route 602, about 200 feet north of Old Mine Road, in a wooded area at the toeslope of Kittatinny Mountain; USGS Flatbrookville topographic quadrangle; lat. 41 degrees 4 minutes 24 seconds N. and long. 74 degrees 57 minutes 40 seconds W.; NAD83.

Ap—0 to 8 inches; brown (10YR 4/3) silt loam; weak medium subangular blocky structure parting to moderate medium and fine granular; friable; common fine and medium and few coarse roots; 8 percent cobbles (red and gray subangular sandstone); 3 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.3); clear wavy boundary.

Bw1—8 to 15 inches; light reddish brown (5YR 6/3) cobbly silt loam; moderate medium subangular blocky structure; friable; common fine roots; common fine distinct reddish brown (5YR 5/4) iron accumulations with clear boundaries in the matrix; many medium prominent black (10YR 2/1) manganese accumulations in the matrix; 14 percent cobbles (red and gray subangular sandstone); 10 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.2); gradual wavy boundary.

Bw2—15 to 24 inches; light reddish brown (5YR 6/3) cobbly loam; moderate medium subangular blocky structure; friable; few fine roots; many medium prominent strong brown (7.5YR 5/6) iron accumulations with clear boundaries in the matrix; 14 percent cobbles (red and gray subangular sandstone); 10 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.2); gradual wavy boundary.

Bw3—24 to 29 inches; light brown (7.5YR 6/3) cobbly loam; moderate medium subangular blocky structure; friable; few fine roots; common medium faint pinkish gray (7.5YR 6/2) iron depletions with clear boundaries in the matrix; many medium distinct strong brown (7.5YR 5/6) and common medium distinct yellowish red (5YR 4/6) iron accumulations with clear boundaries in the matrix; 15 percent cobbles (red and gray subangular sandstone); 14 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.2); clear wavy boundary.

Bx1—29 to 37 inches; reddish brown (5YR 4/3) cobbly sandy loam; moderate very thick platy structure; firm; common vesicular pores; common distinct patchy reddish brown (5YR 4/3) clay films on rock fragments; 18 percent cobbles (red and gray subangular sandstone); 16 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.1); gradual wavy boundary.

Bx2—37 to 60 inches; 70 percent reddish brown (5YR 4/3) and 30 percent weak red (2.5YR 5/3) cobbly sandy loam; moderate very thick platy structure; firm; common vesicular pores; common distinct patchy reddish brown (5YR 4/3) clay films on rock fragments; common medium faint reddish brown (5YR 4/4) iron accumulations with clear boundaries in the matrix; common medium prominent black (10YR 2/1) manganese accumulations with sharp boundaries in the matrix; 18 percent cobbles (red and gray subangular sandstone); 16 percent coarse gravel (red and gray subangular sandstone); strongly acid (pH 5.1).

Range in Characteristics

Thickness of solum: 40 inches or more
Depth to fragipan: 17 to 36 inches
Depth to bedrock: Greater than 60 inches
Rock fragments: 10 to 40 percent, by volume, in the A, E, and Bw horizons; 15 to 45 percent, by volume, in the Bx horizon
Reaction: Extremely acid to strongly acid, except where lime has been applied

Other: Some pedons have an A horizon that is thinner than that of the typical pedon but has colors and textures similar to those of the Ap horizon.

O horizon (where present):
Color—black or brown
Texture—slightly or moderately decomposed plant material

Ap horizon
Color—hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 3
Texture (fine-earth fraction)—silt loam

E horizon (where present):
Color—hue of 5YR to 10YR, value of 3 to 6, and chroma of 2 or 3
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

Bw horizon:
Color—hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 3 to 6
Texture (fine-earth fraction)—loam or silt loam

Bx horizon:
Color—hue of 10R to 5YR, value of 3 to 5, and chroma of 2 to 4
Texture (fine-earth fraction)—sandy loam, loam, or silt loam
Redoximorphic features—iron depletions in shades of gray and iron accumulations in shades of red

Formation of the Soils

By Susan Burlew Southard, Natural Resources Conservation Service.

This section describes the factors of soil formation and the processes of horizon formation and relates them to the soils in Delaware Water Gap National Recreation Area, New Jersey and Pennsylvania.

Setting

The setting and geologic materials of the park are related to the parent materials and therefore to the types of soils in the park. The geographic setting, geologic materials, and earth-shaping processes of Delaware Water Gap National Recreation Area have contributed to the many types of soils found in the park. Understanding the soils of the park enhances understanding of the unique relationship between soils and the environment. Soil forming processes are influenced by rock type, topographic expression, surface properties, and hydrologic properties. Because soil formation influences soil properties and behaviors, an understanding of the processes of soil formation may help in the determination of best management practices.

The park encompasses 70,000 acres of land in New Jersey and Pennsylvania along the Delaware River, extending for 35 miles upstream from the Delaware Water Gap (fig. 4).

The crest of Kittatinny Mountain is observable at the gap and is the approximate eastern boundary of the park in New Jersey (fig. 5). The crest forms a long ridge that maintains a nearly level elevation between 1,400 and 1,600 feet for much of its extent from the southeastern boundary of the park northward to the New Jersey-New York border. Kittatinny Mountain has a core consisting of the highly erosion-resistant material from the Silurian Shawangunk Formation (USDA–NRCS, 2009). The high quartz content of the conglomerates and sandstones of the Shawangunk Formation ensures that the rock is resistant to both mechanical and chemical weathering and to erosion (Witte, 1997). Due to preferential erosion, Kittatinny Mountain has remained relatively unchanged as the surrounding landscape has continued to erode (fig. 6).

The Great Valley Region of New Jersey is east of Kittatinny Mountain. The carbonate rocks and shale of Cambrian and Ordovician age in the Great Valley Region are more easily weathered than the Shawangunk conglomerates. The Port Jervis Trough lies to the west along the Pennsylvania-New Jersey border. The Early and Middle Devonian rocks of the trough are also more easily eroded than the Shawangunk Formation. At Port Jervis, the Delaware River is deflected by Walpack Ridge and turns south along the trough. Walpack Ridge is comprised of hard limestone that was not broken off and worn down by glaciation. Past the point of deflection, the river follows the trough into the survey area. The trough forms the locally-named Minisink Valley. The trough (and valley) formed along the contact of steeply westward-dipping Devonian strata and the geologic formations of the Kittatinny Mountain to the east. The Minisink Valley area of the park has been buried by glaciofluvial deposits (Witte, 2012). Glaciofluvial deposits are stratified materials moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The Delaware River bends again at the end of the Walpack Ridge near Flatbrookville, in

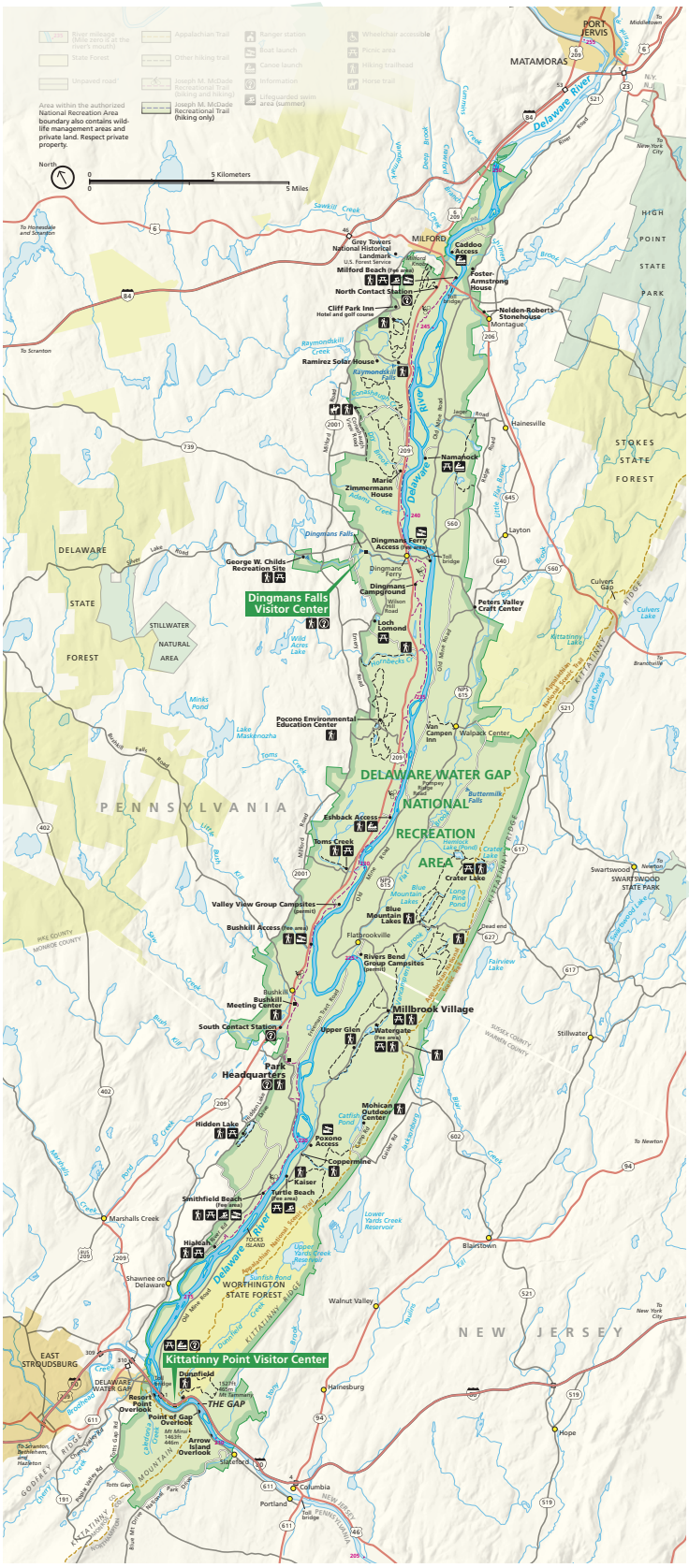

Figure 4.—Map of Delaware Water Gap National Recreation Area.

Figure 5.—The Delaware Water Gap in the distance as viewed from the New Jersey side of the river.

Figure 6.—The Kittatinny Mountain summit looking south across Culvers Gap. The map unit in this area is Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky. Note glacier-polished rock outcrop. The Arnot soil is shallow and associated with rock outcrop. The mountain provides some of the most spectacular views in the park (USDA–NRCS, 2009).

the approximate geographic center of Delaware Water Gap National Recreation Area. The entire park has been affected by glaciation.

Factors of Soil Formation

Soil covers the surface of the earth as a three-dimensional body of varying thickness and is made up of different proportions of organic and mineral material and pore space filled with gases and water. Soils differ in their appearance, productivity, and management requirements due to their chemical and physical properties. The characteristics and properties of soils are determined by physical and chemical processes that result from the interaction of five soil-forming factors. These factors of soil formation are interdependent, and few generalizations can be made regarding any one factor unless the effects of the other factors are known. The term “pedogenesis” is often used to refer to the processes of soil formation.

The interacting soil-forming factors are parent material, climate, organisms, time, and topography and relief (Jenny, 1941). Parent material is the source material (mineral or organic) in which soils formed. Soils are influenced by the texture and structure of the parent material and its mineralogical and chemical composition. The predominant aspects of climate that affect soil formation are temperature and kind and amount of precipitation. The seasonal distribution of temperature and precipitation also has an influence. Organisms include humans and the plants, animals, and microorganisms living in and on the soil. Time refers to how long the soil-forming factors have been operating on a particular landscape. Relief and topography refer to the elevation and shape of the landscape. They affect internal and external soil properties, such as drainage, aeration, susceptibility to erosion, and exposure to sun and wind.

The processes of soil formation are sequences of events, involving biogeochemical reactions that are energized by climate and spatially related to relief and topography (Buol and others, 2011). The physical and chemical properties of a soil are altered by these reactions over time.

The influence of each of the soil-forming factors varies. Soils may differ significantly from place to place in a park and within very short distances as a result of complex interaction among the five factors. In some instances, however, parks may have vast stretches of the same type of soil because of uniform soil-forming factors.

Parent Material

The unconsolidated mass in which soils form is called “parent material.” Mineral soils are a product of the weathering of underlying bedrock in place or the weathering of material that has been transported. Organic soils form in place from the accumulation and decomposition of plant material, such as wood, leaves, and aquatic plants. Weathering refers to the chemical and physical disintegration and decomposition of the parent material. Few soils weather entirely from the underlying rocks. More commonly, soils form in materials that have been transported from elsewhere. Soils generally have a dominant kind of parent material but are influenced by other types of parent material. Material that has been moved by gravity is called colluvial material. Material that has been moved by running water is called alluvial material. Lacustrine deposits are a type of parent material deposited by lakes and ponds. Soils are said to have residual parent material if they formed directly from underlying rocks or from an in situ plant source. Soils that formed in residuum may have the same general chemistry as the original rocks, depending on the degree of weathering that has occurred. Material that has been moved primarily by wind is called eolian material. Windblown sand is an example. Windblown loess, which has been blown for long distances, consists mainly of very fine sand and silt-size particles. Till and outwash are parent materials that were moved by glaciers and glacial waters.

Till

Till is soil parent material transported and deposited by glaciers. It consists dominantly of unsorted and unstratified material deposited directly by a glacier without subsequent reworking by meltwater. It is a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders. Till has rock fragments of various lithologies imbedded within a finer matrix (USDA–NRCS, 2008). The rock fragments generally are angular, but can also be subrounded or rounded. The composition of the till depends on the geology of the area over which the ice passed before the till was deposited. The till in turn affects soil properties, including kind and amount of rock fragments, color, texture, mineralogy, and pH. Figure 7 depicts a landscape near Millbrook Village, which is in the southern part of the park where red tills are found. Till deposits from the most recent Pleistocene glacier extend about 10 miles south of the Delaware Water Gap. Other glaciers of Early Pleistocene age also advanced into the park region.

Figure 7.—A rounded landscape in an area of Lackawanna and Wellsboro soils. Both soils are nearly level to steep. Slopes range from 0 to 55 percent. The soils formed on glaciated uplands in red till derived from sandstone, siltstone, and shale. Both soils have a fragipan.

Many types of till have served as parent materials for the soils in the park. The different till parent materials and landforms are listed in table 5 “Landscape, Landform, and Parent Material.”

Basal till is unconsolidated material of mixed composition deposited at the base (bottom) of a glacier. The Volusia soils in the park formed in basal till and tend to be finer than most of the other soils that formed in till. Ablation till is a general term for loose, relatively permeable, earthy material deposited during the downwasting of nearly static glacial ice, and is either contained within or accumulated on the surface of the glacier. Soils that formed from ablation till include Lackawanna, Morris, and Oquaga.

Different tills are on different landforms. The common tills in the park were deposited as till plains composed of either ground moraines or recessional moraines. A till plain is a broad landscape that forms when a sheet of ice melts in place and deposits the sediments it carried. It is an extensive, flat to gently undulating area underlain predominantly by till and bounded on the distal end by a recessional or end moraine. A ground moraine landform is commonly an extensive, low-relief area of till having an uneven or undulating surface and is commonly bounded on the distal end by a recessional or end moraine (USDA–NRCS, 2008). Soils that formed on ground moraines include Arnot, Lordstown, Swartswood, and Wurtsboro.

Till can be transported great distances by a glacier, or it can be of local origin. For example, the Wallpack soils are found only on the Walpack Ridge (fig. 8). These soils formed in till derived from the shale and limestone bedrock of the ridge's mixed rock types (USDA–NRCS, 2009).

Figure 8.—Hoosic and Hazen soil landscape in the foreground. These soils formed in glaciofluvial deposits on a landscape known as a "valley train." Walpack Ridge is to the right in the background. The ridge is covered by Wallpack soils, which are mantled with till. The ridge is erosion-resistant and exhibits higher elevation and steeper slopes than the glaciofluvial deposits. The ridge deflected the flow of the Delaware River to the southwest from a previous southeast direction.

Till-derived soils in the park include Arnot, Bath, Farmington, Galway, Lackawanna, Lordstown, Manlius, Morris, Nassau, Oquaga, Volusia, and Wellsboro. Arnot and Lordstown soils are predominately on Kittatinny Mountain. They formed in till derived from the red sandstone of the Upper Silurian Bloomsburg Red Beds and conglomerate of the Middle and Lower Silurian Shawangunk Formation (USDA–NRCS, 2009). Hillslopes composed of till typically have a distinctive margin with terrace soils as seen near the Town Creek picnic area in figure 9. Oquaga and Lackawanna soils are till-derived and are located together on ground moraines in the southeastern part of the park as illustrated in figure 10. Manlius and Nassau soils are mainly in the northern and western parts of the Kittatinny Valley. They formed in till derived from shale bedrock that underlies parts of the valley. Conversely, the Farmington, and Galway soils are in the eastern and south-central parts of the Kittatinny Valley. They formed in

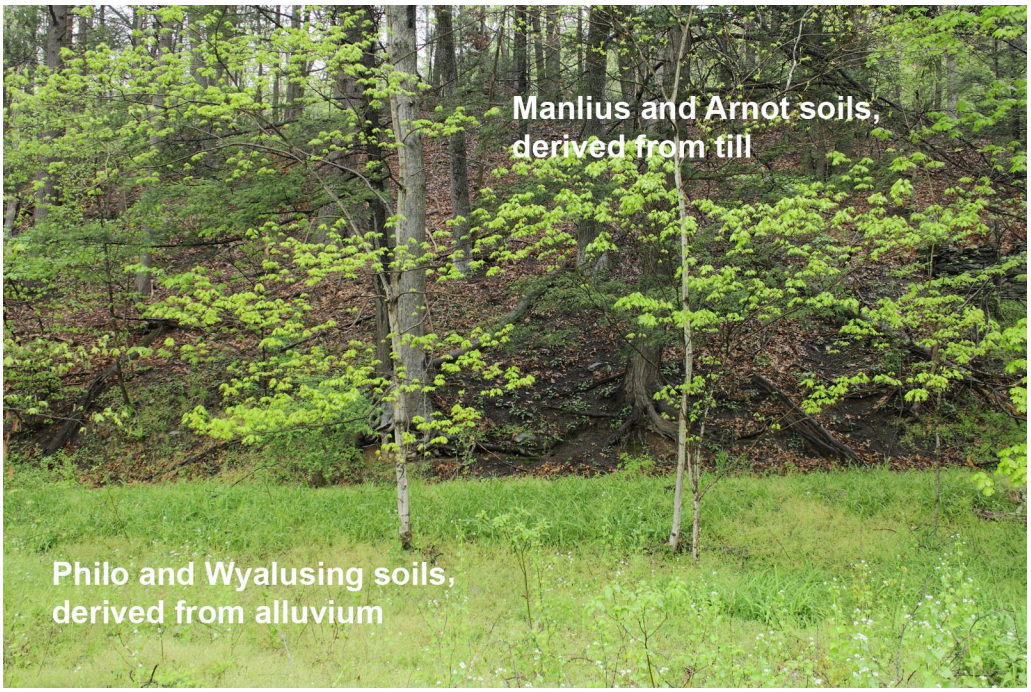

Figure 9.—Manlius and Arnot soils on a hillslope and Philo and Wyalusing soils on a terrace near the Town Creek picnic area.

Figure 10.—Oquaga and Lackawanna soils on ground moraines near the Karamac parking area. Oquaga soils have a high content of rock fragments. Lackawanna soils have a lower content of rock fragments.

till derived from the limestone and dolomite bedrock that underlies the valley. Dekalb and Weikert soils also formed in a combination of till and residuum, and Buchanan, Clymer, and Laidig soils formed in a combination of mostly till and colluvium (USDA–SCS, 1981).

Alluvium

Alluvium is material deposited by running water. Alluvium can have different textures, depending on the speed of the water. Slow-moving water deposits fine textured material (clay and silt) as the sediments in the water settle out. Fast-moving water deposits gravel, cobbles, and sand. The type of rocks in the source region for the streams and rivers determines some characteristics of the alluvium.

Postglacial alluvial deposits were laid down during the Pleistocene and Holocene Epochs of the Quaternary period as the glaciers retreated. The glacial and postglacial environments affected the morphology of the Delaware River Valley. Increased precipitation enhanced downcutting and erosion. Eroded materials were deposited by the river elsewhere. These alluvial deposits further weathered in place on river terraces to form some of the soils currently in the park.

At the beginning of glacial recession, the Delaware River was a braided stream fed by meltwater from the receding glaciers. The river became more linear after the glaciers fully retreated from the Upper Delaware Valley. During the river's development, alluvium was deposited as stream terraces on successive flood plains. Each flood plain was abandoned by the continual incising of the river into lower deposits and the lowering of the water level of the river (Witte, 1997). Colonie, Delaware, Phelps, Scio, and Unadilla soils formed from these postglacial alluvial deposits on terraces. Because of favorable characteristics, these soils have historically been used for agriculture as they are on elevated terraces that are not subject to frequent flooding. Most of the map units on high river terraces are prime farmland. Table 3 lists the map units that have favorable farmland classifications. Park-administered agricultural leases in the park are usually on the higher elevation river terraces (fig. 11).

Fluvaquents, Fluvents, Udifluvents, Barbour, Holly, Philo, Pope, Suncook, Wayland, and Wyalusing soils all formed in postglacial alluvium in the lower positions on flood plains and all have variable risks for flooding. The Pope soil is also found extensively on the major islands in the river. Table 19 lists the frequency and duration of flooding and ponding for the dominant soils in each map unit.

Craigsville and Wyoming soils are typically associated in nearly level or gently sloping positions along the major tributaries to the Delaware River. Craigsville soils formed in alluvium that washed from sandy and gravelly upland soils. Wyoming soils formed in a combination of alluvium and colluvium and are nearly level to very steep. Wyoming soils are on outwash terraces, moraines, kames, eskers, and valley trains. They formed in gravelly, water-sorted material derived from red and gray sandstone, siltstone, and shale. In the park, these soils are along Spackman's Creek, Tom's Creek, Hornbeck's Creek, Dingman's Creek, and Adam's Creek.

Figure 12 depicts some of the typical landscapes, parent materials, and soils in the park.

Outwash

Outwash (glaciofluvial) deposits are stratified and sorted sediments (chiefly sand and gravel) removed or "washed out" from a glacier by meltwater streams and deposited in front of or beyond the end moraine or margin of a glacier. The coarser material is deposited nearer to the ice and consists of rock or soil parent material transported and deposited by meltwater running off a receding glacier.

Certain landforms are associated with outwash, and certain soils are associated with these landforms. An outwash plain is an extensive lowland landscape consisting

Figure 11.—An area of Unadilla silt loam, 0 to 3 percent slopes, in the Delaware Valley. Areas of this soil are leased for corn production in some parts of the park. Unadilla soils formed in alluvium deposited by the Delaware River. The map unit is prime farmland. (USDA–NRCS, 2009).

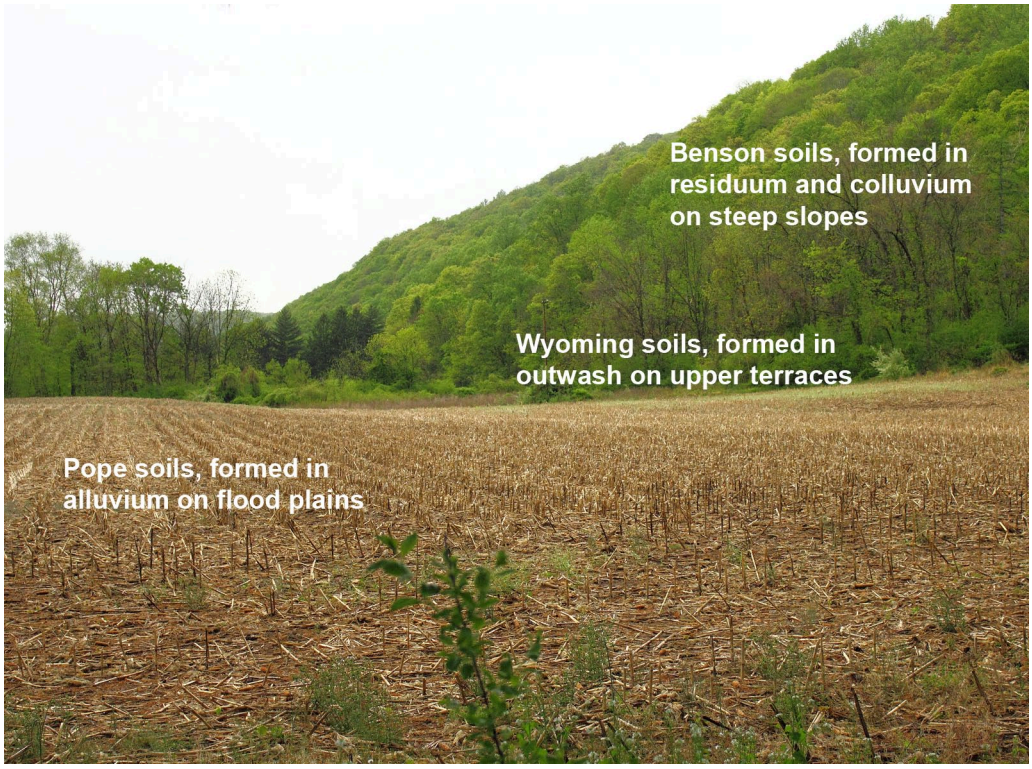

Figure 12.—An area north of Shawnee, Pennsylvania, depicting the relationships between soil, landscape, and parent material in the park.

of coarse textured, glaciofluvial material. An outwash plain commonly is smooth, generally has low relief, and largely retains its original gradient. A valley train is a long narrow body of outwash that was confined within a valley beyond a glacier. Soils on valley trains include Hazen, Hoosic, and Otisville (fig. 8).

Similarly to till, outwash can have a variety of particle sizes. However, like alluvial materials, the particle-size distribution of outwash depends upon the velocity of the meltwater carrying the sediment. In general, the higher the velocity of water, the larger the particle that the water can transport. Rock fragments in outwash are more commonly subrounded or rounded because they were tumbled and polished during transport. Soils that formed from outwash and till in this region of the country commonly have a high content of rocks.

The outwash deposits in the park were influenced by the source of the geologic materials being carried by water. Consequently, the geologic origin of the rock fragments in these outwash deposits can be more variable than the geologic origin of the rock fragments in till deposits. For example, although the Kittatinny Valley is underlain mainly by shale and limestone bedrock, the Fredon, Halsey, Hazen, Hoosic, and Otisville soils in the valley contain rock fragments consisting not just of limestone and shale but also of sandstone and conglomerate (USDA–NRCS, 2009). Other soils that formed in outwash in the park are Chenango and Braceville. Some soils in the park formed from a mix of outwash and alluvium. An example is the Sheffield taxadjunct.

Eolian Material

Some soils in the park have eolian parent materials due to the past glacial and periglacial environments. Periglacial refers to conditions, processes, and landforms expected or found in areas adjacent to glaciers. These glacial and periglacial environments were subject to strong directional winds, mostly blowing to the southeast. The Colonie soil is on terraces along the eastern side of the Delaware River. The soil formed in a mix of postglacial sandy alluvium and some fine-sandy material blown up from the active and ancestral river channels. Some areas of these soils have a hummocky and obvious sandy appearance. Figure 13 shows corn stubble buried under eolian sand deposits. Some of the Wallpack soils have a mantle of loess (high silt content) that was blown in and captured as a surface mantle on the soils. These mantled soils are on the west-facing slopes of Walpack Ridge where prevailing winds captured the silts.

Organic Residuum

Organic deposits in the park consist of accumulations of decomposed plant material in postglacial lakes and ponds and in depressions called “kettles.” Kettles are depressions that formed by the melt-out of incorporated ice blocks on outwash plains and till plains. Over time, these water-filled depressions filled with organic material derived from algae, sedges, rushes, and other water-tolerant plants. The plant residue accumulated because permanently wet conditions of the soils prevented oxidation and slowed decomposition.

The influence of organic residuum as a parent material is commonly a major factor in the development of highly carbon-sequestrating ecological niches in the park. Soils that formed in these swamps have the same dark brown and black colors as the decomposed hydrophilic plant material from which they formed. A wet marsh landscape of mucky peat is near the park headquarters west of Depew Island. Catden, Freetown, and Paupack soils are also derived from residual organic deposits.

The content of organic carbon and inorganic carbon for each soil in the park is shown in table 17. The Conotton soils are the only soils in the park that have a measurable content of soil inorganic carbon (SIC). This SIC is probably derived from limestone. Soil organic carbon (SOC) originates from a biological source, such as plants, animals, or microorganisms. It makes up about one-half the weight of the

Figure 13.—An area of Colonie loamy fine sand, 3 to 8 percent slopes, to the west of the Old Mine Road in New Jersey. Colonie soils are sandy. They formed in sandy alluvial material and windblown sand. The sand probably blew up from the ancestral Delaware River corridor during glacial and postglacial time.

organic matter in a soil. The term “soil organic carbon” refers only to the carbon in organic matter. Soil inorganic carbon is the carbon in soil carbonates, typically as calcium carbonate in layers or as clay-sized fractions throughout the soil. Carbonates in soils are most common in areas where evaporation rates exceed precipitation rates, as in most desert environments in the western United States. Generally, the carbonates in those dry areas accumulated from carbonatic dust or from carbonate-containing parent material.

The Freetown soil has the highest content of soil organic carbon of any soil in the park. Based on current data, a Freetown soil has 170 kilograms of soil organic carbon per square meter (to a depth of 2 meters). That equates to about 750 tons of stored carbon per acre of land where the map unit is 100 percent Freetown soil. The Freetown soil is very poorly drained. It is mapped on the divide between Adams Creek and Dry Brook directly south of Long Meadow Road where the road turns sharply to the west.

Processes by which carbon is withdrawn from the atmosphere and secluded in soil are called “carbon sequestration.” Atmospheric carbon dioxide (CO_2) and methane (CH_4) are greenhouse gases. Soil carbon sequestration transfers carbon dioxide from the atmosphere to the soil.

Humification is one process by which soil organic carbon becomes sequestered. Humification occurs when organic matter, such as leaves, wood, roots, and animals, is decomposed and converted to humic substances. Humic substances are broadly defined as products of organic matter decomposition that are relatively resistant to further microbial decomposition. Humic substances containing a high content of carbon can persist in the soil for thousands of years. Examples of humic substances are humic and fulvic acids and humins. Humification is common in depressions in the park.

Burial is also a process of carbon sequestration. Soil organic carbon can be buried in various ways. Burial of carbon-containing soil layers limits the exposure of the

carbon to the atmosphere and microbial degradation, thereby preserving organic carbon in the soil. Floods along the Delaware River episodically bury, cover, and preserve old soil surface horizons with new sediment. Landslides along the hillslopes can also bury soil organic carbon.

Erosion is a natural process that can also sequester carbon in soils. Removal of soil from one place often results in burial of soil in another place. Burial of soil horizons that contain soil organic matter sequesters that carbon in the soil.

Climate

Past and present climate variations have significantly affected soil-forming processes in the park. Climatic factors, such as precipitation and temperature, have influenced the existing plant and animal communities and the physical and chemical weathering of the parent material. Temperature and moisture influence soil formation and are the two most commonly measured features of climate. Weathering is most active when soils are moist and warm because these soil conditions are conducive to rapid chemical reactions and increased biological activity in the soil. Cooler temperatures result in slower chemical reactions. Although average temperatures and precipitation are important in determining soil properties, the extremes of climate also have a major role in soil formation at any specific locale.

Glaciers advanced over the park during the last ice age and obliterated the existing vegetation and soils. The cold temperatures most likely prohibited or significantly reduced the rate of chemical reactions in the rock and soil material. As the temperature slowly increased and glaciers started to recede, the deposition of till and glaciofluvial material began. After the ice retreated and the climate gradually warmed, deciduous forests eventually succeeded the preexisting vegetation. The warmer, humid climate increased the physical and chemical weathering of the parent material and the accumulation of organic matter. The formation and translocation of clay and the leaching of soluble compounds accelerated during this time.

During periods of rainfall or snowmelt, water carries dissolved or suspended solids through the soil in a process called “leaching.” The leaching process becomes active with the onset of rainfall or snowmelt. Variations in temperature and moisture cause variations in weathering and leaching in the soil. Seasonal and daily changes in temperature affect moisture effectiveness, biological activity, rates of chemical reactions, and kinds of vegetation.

The areas adjacent to glaciers, or periglacial areas, had intensified hillslope weathering during the ice ages (Means, 1995). The past periglacial environments in the park included discontinuous permafrost, tundra-like vegetation, and many freeze-thaw cycles due to proximity to the glacial environment. Freeze-and-thaw cycles led to ice-wedging of boulders and small rocks. During the day, water would melt and seep into soil and cracks. At night, the water would freeze, expand, and force the rocks apart. Movement of the rocks and soil created talus piles lower on the slopes. Large, water-saturated masses of rock and soil would slowly slide downward in lobes over frozen or partially frozen ground in a process known as solifluction.

Present-Day Climate

Currently, the soils in the park are usually moist (they have a udic soil moisture regime) and have a mesic soil temperature regime. Some soils in low-lying positions have an aquic (usually wet) soil moisture regime. Examples are Alden and Holly soils. The Alden soil is in depressions on till plains and has reduced iron due to the saturated environment. The Holly soil is in depressions on flood plains in backswamp positions (fig. 14). Reduced iron appears as grey material in the soil (fig. 15). Both soils are hydric (table 4). Some soils are seasonally wet because water movement within the profile is restricted by contrasting particle-size classes. The Fredon soils are an example. Tables 19 and 20 list distinguishing features of the soils.

Figure 14.—An area of Holly soil in a backswamp along the Delaware River. Holly soils are hydric.

Figure 15.—A profile of a Holly soil. Holly soils are very deep and very poorly drained. They are on flood plains. The depth to the water table fluctuates with seasonal flooding in the river. Depths on the tape are in centimeters. (USDA–NRCS and USDI–NPS, 2013)

Climate and Frost Heave

Many of the soils in the park have moderate or high susceptibility to frost heave. Frost heave is a natural pedogenic process that breaks up and mixes the surface of the soil. Table 20 categorizes the potential for frost heave as low, moderate, or high "Potential for frost action." The Chippewa, Freetown, Holly, Norwich, Shohola, Volusia, and Wellsboro soils in the park are rated as having a high potential for frost action. Many soils in the park have a dense layer, called a "fragipan," that supplies the source of water for frost heave above the pan.

Frost heave results from ice forming beneath the surface of soil during atmospheric freezing conditions. The ice grows in the direction of heat loss, which is vertically toward the surface, starting at the freezing boundary in the soil. Frost heave requires a water supply to keep feeding the growth of ice crystals. The growing ice is restrained by overlying soil, which applies a load that limits vertical growth and promotes the formation of lens-shaped areas of ice within the soil. Figure 16 illustrates the formation of ice lenses (Williamborg, 2009). The process of frost heave was more intense during glacial times than it is today.

Frost heave can result in potholes, cracked pavements, and cracked foundations. Table 9 indicates which map units and soils are limited as a site for roads and streets

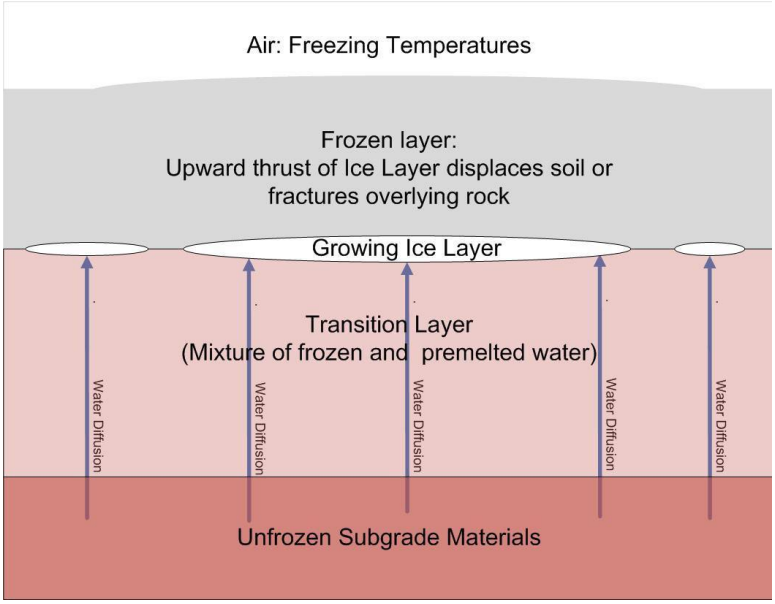

Figure 16.—Diagram illustrating formation of ice lenses that result in frost heave or frost action (Williamborg, 2009).

due to frost action. The limitation results in higher maintenance costs for roads and parking lots.

Present-day climate variations are the result of topography and relief. In most areas of the United States, temperature generally decreases with elevation and precipitation generally increases with elevation. As elevation increases, the amount of precipitation, the extent of leaching, and the amount of vegetation generally increase up to a point where decreasing temperatures reverse the trend. The colder temperatures result in less leaching because of decreased microbial growth, decreased vegetation, and possibly frozen soil. Fluctuations in temperature and moisture affect the rate at which organic matter is produced, decomposed, and accumulated and the rate at which minerals are weathered.

Some areas of the country have climates that make the areas susceptible to wildfires. Wildfires are less common in this park than in parks in the western United States but can occur during periods of drought. Wildfires can alter physical and chemical properties of the soil. Erosion can be accelerated by the loss of vegetation and ground cover. Slopes can be destabilized by increased runoff after fires.

Organisms

Plants, animals, microorganisms, and humans affect the formation and shape of soils. Plants capture solar energy via photosynthesis and transfer that energy to the soil, energy that is a fundamental driver of many soil processes. Fungi and bacteria are the primary organisms that decompose organic matter and add nutrients to the soil. Animals and microorganisms mix soils and form burrows and pores. Abandoned animal burrows commonly are filled with loose material from the overlying horizons and transmit water more readily than the surrounding undisturbed soil material. Microorganisms affect chemical exchanges between roots and soil. Bacteria, fungi, and many other microorganisms decompose organic matter and release nutrients to growing plants. They influence the formation of soil structure. Soil properties, such as drainage, temperature, and reaction, influence the type of microorganisms that live in the soil. Fungi are generally more active in the more acid soils, while bacteria are more active in the less acid soils.

Plant roots open channels in the soils. Different types of roots have different effects on soils. Grass roots are fibrous and decompose easily, adding organic matter to the soil. Fine grass roots can extend below the surface for many feet. Plant roots also help to develop soil structure and aggregate stability. Vegetation increases soil stability by protecting the surface against wind erosion and water erosion. Taproots open pathways through dense layers.

The vegetation under which a soil forms influences soil properties, such as color, structure, reaction, and content and distribution of organic matter. Vegetation extracts water from the soil, recycles nutrients, and adds organic matter to the soil. Gases derived from root respiration combine with water to form acids that influence the weathering of minerals. Soils that formed under forest vegetation generally have a lower content of organic matter than soils that formed under grasses. The forest soils are therefore generally lighter colored. The variety of soil types, the differences in exposure to the sun, and the variations in temperature and moisture create hundreds of microhabitats that support diverse communities of plants.

The large plants in the forested ecosystem in the park affect soil formation. Tree roots help break up rocks, resulting in channels that increase water penetration. The shallow Benson soil is associated with hard rock outcrop that is slowing being fractured by tree roots. Trees that are blown down help mix the soil when their roots are exposed. Trees capture energy and substance through photosynthesis, by the decomposition of plant residue, and by forming organic-mineral complexes that are recycled many times within the ecosystem (Buol and others, 2011).

The native vegetation depends on climate, topography, and biological factors plus soil factors, such as soil density, depth, chemistry, temperature, and moisture. The dominant coniferous tree in the park is eastern hemlock, which is the Pennsylvania State tree. Eastern hemlock is an important component of the forest canopy in stands covering approximately 2,800 acres (about 5 percent) of the park. The species thrives in damp, cool soils in shady microclimates and has shallow roots that are vulnerable to ground fires, erosion, drought, heavy snows, high winds, and human encroachment. Common deciduous trees in the park include white oak, red maple, and shagbark hickory. Forest communities of river birch are on wet soils along creeks, lakes, and the Delaware River. These trees help to minimize soil erosion along the banks of

waterways. A common shrub is mountain laurel, which is the Pennsylvania State flower and blooms in June. Mountain laurel thrives in the acidic soil of hemlock ravines.

Leaves from plants fall to the surface and decompose on the soil. Organisms decompose these leaves and mix them with the upper part of the soil, resulting in cycling of nutrients and energy back to vegetation. The leaf litter, both leaves and needles, helps prevent nutrient loss, conserves soil moisture, reduces raindrop impact, and limits frost penetration.

Human activities have significantly influenced soil formation in the park. Native forests have been cleared and developed for farming and other uses. Cultivation has accelerated erosion on sloping soils; wet soils have been drained; and manure, lime, chemical fertilizers, and pesticides have been applied in cultivated areas. Cultivation has changed soil structure, increased compaction, and lowered the content of organic matter. Figure 17 shows an area where cobbles from the soil surface have been stacked to build stone walls and to clear fields for agriculture. Agriculture plays an important role in managing the landscape of the park today. Nearly 3,000 acres are leased for agricultural production in the park. These leased lands provide food and shelter for wildlife and help preserve the rural character of the landscapes in the river valley. Corn, wheat, hay, and oats are the chief crops grown in the park. Without farming, the fields would quickly turn into forest. Farmed fields are part of the cultural landscape and depict the historical appearance of some areas of the park.

Time

Time is an important factor affecting soil formation. Over time, soils exhibit features that reflect the interaction of the other soil-forming factors. Recently deposited material, such as material deposited by a flood, does not exhibit features from soil development activities and has properties that are unchanged by soil formation. If the previous surface soil and underlying horizons become buried, the clock resets for formation of the soil. The different horizons in a soil profile and the degree of

Figure 17.—A rock wall built in an old field that has been cleared of cobbles by human activities near Millbrook Village.

development can be directly related to time. Terraces above an active flood plain, while similar in origin to the flood plain, are older land surfaces. The soils on the terraces therefore exhibit more horizon development than the soils on the flood plains. The least developed soils in the park formed in postglacial alluvium, which comprises the youngest geomorphic surfaces of river terraces and flood plains and includes the alluvium along the Delaware River. Fluvaquents, Udifluvents, and Atherton, Colonie, Delaware, Holly, Scio, Unadilla, and Wallkill soils are on this landscape. These soils tend to have weakly expressed horizons because the soil-forming processes are interrupted with each new deposition of fresh alluvium. Glaciers advanced over the area that is now the park and reached a maximum extent roughly 22,000 years ago. They then receded. The glacial deposits are geologically young, but enough time has elapsed for the initial parent material to weather into soils that have distinct horizons.

A model describing how time has acted as a soil forming factor and the resultant degree of horizonation in the soils in the park can be developed by looking at specific soils. The youngest soils in the park in terms of “soil age” are the Fluvents, Fluvaquents, Holly soils, and Udifluvents. These soils have minimal soil horizonation and different parent materials. All of these soils are on the flood plains at the lowest elevations, are subject to flooding, and are classified as Entisols, which are the least developed soils.

Next in terms of age are the soils in the higher positions on flood plains. They are more stable because they are rarely flooded, so they have had more stable soil-forming time to develop horizonation as compared to the Fluvents. These soils have a simple ABC profile. Craigsville, Delaware, Philo, Pope, and Wyoming soils are examples. The B horizon is a subsoil zone of accumulation of materials moved from O, A, or E horizons or of soil material formed in place. Most of these soils have been farmed and therefore do not have an O horizon. Color has an important part in distinguishing the B horizon, which is the horizon of maximum accumulation of dissolved or suspended materials, for example, iron, clay, or calcium carbonate. Not all soils have a B horizon. The B horizon in the soils in the higher positions on flood plains show some color change and weak structure. These soils are Inceptisols.

Next in terms of degree of development, or “age,” are the Brinkerton soils, which formed in colluvium derived from acid gray shale and siltstone. The nearly level to sloping Brinkerton soils are on concave footslopes and around heads of drainageways. These soils have ABC horizonation and have greater development than the Inceptisols mentioned above. The Brinkerton soils have stronger structure than the Inceptisols and have a zone of clay accumulation in the B horizon. The Brinkerton soils have moderately slow permeability in the upper part of the B horizon and slow permeability in the fragipan. The restricted permeability results in seasonal wetness in the soil. The Brinkerton soils are classified as Alfisols. Other soils that have translocated clay are Hazen, Phelps, Venango, and Wallpack soils.

Bedington, Buchanan, Clymer, Cookport, and Laidig soils are examples of the soils that could be considered the “oldest” in terms of soil profile development. They have different subsoil chemistry than the Alfisols due to leaching of cations. Alternatively, the parent material may have had fewer cations available to leach initially than the parent materials of the Alfisols. As mentioned earlier, the other soil forming factors influence how we perceive time of formation or soil age. Most of the soils in the park are Entisols, Inceptisols, or Histosols (organic soils). There are Alfisols and Ultisols of minor extent in the southern portion of the park, south of the Delaware Water Gap. These Alfisols and Ultisols are typically minor components of map units and are in landscape positions that may not have been glaciated. Because of the amount of time available and the weathering conditions, soils would not have developed to Ultisols or Alfisols since the last glaciation. It is significant that Ultisols and Alfisols are only south of the Delaware Water Gap. This suggests the degree of glaciation was less south of the gap, and some landscape positions may have been spared being scraped by the ice.

Although the exact origin or genesis of these older soils is difficult to determine, a couple scenarios may be proposed for the presence of Ultisols and Alfisols directly south of the Delaware Water Gap. This area is in the vicinity of the terminus of the Wisconsinan continental glacier that receded from the area approximately 22,000 years ago. The forces of glacial erosion were not as strong near the terminus of a glacier due to thinning of the ice sheet, which is the result of the ice melting as it advanced. Because of this reduction in erosive power, pre-existing soils in the area may not have been as affected by the glacier as the soils farther north. In some places, the pre-existing soils may have been completely unaffected. This may explain why residual soils, such as Bedington, Brinkerton, Clymer, and Cookport soils, are found in this part of the park—they were not destroyed or displaced by the glacier.

The colluvial Buchanan and Laidig soils are Ultisols. As with the residual soils, they may be pre-existing soils that were left partly or fully undisturbed due to their proximity to the terminus of the glacier. Alternately, they may be the result of the glacier reworking pre-existing soils that were not completely obliterated but instead were displaced and redistributed within short distances. These pre-existing soils would have possessed the physical and chemical properties that are more typical of Ultisols. These properties may have remained intact even after the soils were reworked by the glacier, resulting in the formation of Wisconsinan-age soils that have the physical and chemical properties of much older soils but are best described as Ultisols. As these pre-existing soils were locally displaced and redistributed, the parent material created by their disturbance may have had morphology consistent with soil material transported downslope by gravity. The soils, therefore, are considered colluvial deposits, even though the overall mechanism of their transport may have been local transport by the glacier.

Topography and Relief

Topography refers to the shape of the landscape, and relief refers to differences in elevation. The overall landscape of an area, including river terraces, rolling hills, and steep mountains, is the result of erosion and depositional processes. These processes may have occurred in response to changes in climate, fluctuating sea levels, and tectonic activities. Cyclic periods of landscape stability and instability influence the types of soils that form.

Relief influences soil formation mainly through its effect on runoff and erosion. It also influences soil temperature, plant cover, depth to a water table, and the accumulation and removal of organic matter. Water that runs off the more sloping soils can collect in depressions or drainageways. Because relief causes differences in external soil drainage, relief can differentiate soils that formed in the same kind of parent material. The Alden and Swartswood soils in the park illustrate this differentiation. These soils both formed in till derived from sandstone and conglomerate. The nearly level to steep Swartswood soils are well drained. They are on upland summits and side slopes where there is external drainage. The nearly level Alden soils are very poorly drained. They are in depressions and drainage ways that receive runoff from the upland areas.

Slope and aspect of the overall landscape can affect the moisture and temperature of the soil. Like a south-facing side of a house is warmer than a north-facing side, steep slopes facing the sun are warmer than more level soils facing other directions. Steep soils can erode and lose their surface horizons as they form. Thus, steeper soils may be thinner than more nearly level soils that receive deposits from areas upslope. Deeper, darker soils may be expected on the bottom land. Soil-forming factors continue to affect soils even on “stable” landscapes. Materials are deposited on their surface, and materials are blown or washed away from their surface. Additions, removals, and alterations can be slow or rapid, depending on climate, landscape position, and biological activity.

Relief varies greatly in the park. On the alluvial deposits in the Delaware Valley, the soils generally have broad, gentle slopes. Some areas along the river are nearly level. The glaciofluvial deposits in both the Upper Delaware Valley and the Kittatinny Valley also formed soils having broad, gentle slopes. Some steep slopes are present as well.

Relief is more pronounced on Walpack Ridge, on Kittatinny Mountain, and in some areas of shale and limestone in the Kittatinny Valley. The relief is affected by the bedrock-controlled topography and consists of steep side slopes and undulating summits. The differences in relief in the bedrock-controlled areas are due to differences in resistance to destruction by the glacier. Hard bedrocks, such as the conglomerate of the Shawangunk Formation that makes up Kittatinny Mountain, were not broken apart and carried away by the glacier (Witte, 1997). The glacier did, however, polish these bedrock types as it passed over. The resistance of the rock to glacial action left behind the prominent ridge of Kittatinny Mountain. Conversely, the shale and limestone in the Kittatinny Valley were less resistant to destruction, so the glacier gouged deep valleys into these types of bedrock. Some of the valleys were subsequently filled with glaciofluvial deposits as the melting glacier receded (Witte, 1997). In parts of the Kittatinny Valley where the bedrock was not broken off and carried away, the glacier left rounded knolls of shale bedrock and jagged outcroppings of limestone bedrock. This accounts for Walpack Ridge in the park.

The Pennsylvania side of the Delaware River has a steep escarpment running east of the Mosiers Knob Road. On the top of the escarpment are the shallow Benson soils, which are associated with rock outcrop, and the deeper Mardin soils, which have a fragipan. Lackawanna and Bath soils are along the sides of the escarpment, which grades down to Wyoming and Pope soils on terraces and flood plains. Udifluvents are on low-lying islands. The Pope soil is on the vegetated islands in the river that have greater relief and better drainage than the lower lying islands. Figure 18 illustrates typical relationships of soil and landscape in this area of the park.

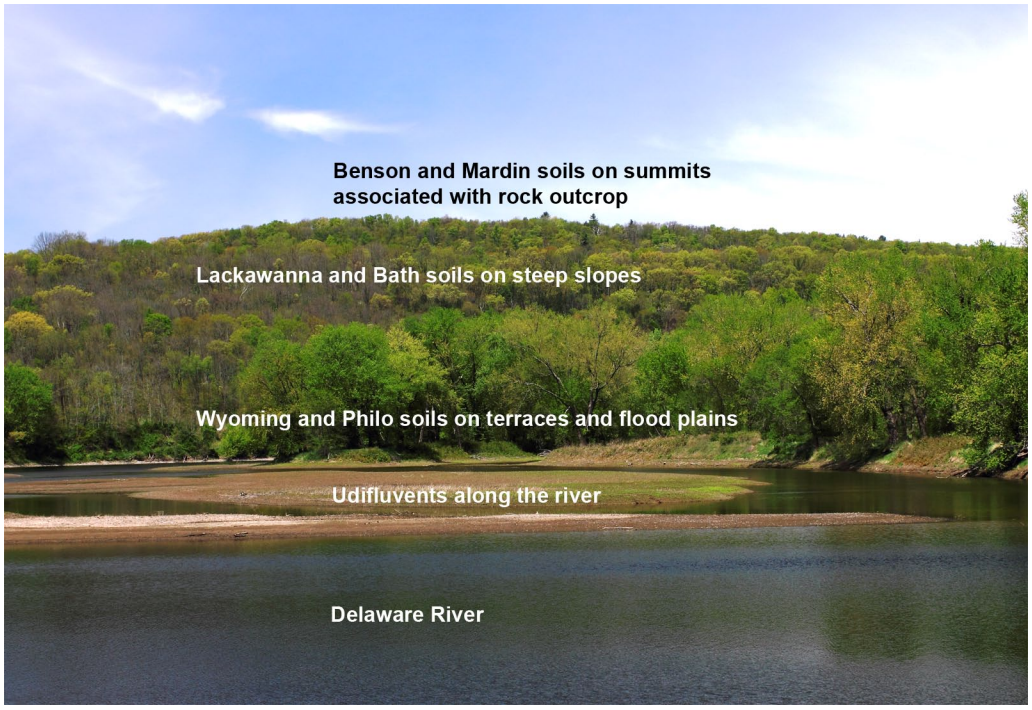

Figure 18.—Relationships of soils and landscape position on the Pennsylvania side of the Delaware River near the boat ramp on the Poxono River.

If left unvegetated, most of the soils in the park are affected by slope instability and high erosion rates. The geologic units underlying the slopes of the park contain a heterogeneous mix of shale, sandstone, siltstone, limestone, dolomite, conglomerate, and mudstone. Clay-rich units (e.g., shale and mudstone) may disintegrate when they become saturated and are prone to fail when exposed on a slope. Where more resistant rock units, such as conglomerates, sandstone, and limestone, are located above weaker units, undercutting occurs due to preferential erosion and can cause rock fall hazards. The Dekalb series is an example of soils that are moderately deep, well drained, and formed in residuum from interbedded shale and siltstone. These soils are on gently sloping to very steep, dissected mountain uplands.

Figures 19, 20, and 21 are stylized block diagrams of the typical soils and landscapes in the park. Some landscape positions and parent materials favor the development of certain profile characteristics or diagnostic horizons. Brinkerton, Clarksburg, Comly, Cookport, Readington, Venango, and Wallpack soils all have a dense horizon called a “fragipan.” Fragipans are common in this part of the northeastern United States. The fragipan has a low content of organic matter and a high bulk density in relation to other horizons above it. The fragipan restricts water movement through the soils. The effects of restricted water movement can be seen in soil profiles as grey colors. It is not known exactly how and why fragipans form, but some generalizations can be made about them. They show evidence of pedogenesis, usually as clay movement; they have a higher content of silt and/or very fine sand than geographically associated soils without fragipans; they occur at depths where the soil does not freeze; and they typically formed under forested vegetation (Soil Survey Staff, 1999). All soils that have a fragipan are named with “fragi” as part of their taxonomic classification (tables 21 and 22).

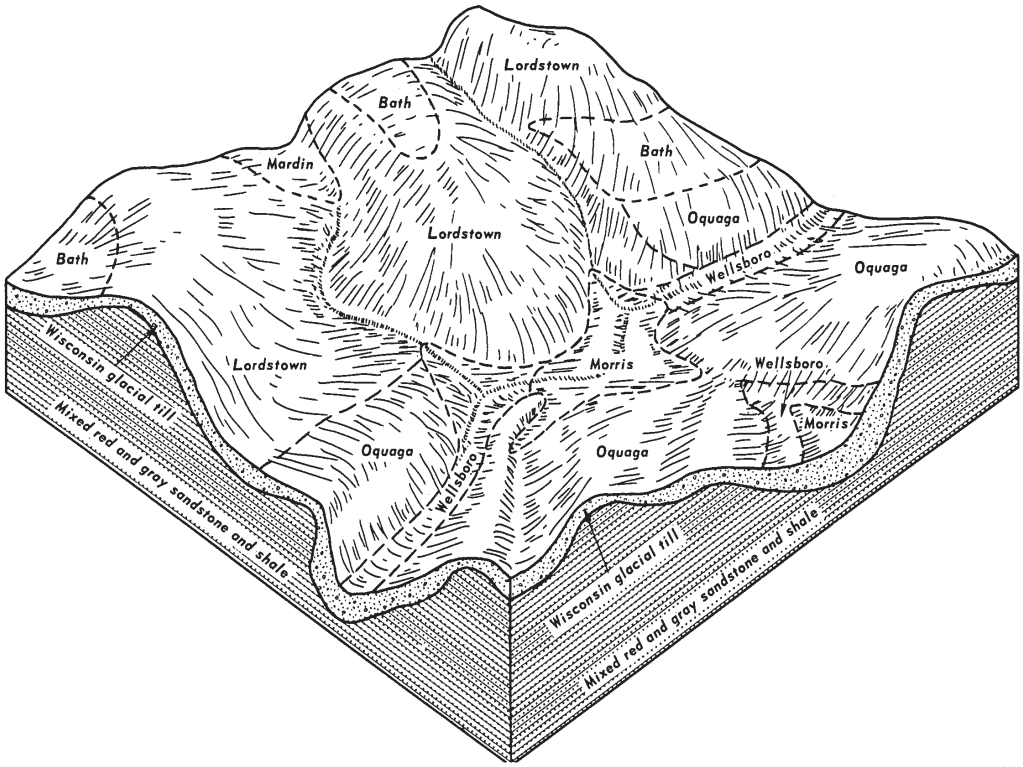

Figure 19.—Typical relationship of soils to parent material, underlying rock formations, and landscape position in the northern part of the park, east of the Delaware River. This diagram was originally published in the Soil Survey of Monroe County, Pennsylvania (USDA–SCS, 1981).

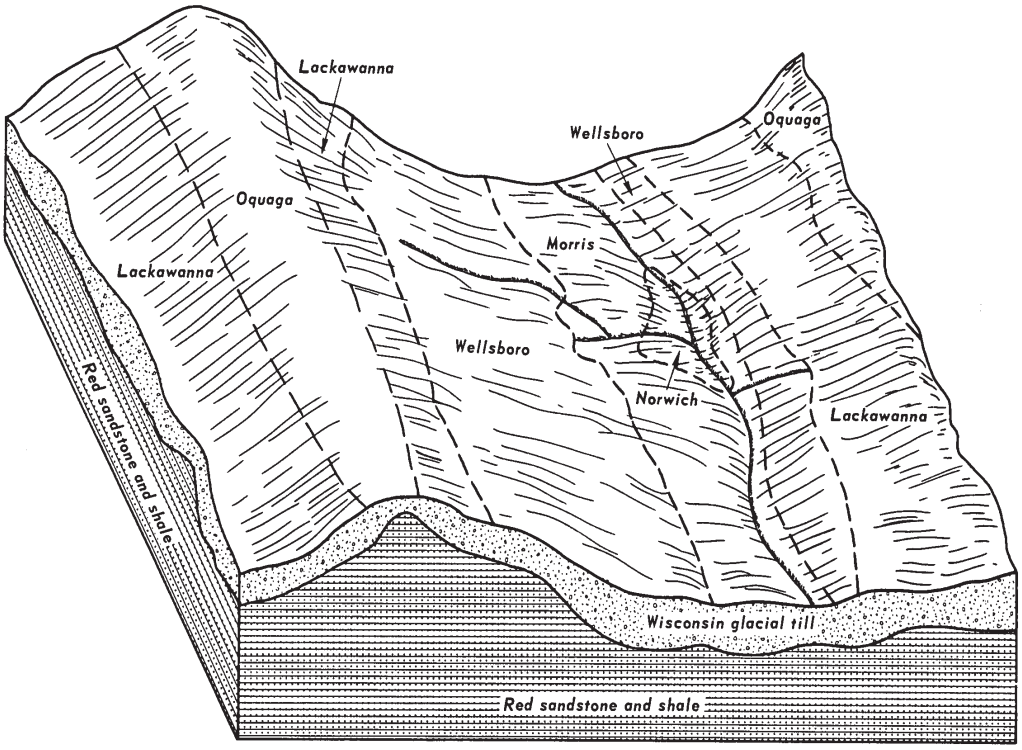

Figure 20.— Typical relationship of soils to parent material, underlying rock formations, and landscape position. The Norwich soils are of minor extent in the survey area. This diagram was originally published in the Soil Survey of Monroe County, Pennsylvania (USDA–SCS, 1981).

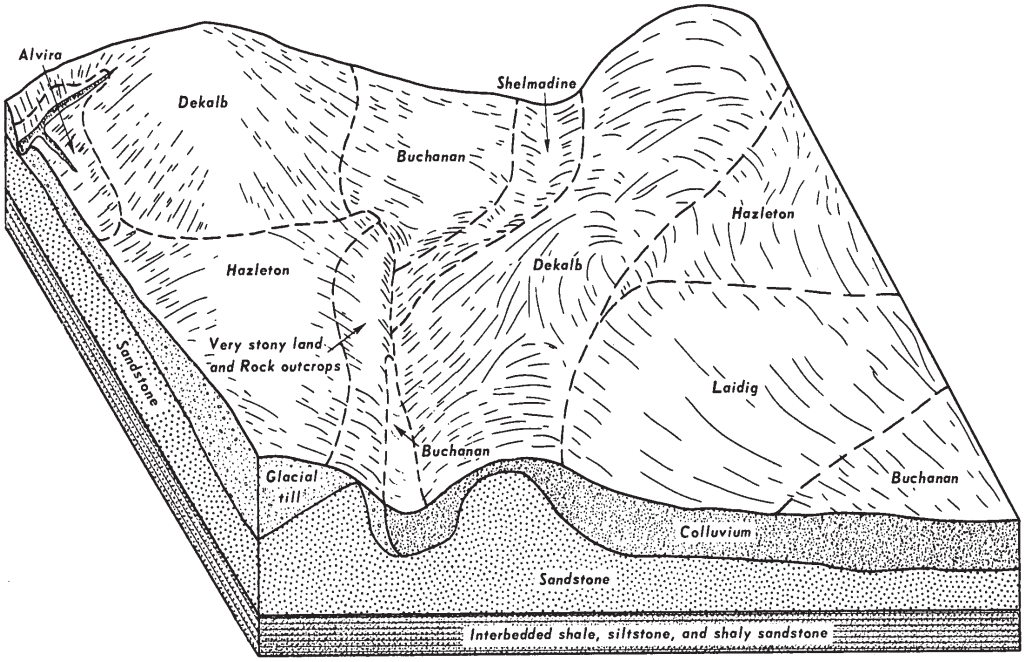

Figure 21.— Typical relationship of soils to parent material, underlying sandstone, and landscape position. This diagram is pertinent to park lands south of the Delaware Water Gap near Mt. Minsi. This diagram was originally published in the Soil Survey of Monroe County, Pennsylvania (USDA–SCS, 1981).

Processes of Soil Horizon Differentiation

The soil profile provides a record of the activities of the five soil-forming factors. It consists of a succession of layers, or horizons, extending from the surface down to the parent material. The horizons differ in one or more properties, for example, thickness, color, texture, structure, consistence, porosity, and reaction (pH).

Numerous processes of soil formation result in the development of soil horizons (Buol and others, 2011). In the park, some of the main processes are lessivage, enrichment, decomposition, synthesis, and leaching. Lessivage is the physical movement of small mineral particles from one area of the profile to another. An example is movement of small clay particles downward in the profile. Enrichment is the addition of material to soil, such as the addition of fine sand and silt to the surface of the Wallpack soils on Walpack Ridge or the addition of plant litter to the surface of forested soils, such as Swartswood soils. Decomposition is the breakdown of minerals or organic material to new, more stable materials. Synthesis is the formation of new minerals or organic materials. Leaching is the translocation of materials in solution from one horizon to another or their removal from the soil entirely.

Soil profiles commonly consist of up to six major horizons or layers, designated as O, A, E, B, and C horizons and R layers.

The O horizon consists of decomposing organic materials.

The A horizon is a mineral horizon that has a higher content of organic matter than that of the underlying horizons but less than that of the overlying O horizons. The A horizon may be the surface layer if there is no O horizon.

The E horizon is a zone of maximum leaching of materials that are usually lighter in color than horizons above or below. It typically occurs in wetter climates or wetter soil conditions on certain landscapes.

The B horizon is a subsoil zone of accumulation of materials moved from O, A, or E horizons or of soil material formed in place. It is the horizon of maximum accumulation of dissolved or suspended materials, for example, iron, clay, or calcium carbonate. Color has an important part in distinguishing B horizons. Not all soils have a B horizon.

The C horizon is typically in the bottom part of a soil profile and has properties similar to those of the parent material. It can be at the surface in undeveloped soils, such as dune soils. The C horizon is relatively unchanged by the soil-forming processes. The C horizon in the Delaware soils is an example.

The R layer is hard bedrock, but it may be fractured. In the park, an R layer underlies many of the soils. Chert or sandstone bedrock is common. The Oquaga soils, for example, have an R layer.

Pedogenesis in the Delaware soil

Delaware soils provide a good example to illustrate the factors of soil formation and the processes of soil horizonation, or “pedogenesis.” The type location for the Delaware series is in the park (page 392). Most of the acreage of Delaware soils is along the Delaware Valley river corridor. These soils formed in alluvium. They are mostly dark yellowish brown and are very deep. All five factors of soil formation can be identified in this soil as well as the soil-forming processes of lessivage, leaching, decomposition, enrichment, and synthesis.

Interactions of Soil-Forming Factors

Topography, parent material, and time.—Delaware soils are on level terraces along the river. Because they are in relatively stable positions, they do not erode like the soils on steep uplands. Over time, the Delaware soils have become very deep and have developed some horizon differentiation. They formed in alluvium from the surrounding, eroding hillslopes and inherited their texture from soils eroding from the nearby hillslopes. The upland soils developed from conglomerates and sandstone.

Soil material has been moved from one area to another (enrichment). The change in color and structure is due to the process of lessivage, the process of decomposition of primary minerals, and the subsequent synthesis of new soil minerals and stabilized organic materials. Primary minerals are the unweathered, original minerals that comprise a rock**.**

Topography, organisms, and climate.—Delaware soils have a surface A horizon that is darkened due to its high content of organic matter. Decomposition of roots, leaves, and stems by soil microbes results in a surface horizon that is enriched with newly synthesized soil organic matter. The high content of organic matter is due to the higher plant productivity of the soils as well as to the wetter soil microclimate conditions that reduce the rates of organic matter oxidation. Map units containing Delaware soils are classified as prime farmland.

Soil Horizonation

The typical pedon for the Delaware soil has an O horizon. In active farming areas, the O horizon is plowed and mixed into the A horizon. The A horizons in these soils have an accumulation of stable organic matter mixed with mineral soil material. The surface A horizons, as described by the soil scientists mapping the area, appear to have been plowed to a depth of 11 inches at some time in the past. The mixing of a soil is a soil-forming process called “pedoturbation.” The Delaware soils have two A subhorizons, both of which have been plowed. The plowing is indicated by the Ap designation in the typical pedon (page 393).

Below the Ap horizons, at about 11 inches below the surface, the Delaware soils have a B horizon. The B horizon extends to a depth 33 of inches. It formed due to lessivage resulting in change of soil structure.

Below the B horizon, at a depth of 33 to 41 inches, is a transitional BC horizon that displays more characteristics of the underlying parent material.

Below a depth of 41 inches, the Delaware soils have a C horizon that is relatively unaltered and closely related to the original glacial parent material.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

ABC soil. A soil having an A, a B, and a C horizon.

Ablation till. Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial fan. A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Aspect. The direction toward which a slope faces. Also called slope aspect.

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.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

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.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

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.

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 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

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 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

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. See Redoximorphic features.

Conglomerate. A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

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 and 40 or 80 inches.

Coprogenous earth (sedimentary peat). A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). 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.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Delta. A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diatomaceous earth. A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Drift. A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

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.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion surface. A land surface shaped by the action of erosion, especially by running water.

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. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Esker. A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

Fan remnant. A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

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 well preserved fiber that is 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 ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay. A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Foothills. A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

Footslope. The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

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.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

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.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded 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.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

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.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

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.

Hill. A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

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.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

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.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

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

Interdrumlin. Concave to relatively flat-bottomed, roughly linear depressions ranging from small saddles or swales to small valleys that separate drumlins or drumlinoid ridges in drumlin fields. Streams, if present, have not had a dominant impact on the formation of the depression.

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Kame. A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

Kame terrace. A terrace-like ridge consisting of stratified sand and gravel (a) deposited by a meltwater stream flowing between a melting glacier and a higher valley wall or lateral moraine and (b) left standing after the disappearance of the ice. It is commonly pitted with “kettles” and has an irregular ice-contact slope.

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.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward

deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

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. Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

Map unit. A map unit is a collection of areas defined and named the same in terms of their soil components or miscellaneous (nonsoil) areas or both. Each map unit differs in some respect from all others in a survey area, and each has a symbol that uniquely identifies the map unit on a soil map. Each individual polygon, point, or line so identified on the map is referred to as a delineation.

Map unit component. A distinct kind of soil, generally a phase of a taxonomic unit, or miscellaneous (nonsoil) area within a soil map unit. Components can be categorized as either major or minor. The names of major components are used to name the map unit. Each component of a map unit has a unique set of soil properties that differentiates it from other components within the same map unit. Each is assigned a designated range in proportionate extent (percent) within the map unit.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Meander belt. The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

Meander scar. A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

Meander scroll. One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Miscellaneous area. A kind of map unit 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. In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) 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. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nose slope (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

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. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Outwash. Stratified and sorted sediments (chiefly sand and gravel) removed or "washed out" from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

Outwash plain. An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Outwash terrace. A flat-topped bank of outwash with an abrupt outer face (scarp or riser) extending along a valley downstream from an outwash plain or terminal moraine; a valley train deposit.

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 meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

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:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

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 as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Red beds. Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

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.

Saturated hydraulic conductivity (K_{sat}). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Series, soil. A group of soils that have profiles that are almost alike. All the soils of a given series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

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 convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

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. An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

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.

Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

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 and by the passage 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.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

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 grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

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 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talf. A geomorphic component of flat plains (e.g., lake plain, low coastal plain, low gradient till plain) consisting of an essentially flat (0 or 1 percent slopes) and broad area dominated by closed depressions and a nonintegrated or poorly integrated drainage system. Precipitation tends to pond locally, and lateral transport is slow both above and below ground, favoring the accumulation of organic matter and the retention of fine-earth sediments. Better drained soils are commonly adjacent to drainageways.

Talus. Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

Terrace (conservation). 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 (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Till. Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Till plain. An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. 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.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Unstable excavation walls (in tables). The walls of excavations tend to cave in or slough.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation

than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley train. A long, narrow body of outwash confined within a valley beyond a glacier; it may emerge from the valley and join an outwash plain.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry 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.

Tables

Table 1.--Soil Legend

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
290836		
Hoosic-Otisville complex, 25 to 60 percent slopes, very stony	Hoosic, very stony	50
	Otisville, very stony	40
	Hazen, very stony	10
296265		
Alden mucky silt loam	Alden	100
296269		
Alluvial land	Fluvents, (alluvial land)	70
	Holly	20
296271		
Alvira and Watson very stony loams, 0 to 12 percent slopes	Alvira	55
	Watson	35
	Shelmadine	10
296272		
Bath channery silt loam, 3 to 8 percent slopes	Bath	85
	Lackawanna	5
	Mardin	5
296273		
Bath channery silt loam, 8 to 15 percent slopes	Bath	85
	Lackawanna	5
	Mardin	5
296274		
Bath channery silt loam, 15 to 25 percent slopes	Bath	85
	Lackawanna	5
	Mardin	5
296275		
Bath very stony silt loam, 0 to 8 percent slopes	Bath	90
296276		
Bath very stony silt loam, 8 to 25 percent slopes	Bath	90
296277		
Benson-Rock outcrop complex, 0 to 8 percent slopes	Benson	55
	Rock outcrop	15
296278		
Benson-Rock outcrop complex, 8 to 25 percent slopes	Benson	60
	Rock outcrop	20
296279		
Benson-Rock outcrop complex, 25 to 70 percent slopes	Benson	60
	Rock outcrop	25
296280		
Braceville gravelly loam, 0 to 3 percent slopes	Braceville	90
	Rexford, poorly drained	10
296281		
Braceville gravelly loam, 3 to 8 percent slopes	Braceville	90
	Rexford, poorly drained	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
296283		
Buchanan extremely stony loam, 0 to 8 percent slopes	Buchanan	90
	Shelmadine	5
296288		
Chippewa and Norwich silt loams, 0 to 5 percent slopes	Chippewa	48
	Norwich	48
296289		
Chippewa and Norwich extremely stony soils, 0 to 8 percent slopes	Chippewa	47
	Norwich	47
296295		
Cut and fill land	Udorthents, cut and fill	90
296297		
Dekalb extremely stony loam, 8 to 25 percent slopes	Dekalb	100
296298		
Dekalb extremely stony loam, 25 to 80 percent slopes	Dekalb	100
296303		
Hazleton extremely stony sandy loam, 8 to 25 percent slopes	Hazleton	100
296304		
Holly silt loam	Holly	100
296311		
Lackawanna and Bath extremely stony soils, steep	Lackawanna	40
	Bath	30
	Lordstown	5
	Mardin	5
	Oquaga	5
	Wellsboro	5
296312		
Lackawanna channery loam, 2 to 8 percent slopes	Lackawanna	80
	Bath	5
	Wellsboro	5
296313		
Lackawanna channery loam, 8 to 15 percent slopes	Lackawanna	80
	Bath	5
	Lackawanna	5
296315		
Lackawanna extremely stony loam, 0 to 8 percent slopes	Lackawanna	80
	Bath	5
	Wellsboro	5
296316		
Lackawanna extremely stony loam, 8 to 25 percent slopes	Lackawanna	80
	Bath	5
	Wellsboro	5
296317		
Laidig extremely stony loam, 0 to 8 percent slopes	Laidig	100
296326		
Lordstown extremely stony silt loam, 0 to 8 percent slopes	Lordstown	85
	Arnot	5
	Bath	5
	Oquaga	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
296327		
Lordstown extremely stony silt loam, 8 to 25 percent slopes	Lordstown	85
	Arnot	5
	Bath	5
	Oquaga	5
296328		
Lordstown and Oquaga extremely stony soils, 25 to 70 percent slopes	Lordstown	40
	Oquaga	35
296329		
Mardin channery silt loam, 2 to 8 percent slopes	Mardin	85
	Volusia	5
	Chippewa	3
	Bath	2
296330		
Mardin channery silt loam, 8 to 15 percent slopes	Mardin	85
	Volusia	5
	Bath	3
	Chippewa	2
296331		
Mardin very stony silt loam, 0 to 8 percent slopes	Mardin	85
	Lordstown	6
	Volusia	5
	Chippewa	4
296332		
Mardin very stony silt loam, 8 to 25 percent slopes	Mardin	87
	Lordstown	8
	Volusia	3
	Chippewa	1
296335		
Meckesville gravelly loam, 8 to 15 percent slopes	Meckesville	100
296337		
Meckesville very stony loam, 8 to 25 percent slopes	Meckesville	100
296338		
Morris channery silt loam, 2 to 10 percent slopes	Morris	80
	Norwich	20
296339		
Morris extremely stony silt loam, 0 to 8 percent slopes	Morris	75
	Norwich	25
296340		
Morris extremely stony silt loam, 8 to 20 percent slopes	Morris	80
	Norwich	20
296341		
Mucky peat, deep	Freetown, mucky peat	100
296342		
Mucky peat, shallow	Paupack, mucky peat (shallow)	100
296343		
Oquaga-Lackawanna channery loams, 3 to 8 percent slopes	Oquaga	50
	Lackawanna	35

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
296344		
Oquaga-Lackawanna channery loams, 8 to 15 percent slopes	Oquaga	55
	Lackawanna	30
296346		
Oquaga-Lackawanna extremely stony loams, 0 to 8 percent slopes	Oquaga	50
	Lackawanna	35
296347		
Oquaga-Lackawanna extremely stony loams, 8 to 25 percent slopes	Oquaga	60
	Lackawanna	30
296348		
Philo silt loam	Philo	85
	Holly	10
296349		
Pope silt loam	Pope	90
	Holly	8
296350		
Pope silt loam, high bottom	Pope	90
	Holly	10
296351		
Rexford gravelly silt loam, 0 to 3 percent slopes	Rexford, somewhat poorly drained	40
	Rexford, poorly drained	35
296355		
Sheffield silt loam	Sheffield	100
296363		
Very stony land and Rock outcrops, steep	Dystrochrepts, very stony	85
296369		
Wayland silty clay loam	Wayland	100
296376		
Wellsboro channery loam, 3 to 8 percent slopes	Wellsboro	80
	Morris	8
	Norwich	8
	Lackawanna	4
296379		
Wellsboro extremely stony loam, 8 to 25 percent slopes	Wellsboro	85
	Lackawanna	8
	Norwich	3
	Morris	2
296385		
Wyoming gravelly sandy loam, 0 to 3 percent slopes	Wyoming	85
	Braceville	5
	Unadilla	5
296386		
Wyoming gravelly sandy loam, 3 to 8 percent slopes	Wyoming	85
	Braceville	5
	Unadilla	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
296387		
Wyoming gravelly sandy loam, 8 to 15 percent slopes	Wyoming	85
	Braceville	7
	Unadilla	5
296388		
Wyoming gravelly sandy loam, 15 to 25 percent slopes	Wyoming	85
	Unadilla	5
296389		
Wyoming gravelly sandy loam, 25 to 70 percent slopes	Wyoming	100
296390		
Water	Water	100
297185		
Edgemere-Shohola complex, 3 to 15 percent slopes, very rubbly	Edgemere	42
	Shohola	42
	Mardin	11
	Freetown	5
297186		
Edgemere extremely stony loam, 0 to 3 percent slopes, very rubbly	Edgemere	75
	Shohola	10
	Mardin	7
	Freetown	4
	Wyalusing	4
297188		
Manlius-Arnot-Rock outcrop complex, 15 to 30 percent slopes, rubbly	Manlius	40
	Arnot	35
	Rock outcrop	15
	Mardin	6
	Rubble land	4
297189		
Manlius-Arnot-Rock outcrop complex, 30 to 80 percent slopes, rubbly	Manlius	40
	Arnot	35
	Rock outcrop	15
	Mardin	6
	Rubble land	4
297190		
Braceville fine sandy loam	Braceville	82
	Wyoming	9
	Chenango	6
	Rexford, poorly drained	3
297191		
Wyalusing fine sandy loam	Wyalusing	85
	Barbour	7
	Craigsville	6
	Pope	2
297192		
Pope fine sandy loam	Pope	95
	Wyalusing	5
297193		
Paupack mucky peat	Paupack	90
	Edgemere	8
	Kimbles	2

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
297196		
Freetown mucky peat	Freetown	94
	Gleneyre	6
297197		
Manlius very channery silt loam, 3 to 8 percent slopes, very bouldery	Manlius	90
	Mardin	7
	Edgemere	3
297198		
Manlius very channery silt loam, 8 to 15 percent slopes, very bouldery	Manlius	86
	Mardin	10
	Edgemere	2
	Rock outcrop	2
297201		
Oquaga very stony loam, 15 to 30 percent slopes, extremely bouldery	Oquaga	75
	Wellsboro	7
	Rock outcrop	6
	Lackawanna	5
	Shohola	2
297203		
Delaware fine sandy loam, 0 to 3 percent slopes	Delaware	93
	Pope	4
	Chenango	2
	Barbour	1
297204		
Delaware fine sandy loam, 3 to 8 percent slopes	Delaware	82
	Chenango	9
	Pope	6
	Barbour	3
297205		
Delaware fine sandy loam, 8 to 20 percent slopes	Delaware	80
	Pope	8
	Barbour	7
	Chenango	5
297209		
Philo loam	Philo	85
	Barbour	8
	Chenango	2
	Wyalusing	2
297210		
Barbour fine sandy loam	Barbour	85
	Pope	7
	Philo	4
	Delaware	3
297216		
Wurtsboro stony fine sandy loam, 0 to 8 percent slopes, extremely stony	Wurtsboro	92
	Edgemere	3
	Shohola	3
	Oquaga	2
297217		
Wurtsboro stony fine sandy loam, 8 to 15 percent slopes, extremely stony	Wurtsboro	88
	Oquaga	6
	Rock outcrop	4
	Edgemere	1
	Shohola	1

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
297227		
Arnot very channery loam, 3 to 15 percent slopes, very rocky	Arnot	88
	Rock outcrop	6
	Mardin	4
	Lackawanna	1
297228		
Arnot very channery loam, 15 to 35 percent slopes, very rocky	Arnot	85
	Rock outcrop	8
	Mardin	5
	Swartswood	2
297229		
Wyoming very cobbly sandy loam, 3 to 8 percent slopes	Wyoming	90
	Delaware	6
	Braceville	2
	Suncook	2
297230		
Wyoming very cobbly sandy loam, 8 to 15 percent slopes	Wyoming	90
	Delaware	6
	Braceville	2
	Suncook	2
297231		
Wyoming very cobbly sandy loam, 15 to 30 percent slopes	Wyoming	90
	Suncook	6
	Delaware	3
	Braceville	1
297236		
Suncook loamy sand, 0 to 8 percent slopes	Suncook	91
	Wyalusing	4
297237		
Mardin channery silt loam, 0 to 8 percent slopes, stony	Mardin	85
	Manlius	5
	Oquaga	5
	Edgemere	3
	Shohola	2
297238		
Mardin channery silt loam, 8 to 15 percent slopes, stony	Mardin	85
	Manlius	5
	Oquaga	5
	Edgemere	3
	Shohola	2
297239		
Mardin stony loam, 0 to 8 percent slopes, extremely stony	Mardin	85
	Manlius	5
	Oquaga	5
	Edgemere	3
	Shohola	2
297240		
Mardin stony loam, 8 to 15 percent slopes, extremely stony	Mardin	85
	Manlius	5
	Oquaga	4
	Edgemere	3
	Shohola	2

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
297241		
Unadilla silt loam	Unadilla	90
	Braceville	6
	Suncook	4
297242		
Shohola-Edgemere complex, 0 to 8 percent slopes, very rubbly	Shohola	62
	Edgemere	29
	Mardin	9
297243		
Shohola-Edgemere complex, 8 to 15 percent slopes, very rubbly	Shohola	62
	Edgemere	29
	Mardin	9
297244		
Lordstown-Swartswood complex, 0 to 8 percent slopes, extremely stony	Lordstown	40
	Swartswood	35
	Arnot	10
	Rock outcrop	10
	Shohola	5
297247		
Chenango gravelly fine sandy loam, 0 to 8 percent slopes	Chenango	86
	Delaware	7
	Braceville	3
	Philo	2
	Unadilla	2
297248		
Chenango gravelly fine sandy loam, 8 to 15 percent slopes	Chenango	85
	Delaware	9
	Unadilla	6
297249		
Chenango gravelly fine sandy loam, 15 to 25 percent slopes	Chenango	90
	Delaware	8
	Unadilla	2
297253		
Craigsville-Wyoming complex, 0 to 8 percent slopes, extremely stony	Craigsville	50
	Wyoming	40
	Wyalusing	6
	Philo	2
	Pope	2
297254		
Pits, shale, and gravel	Pits, gravel	40
	Pits, shale	40
298049		
Wurtsboro loam, 0 to 8 percent slopes, extremely stony	Wurtsboro, extremely stony	90
	Swartswood, extremely stony	10
298050		
Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony	Wurtsboro, extremely stony	60
	Swartswood, extremely stony	40

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
298051		
Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony	Wurtsboro, extremely stony	60
	Swartswood, extremely stony	40
298075		
Colonie loamy fine sand, 3 to 8 percent slopes	Colonie	80
	Delaware	10
	Unadilla	10
298188		
Lackawanna cobbly fine sandy loam, 15 to 35 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5
298189		
Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5
298221		
Swartswood loam, 0 to 8 percent slopes, extremely stony	Swartswood, extremely stony	90
	Wurtsboro, extremely stony	10
298222		
Swartswood loam, 8 to 15 percent slopes, extremely stony	Swartswood, extremely stony	90
	Wurtsboro, extremely stony	10
298223		
Swartswood loam, 15 to 35 percent slopes, extremely stony	Swartswood, extremely stony	85
	Arnot, extremely stony	10
	Lordstown, extremely stony	5
298255		
Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	Delaware, rarely flooded	80
	Colonie	10
	Unadilla	10
298256		
Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	Delaware, rarely flooded	80
	Colonie	10
	Unadilla	10

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
298257		
Wallpack silt loam, 8 to 15 percent slopes	Wallpack	85
	Cambridge	10
	Lordstown	5
298258		
Wallpack silt loam, 15 to 25 percent slopes	Wallpack	85
	Cambridge	10
	Lordstown	5
298259		
Wallpack silt loam, 3 to 8 percent slopes, extremely stony	Wallpack, extremely stony	85
	Cambridge, extremely stony	10
	Lordstown, extremely stony	5
298260		
Wallpack silt loam, 8 to 15 percent slopes, extremely stony	Wallpack, extremely stony	85
	Cambridge, extremely stony	10
	Lordstown, extremely stony	5
298261		
Wallpack silt loam, 3 to 8 percent slopes	Wallpack	85
	Cambridge	10
	Lordstown	5
298262		
Wallpack silt loam, 15 to 35 percent slopes, extremely stony	Wallpack, extremely stony	85
	Cambridge, extremely stony	10
	Lordstown, extremely stony	5
298265		
Venango silt loam, 0 to 8 percent slopes, extremely stony	Venango, extremely stony	90
	Chippewa, extremely stony	10
298266		
Venango silt loam, 8 to 15 percent slopes, extremely stony	Venango, extremely stony	85
	Nassau, extremely stony	10
	Manlius, extremely stony	5
298409		
Swartswood loam, 0 to 8 percent slopes, extremely stony	Swartswood, extremely stony	90
	Wurtsboro, extremely stony	10
298411		
Swartswood loam, 8 to 15 percent slopes, extremely stony	Swartswood, extremely stony	90
	Wurtsboro, extremely stony	10

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
298413		
Swartswood loam, 15 to 35 percent slopes, extremely stony	Swartswood, extremely stony	85
	Arnot, extremely stony	10
	Lordstown, extremely stony	5
318498		
Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	Hazen, very stony	60
	Hoosic, very stony	35
	Otisville, very stony	5
318533		
Hazen-Hoosic complex, 0 to 3 percent slopes, very stony	Hazen, very stony	50
	Hoosic, very stony	40
	Hero, very stony	10
319783		
Catden mucky peat, 0 to 2 percent slopes	Catden	85
	Alden	13
	Wallkill	2
319784		
Fredon-Halsey complex, 0 to 3 percent slopes, very stony	Fredon, very stony	50
	Halsey, very stony	40
	Hero, very stony	10
543222		
Andover-Buchanan gravelly loams, 0 to 8 percent slopes, extremely stony	Andover, extremely stony	55
	Buchanan, extremely stony	40
	Laidig	3
	Hazleton	2
543243		
Berks-Weikert complex, 25 to 60 percent slopes	Berks	65
	Weikert	25
	Bedington	4
	Comly	3
	Brinkerton	2
543246		
Buchanan gravelly loam, 3 to 8 percent slopes	Buchanan	75
	Andover	10
	Wharton	10
	Laidig	5
543247		
Buchanan gravelly loam, 0 to 8 percent slopes, extremely stony	Buchanan, extremely stony	80
	Andover, extremely stony	5
	Cookport	5
	Laidig	5
	Murrill	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
543257		
Chippewa silt loam, 0 to 3 percent slopes	Chippewa	90
	Swartswood	5
	Wurtsboro	5
543258		
Chippewa silt loam, 3 to 8 percent slopes	Chippewa	90
	Swartswood	5
	Wurtsboro	5
543259		
Chippewa gravelly silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	90
	Swartswood	5
	Wurtsboro	5
543271		
Delaware fine sandy loam, 0 to 3 percent slopes	Delaware	90
	Alton	5
	Conotton	2
	Hatboro	1
	Nanticoke	1
543276		
Fluvaquents	Fluvaquents	85
	Towhee	5
	Mount Lucas	1
	Nanticoke	1
	Neshaminy	1
543292		
Hazleton very channery loam, 8 to 25 percent slopes, extremely stony	Hazleton, extremely stony	90
	Buchanan	5
543293		
Hazleton very channery loam, 25 to 60 percent slopes, extremely stony	Hazleton, extremely stony	90
	Buchanan	5
543299		
Laidig very gravelly loam, 0 to 8 percent slopes, extremely stony	Laidig, extremely stony	90
	Andover	4
	Buchanan	4
	Hazleton	2
543300		
Laidig very gravelly loam, 8 to 25 percent slopes, extremely stony	Laidig, extremely stony	90
	Andover, extremely stony	4
	Buchanan	4
	Hazleton	2
543304		
Laidig-Rubble land complex, 25 to 60 percent slopes	Laidig	50
	Rubble land	40
	Andover	5
	Buchanan	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
543318		
Rubble land	Rubble land	75
	Hazleton	10
	Buchanan	5
	Clymer	5
	Laidig	5
543327		
Swartswood gravelly loam, 3 to 8 percent slopes	Swartswood	90
	Conotton	4
	Chippewa	3
	Manlius	3
543328		
Swartswood gravelly loam, 8 to 15 percent slopes	Swartswood	90
	Conotton	4
	Chippewa	3
	Manlius	3
543330		
Swartswood and Wurtsboro soils, 0 to 8 percent slopes, extremely stony	Swartswood, extremely stony	50
	Wurtsboro, extremely stony	30
	Conotton	4
	Manlius	4
	Chippewa, extremely stony	3
543331		
Swartswood and Wurtsboro soils, 8 to 25 percent slopes, extremely stony	Swartswood, extremely stony	50
	Wurtsboro, extremely stony	30
	Conotton	4
	Chippewa, extremely stony	3
543359		
Volusia gravelly silt loam, 3 to 8 percent slopes	Volusia	85
	Chippewa	10
	Swartswood	5
543360		
Volusia gravelly silt loam, 0 to 8 percent slopes, extremely stony	Volusia, extremely stony	85
	Chippewa, extremely stony	10
	Swartswood	5
543374		
Wurtsboro gravelly silt loam, 3 to 8 percent slopes	Wurtsboro	90
	Chippewa	2
	Conotton	2
	Halsey	2
	Manlius	2
	Phelps	2

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
543375		
Wurtsboro gravelly silt loam, 8 to 15 percent slopes	Wurtsboro	90
	Chippewa	2
	Conotton	2
	Halsey	2
	Manlius	2
	Phelps	2
612280		
Scio silt loam, 0 to 3 percent slopes	Scio	80
	Unadilla	10
	Aeric Endoaquepts, postglacial alluvium	10
612666		
Colonie loamy fine sand, 0 to 3 percent slopes	Colonie	80
	Delaware	10
	Unadilla	10
612668		
Hoosic-Hazen complex, 8 to 15 percent slopes, very stony	Hoosic, very stony	60
	Hazen, very stony	30
	Otisville, very stony	5
	Colonie, very stony	5
612724		
Lordstown-Wallpack complex, 15 to 35 percent slopes, very rocky	Lordstown, very rocky	50
	Wallpack, very rocky	40
	Chadakoin, very rocky	5
	Rock outcrop	5
612732		
Atherton mucky silt loam, 0 to 3 percent slopes	Atherton, very poorly drained	60
	Atherton, poorly drained	30
	Aeric Endoaquepts, postglacial alluvium	10
612738		
Fluvaquents, loamy, 0 to 3 percent slopes, occasionally flooded	Fluvaquents, occasionally flooded	90
	Udifluvents, occasionally flooded	10

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
612753		
Wallpack fine sandy loam, aeolian mantle, 8 to 15 percent slopes, very stony	Wallpack, aeolian mantle, very stony	85
	Lordstown, very stony	10
	Aquic Dystrudepts, aeolian mantle, very stony	5
612756		
Wallpack fine sandy loam, aeolian mantle, 0 to 8 percent slopes, very stony	Wallpack, aeolian mantle, very stony	85
	Lordstown, very stony	10
	Aquic Dystrudepts, aeolian mantle, very stony	5
612757		
Wallpack fine sandy loam, aeolian mantle, 15 to 35 percent slopes, very stony	Wallpack, aeolian mantle, very stony	85
	Lordstown, very stony	10
	Aquic Dystrudepts, aeolian mantle, very stony	5
612767		
Wellsboro silt loam, 8 to 15 percent slopes, extremely stony	Wellsboro, extremely stony	85
	Morris, extremely stony	10
	Lackawanna, extremely stony	5
612768		
Wellsboro silt loam, 0 to 8 percent slopes, extremely stony	Wellsboro, extremely stony	85
	Morris, extremely stony	10
	Lackawanna, extremely stony	5
613393		
Alden silt loam, 0 to 8 percent slopes, extremely stony	Alden, extremely stony	90
	Chippewa, extremely stony	10
613447		
Unadilla silt loam, 0 to 3 percent slopes	Unadilla	85
	Delaware	10
	Colonie	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
613448		
Unadilla silt loam, 3 to 8 percent slopes	Unadilla	85
	Delaware	10
	Colonie	5
614075		
Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony	Wurtsboro, extremely stony	80
	Swartswood, extremely stony	20
620179		
Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky	Arnot, very rocky	55
	Lordstown, very rocky	40
	Rock outcrop	5
620180		
Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes	Arnot	45
	Lordstown	40
	Rock outcrop	15
620181		
Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes	Arnot	60
	Lordstown	25
	Rock outcrop	15
623089		
Chippewa silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	80
	Alden, extremely stony	10
	Venango, extremely stony	10
623109		
Farmington-Rock outcrop complex, 0 to 15 percent slopes	Farmington	50
	Rock outcrop	40
	Galway	10
624811		
Galway loam, 35 to 60 percent slopes, very rocky	Galway, very rocky	80
	Farmington, very rocky	10
	Rock outcrop	5
	Wallpack, aeolian mantle, very rocky	5
624813		
Lackawanna cobbly fine sandy loam, 0 to 8 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
624816		
Lordstown-Wallpack complex, 8 to 15 percent slopes, very rocky	Lordstown, very rocky	50
	Wallpack, very rocky	35
	Cambridge, very rocky	5
	Chadakoin, very rocky	5
	Rock outcrop	5
624822		
Lordstown-Wallpack complex, 15 to 25 percent slopes	Lordstown	50
	Wallpack	35
	Chadakoin	10
	Cambridge	5
624823		
Lordstown-Wallpack complex, 8 to 15 percent slopes	Lordstown	50
	Wallpack	35
	Chadakoin	10
	Cambridge	5
624824		
Lordstown-Wallpack complex, 0 to 8 percent slopes	Lordstown	50
	Wallpack	35
	Chadakoin	10
	Cambridge	5
624826		
Manlius-Nassau complex, 35 to 60 percent slopes, very rocky	Manlius, very rocky	60
	Nassau, very rocky	25
	Rock outcrop	10
	Wallpack, very rocky	5
624827		
Nassau-Manlius complex, 0 to 8 percent slopes, very rocky	Nassau, very rocky	55
	Manlius, very rocky	44
	Rock outcrop	1
624828		
Nassau-Manlius complex, 8 to 15 percent slopes, very rocky	Nassau, very rocky	55
	Manlius, very rocky	44
	Rock outcrop	1
624829		
Nassau-Manlius complex, 15 to 35 percent slopes, very rocky	Nassau, very rocky	55
	Manlius, very rocky	44
	Rock outcrop	1
624832		
Nassau-Rock outcrop complex, 35 to 60 percent slopes	Nassau	50
	Rock outcrop	45
	Manlius	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
624841		
Oquaga-Rock outcrop complex, 35 to 60 percent slopes	Oquaga	60
	Rock outcrop	25
	Arnot	10
	Lackawanna	5
624845		
Rock outcrop-Farmington-Galway complex, 15 to 35 percent slopes	Rock outcrop	45
	Farmington	35
	Galway	20
624846		
Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes	Rock outcrop	40
	Arnot	30
	Rubble land	20
	Lordstown	10
626816		
Udifluvents, 0 to 3 percent slopes, occasionally flooded	Udifluvents, occasionally flooded	90
	Fluvaquents, occasionally flooded	10
635458		
Oquaga-Lackawanna complex, 8 to 15 percent slopes, very rocky	Oquaga, very rocky	55
	Lackawanna, very rocky	30
	Rock outcrop	10
	Wellsboro, very rocky	5
635459		
Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky	Oquaga, very rocky	50
	Lackawanna, very rocky	35
	Rock outcrop	10
	Wellsboro, very rocky	5
740953		
Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	Delaware, rarely flooded	80
	Colonie	10
	Unadilla	10
740968		
Nassau-Manlius complex, 8 to 15 percent slopes, very rocky	Nassau, very rocky	55
	Manlius, very rocky	44
	Rock outcrop	1
740969		
Nassau-Manlius complex, 15 to 35 percent slopes, very rocky	Nassau, very rocky	55
	Manlius, very rocky	44
	Rock outcrop	1

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
740971		
Oquaga-Lackawanna complex, 8 to 15 percent slopes, very rocky	Oquaga, very rocky	55
	Lackawanna, very rocky	30
	Rock outcrop	10
	Wellsboro, very rocky	5
740972		
Oquaga-Lackawanna complex, 15 to 35 percent slopes, very rocky	Oquaga, very rocky	50
	Lackawanna, very rocky	35
	Rock outcrop	10
	Wellsboro, very rocky	5
740974		
Oquaga-Rock outcrop complex, 35 to 60 percent slopes	Oquaga	60
	Rock outcrop	25
	Arnot	10
	Lackawanna	5
740975		
Rock outcrop-Arnot-Rubble land complex, 60 to 80 percent slopes	Rock outcrop	40
	Arnot	30
	Rubble land	20
	Lordstown	10
740987		
Scio silt loam, 0 to 3 percent slopes	Scio	80
	Unadilla	10
	Aeric Endoaquepts, postglacial alluvium	10
740988		
Udifluvents, 0 to 3 percent slopes, occasionally flooded	Udifluvents, occasionally flooded	90
	Fluvaquents, occasionally flooded	10
740991		
Unadilla silt loam, 0 to 3 percent slopes	Unadilla	85
	Delaware	10
	Colonie	5
740992		
Unadilla silt loam, 3 to 8 percent slopes	Unadilla	85
	Delaware	10
	Colonie	5
740995		
Wellsboro silt loam, 0 to 8 percent slopes, extremely stony	Wellsboro, extremely stony	85
	Morris, extremely stony	10
	Lackawanna, extremely stony	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
740996		
Wellsboro silt loam, 8 to 15 percent slopes, extremely stony	Wellsboro, extremely stony	85
	Morris, extremely stony	10
	Lackawanna, extremely stony	5
741149		
Lackawanna cobbly fine sandy loam, 8 to 15 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5
741150		
Lackawanna cobbly fine sandy loam, 15 to 35 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5
801114		
Oquaga-Rock outcrop complex, 0 to 15 percent slopes	Oquaga	75
	Rock outcrop	15
	Arnot	5
	Wellsboro	5
810906		
Oquaga-Rock outcrop complex, 0 to 15 percent slopes	Oquaga	75
	Rock outcrop	15
	Arnot	5
	Wellsboro	5
1147465		
Alden silt loam, 0 to 8 percent slopes, extremely stony	Alden, extremely stony	90
	Chippewa, extremely stony	10
1147467		
Arnot-Lordstown complex, 0 to 15 percent slopes, very rocky	Arnot, very rocky	55
	Lordstown, very rocky	40
	Rock outcrop	5
1147468		
Arnot-Lordstown-Rock outcrop complex, 15 to 35 percent slopes	Arnot	45
	Lordstown	40
	Rock outcrop	15
1147469		
Arnot-Lordstown-Rock outcrop complex, 35 to 60 percent slopes	Arnot	60
	Lordstown	25
	Rock outcrop	15

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
1147470		
Atherton mucky silt loam, 0 to 3 percent slopes	Atherton, very poorly drained	60
	Atherton, poorly drained	30
	Aeric Endoaquepts, postglacial alluvium	10
1147471		
Catden mucky peat, 0 to 2 percent slopes	Catden	85
	Alden	13
	Wallkill	2
1147474		
Chippewa silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	80
	Alden, extremely stony	10
	Venango, extremely stony	10
1147475		
Colonie loamy fine sand, 0 to 3 percent slopes	Colonie	80
	Delaware	10
	Unadilla	10
1147478		
Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	Delaware, rarely flooded	80
	Colonie	10
	Unadilla	10
1147482		
Fredon-Halsey complex, 0 to 3 percent slopes, very stony	Fredon, very stony	50
	Halsey, very stony	40
	Hero, very stony	10
1147485		
Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	Hazen, very stony	60
	Hoosic, very stony	35
	Otisville, very stony	5
1147490		
Hoosic-Hazen complex, 8 to 15 percent slopes, very stony	Hoosic, very stony	60
	Hazen, very stony	30
	Otisville, very stony	5
	Colonie, very stony	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
1147491		
Hoosic-Otisville complex, 25 to 60 percent slopes, very stony	Hoosic, very stony	50
	Otisville, very stony	40
	Hazen, very stony	10
1147492		
Lackawanna cobbly fine sandy loam, 0 to 8 percent slopes, extremely stony	Lackawanna, extremely stony	85
	Wellsboro, extremely stony	10
	Oquaga, extremely stony	5
1147500		
Wurtsboro loam, 0 to 8 percent slopes, extremely stony	Wurtsboro, extremely stony	90
	Swartswood, extremely stony	10
1147501		
Wurtsboro-Swartswood complex, 0 to 8 percent slopes, extremely stony	Wurtsboro, extremely stony	60
	Swartswood, extremely stony	40
1147502		
Wurtsboro-Swartswood complex, 8 to 15 percent slopes, extremely stony	Wurtsboro, extremely stony	60
	Swartswood, extremely stony	40
1147527		
Udorthents-Urban land complex, 0 to 8 percent slopes	Udorthents	60
	Urban land	40
1147532		
Udorthents, 0 to 8 percent slopes, smoothed	Udorthents	100
1147533		
Wurtsboro-Swartswood complex, 15 to 35 percent slopes, extremely stony	Wurtsboro, extremely stony	80
	Swartswood, extremely stony	20
1948749		
Arnot channery silt loam, 3 to 8 percent slopes	Arnot	90
	Bedington	5
	Wurtsboro	5
1948750		
Arnot channery silt loam, 8 to 15 percent slopes	Arnot	90
	Brinkerton	5
	Wurtsboro	5
1948751		
Arnot channery silt loam, 15 to 25 percent slopes	Arnot	90
	Brinkerton	5
	Wurtsboro	5

Table 1.--Soil Legend--Continued

Map unit symbol and map unit name	Components in map unit	Pct. of map unit
1948774		
Conotton gravelly loam, 3 to 8 percent slopes	Conotton	90
1948775		
Conotton gravelly loam, 8 to 15 percent slopes	Conotton	95
1948776		
Conotton gravelly loam, 15 to 25 percent slopes	Conotton	95
1948777		
Conotton gravelly loam, 25 to 65 percent slopes	Conotton	95
1948797		
Manlius channery silt loam, 3 to 8 percent slopes	Manlius	90
	Arnot	2
	Conotton	2
	Loudonville	2
	Swartswood	2
	Wurtsboro	2
1948802		
Manlius channery silt loam, 8 to 15 percent slopes	Manlius	90
	Arnot	2
	Conotton	2
	Loudonville	2
	Swartswood	2
	Wurtsboro	2
1948818		
Manlius channery silt loam, 15 to 25 percent slopes	Manlius	90
	Arnot	2
	Conotton	2
	Loudonville	2
	Swartswood	2
	Wurtsboro	2
1948832		
Penargyl channery silt loam, 3 to 8 percent slopes	Penargyl	90
1948846		
Phelps gravelly silt loam, 3 to 8 percent slopes	Phelps	90
	Halsey	4
	Swartswood	4
	Wurtsboro	2
1948855		
Udorthents, loamy	Udorthents, loamy	95
	Bedington	1
	Clarksburg	1
	Duffield	1
	Lansdale	1
	Readington	1
1948989		
Urban land-Delaware complex, 0 to 8 percent slopes	Urban land	65
	Delaware	25

Table 2.--Land Capability Classification

[Land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time]

Map unit symbol and component name	Land capability
290836	
Hoosic, very stony	7e
Otisville, very stony	7s
296265	
Alden	4w
296269	
Fluvents, (alluvial land)	8s
296271	
Alvira	6s
Watson	6s
296272	
Bath	2e
296273	
Bath	3e
296274	
Bath	4e
296275	
Bath	6s
296276	
Bath	6s
296277	
Benson	6s
296278	
Benson	6s
296279	
Benson	7s
296280	
Braceville	2w
296281	
Braceville	2w
296283	
Buchanan	7s
296288	
Chippewa	4w
Norwich	4w
296289	
Chippewa	7s
Norwich	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
296295	
Udorthents, cut and fill.	
296297	
Dekalb	7s
296298	
Dekalb	7s
296303	
Hazleton	7s
296304	
Holly	3w
296311	
Lackawanna	7s
Bath	7s
296312	
Lackawanna	2e
296313	
Lackawanna	3e
296315	
Lackawanna	7s
296316	
Lackawanna	7s
296317	
Laidig	7s
296326	
Lordstown	7s
296327	
Lordstown	7s
296328	
Lordstown	7s
Oquaga	7s
296329	
Mardin	2w
296330	
Mardin	3e
296331	
Mardin	6s
296332	
Mardin	6s
296335	
Meckesville	3e
296337	
Meckesville	6s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
296338	
Morris	3w
296339	
Morris	7s
296340	
Morris	7s
296341	
Freetown, mucky peat	5w
296342	
Paupack, mucky peat (shallow)	5w
296343	
Oquaga	2e
Lackawanna	2e
296344	
Oquaga	3e
Lackawanna	3e
296346	
Oquaga	7s
Lackawanna	7s
296347	
Oquaga	7s
Lackawanna	7s
296348	
Philo	2w
296349	
Pope	1
296350	
Pope	1
296351	
Rexford, somewhat poorly drained	3w
Rexford, poorly drained	3w
296355	
Sheffield	3w
296363	
Dystrochrepts, very stony	7s
296369	
Wayland	4w
296376	
Wellsboro	2w
296379	
Wellsboro	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
296385	
Wyoming	3s
296386	
Wyoming	3s
296387	
Wyoming	4s
296388	
Wyoming	4e
296389	
Wyoming	7e
297185	
Edgemere	7s
Shohola	7s
297186	
Edgemere	7s
297188	
Manlius	7s
Arnot	7s
297189	
Manlius	7s
Arnot	7s
297190	
Braceville	2w
297191	
Wyalusing	4w
297192	
Pope	2w
297193	
Paupack	5w
297196	
Freetown	5w
297197	
Manlius	6s
297198	
Manlius	6s
297201	
Oquaga	6s
297203	
Delaware	1
297204	
Delaware	2e

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
297205	
Delaware	4e
297209	
Philo	2w
297210	
Barbour	1
297216	
Wurtsboro	6s
297217	
Wurtsboro	6s
297227	
Arnot	6s
297228	
Arnot	7s
297229	
Wyoming	3s
297230	
Wyoming	4s
297231	
Wyoming	4e
297236	
Suncook	3s
297237	
Mardin	2w
297238	
Mardin	3e
297239	
Mardin	6s
297240	
Mardin	6s
297241	
Unadilla	1
297242	
Shohola	7s
Edgemere	7s
297243	
Shohola	7s
Edgemere	7s
297244	
Lordstown	7s
Swartswood	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
297247	
Chenango	2s
297248	
Chenango	3e
297249	
Chenango	4e
297253	
Craigsville	6s
Wyoming	6s
298049	
Wurtsboro, extremely stony	7s
298050	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s
298051	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s
298075	
Colonie	2s
298188	
Lackawanna, extremely stony	7s
298189	
Lackawanna, extremely stony	7s
298221	
Swartswood, extremely stony	7s
298222	
Swartswood, extremely stony	7s
298223	
Swartswood, extremely stony	7s
298255	
Delaware, rarely flooded	2e
298256	
Delaware, rarely flooded	1
298257	
Wallpack	3e
298258	
Wallpack	4e
298259	
Wallpack, extremely stony	7s
298260	
Wallpack, extremely stony	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
298261	
Wallpack	2e
298262	
Wallpack, extremely stony	7s
298265	
Venango, extremely stony	6s
298266	
Venango, extremely stony	6s
298409	
Swartswood, extremely stony	7s
298411	
Swartswood, extremely stony	7s
298413	
Swartswood, extremely stony	7s
318498	
Hazen, very stony	2e
Hoosic, very stony	3s
318533	
Hazen, very stony	1
Hoosic, very stony	3s
319783	
Catden	5w
319784	
Fredon, very stony	3w
Halsey, very stony	5w
543222	
Andover, extremely stony	7s
Buchanan, extremely stony	7s
543243	
Berks	7e
Weikert	7e
543246	
Buchanan	2e
543247	
Buchanan, extremely stony	7s
543257	
Chippewa	4w
543258	
Chippewa	4w
543259	
Chippewa, extremely stony	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
543271	
Delaware	1
543276	
Fluvaquents	5w
543292	
Hazleton, extremely stony	7s
543293	
Hazleton, extremely stony	7s
543299	
Laidig, extremely stony	7s
543300	
Laidig, extremely stony	7s
543304	
Laidig	7s
543327	
Swartswood	2e
543328	
Swartswood	3e
543330	
Swartswood, extremely stony	7s
Wurtsboro, extremely stony	7s
543331	
Swartswood, extremely stony	7s
Wurtsboro, extremely stony	7s
543359	
Volusia	3w
543360	
Volusia, extremely stony	7s
543374	
Wurtsboro	2w
543375	
Wurtsboro	3e
612280	
Scio	2w
612666	
Colonie	2s
612668	
Hoosic, very stony	3e
Hazen, very stony	3e
612724	
Lordstown, very rocky	7s
Wallpack, very rocky	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
612732	
Atherton, very poorly drained	3w
Atherton, poorly drained	3w
612738	
Fluvaquents, occasionally flooded	3w
612753	
Wallpack, aeolian mantle, very stony	3e
612756	
Wallpack, aeolian mantle, very stony	2e
612757	
Wallpack, aeolian mantle, very stony	6e
612767	
Wellsboro, extremely stony	7s
612768	
Wellsboro, extremely stony	7s
613393	
Alden, extremely stony	7s
613447	
Unadilla	1
613448	
Unadilla	2e
614075	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s
620179	
Arnot, very rocky	7s
Lordstown, very rocky	7s
620180	
Arnot	7s
Lordstown	7s
620181	
Arnot	7s
Lordstown	7s
623089	
Chippewa, extremely stony	7s
623109	
Farmington	7s
624811	
Galway, very rocky	7s
624813	
Lackawanna, extremely stony	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
624816	
Lordstown, very rocky	6s
Wallpack, very rocky	6s
624822	
Lordstown	4e
Wallpack	4e
624823	
Lordstown	3e
Wallpack	3e
624824	
Lordstown	2e
Wallpack	2e
624826	
Manlius, very rocky	7s
Nassau, very rocky	7s
624827	
Nassau, very rocky	7s
Manlius, very rocky	6s
624828	
Nassau, very rocky	7s
Manlius, very rocky	6s
624829	
Nassau, very rocky	7s
Manlius, very rocky	7s
624832	
Nassau	7e
624841	
Oquaga	7e
624845	
Farmington	7s
Galway	7s
624846	
Arnot	7s
626816	
Udifluvents, occasionally flooded	2w
635458	
Oquaga, very rocky	6s
Lackawanna, very rocky	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
635459	
Oquaga, very rocky	7s
Lackawanna, very rocky	7s
740953	
Delaware, rarely flooded	1
740968	
Nassau, very rocky	7s
Manlius, very rocky	6s
740969	
Nassau, very rocky	7s
Manlius, very rocky	7s
740971	
Oquaga, very rocky	6s
Lackawanna, very rocky	7s
740972	
Oquaga, very rocky	7s
Lackawanna, very rocky	7s
740974	
Oquaga	7e
740975	
Arnot	7s
740987	
Scio	2w
740988	
Udifluvents, occasionally flooded	2w
740991	
Unadilla	1
740992	
Unadilla	2e
740995	
Wellsboro, extremely stony	7s
740996	
Wellsboro, extremely stony	7s
741149	
Lackawanna, extremely stony	7s
741150	
Lackawanna, extremely stony	7s
801114	
Oquaga	3e
810906	
Oquaga	3e

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
1147465	
Alden, extremely stony	7s
1147467	
Arnot, very rocky	7s
Lordstown, very rocky	7s
1147468	
Arnot	7s
Lordstown	7s
1147469	
Arnot	7s
Lordstown	7s
1147470	
Atherton, very poorly drained	3w
Atherton, poorly drained	3w
1147471	
Catden	5w
1147474	
Chippewa, extremely stony	7s
1147475	
Colonie	2s
1147478	
Delaware, rarely flooded	2e
1147482	
Fredon, very stony	3w
Halsey, very stony	5w
1147485	
Hazen, very stony	2e
Hoosic, very stony	3s
1147490	
Hoosic, very stony	3e
Hazen, very stony	3e
1147491	
Hoosic, very stony	7e
Otisville, very stony	7s
1147492	
Lackawanna, extremely stony	7s
1147500	
Wurtsboro, extremely stony	7s
1147501	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s

Table 2.--Land Capability Classification--Continued

Map unit symbol and component name	Land capability
1147502	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s
1147527	
Udorthents	3w
1147532	
Udorthents	3w
1147533	
Wurtsboro, extremely stony	7s
Swartswood, extremely stony	7s
1948749	
Arnot	3s
1948750	
Arnot	4e
1948751	
Arnot	6e
1948774	
Conotton	2e
1948775	
Conotton	3e
1948776	
Conotton	6e
1948777	
Conotton	7e
1948797	
Manlius	2s
1948802	
Manlius	3e
1948818	
Manlius	4e
1948832	
Penargyl	2e
1948846	
Phelps	2e
1948855	
Udorthents, loamy	7s
1948989	
Delaware	2e

Table 3.--Prime Farmland and Other Important Farmland

[Only the soils considered prime or important farmland are listed. Urban or built-up areas of the soils listed are not considered prime or important farmland]

Map unit symbol	Map unit name	Farmland classification
296272	Bath channery silt loam, 3 to 8 percent slopes	All areas are prime farmland
296273	Bath channery silt loam, 8 to 15 percent slopes	Farmland of statewide importance
296280	Braceville gravelly loam, 0 to 3 percent slopes	All areas are prime farmland
296281	Braceville gravelly loam, 3 to 8 percent slopes	All areas are prime farmland
296312	Lackawanna channery loam, 2 to 8 percent slopes	All areas are prime farmland
296313	Lackawanna channery loam, 8 to 15 percent slopes	Farmland of statewide importance
296329	Mardin channery silt loam, 2 to 8 percent slopes	All areas are prime farmland
296330	Mardin channery silt loam, 8 to 15 percent slopes	Farmland of statewide importance
296335	Meckesville gravelly loam, 8 to 15 percent slopes	Farmland of statewide importance
296338	Morris channery silt loam, 2 to 10 percent slopes	Farmland of statewide importance
296343	Oquaga-Lackawanna channery loams, 3 to 8 percent slopes	Farmland of statewide importance
296344	Oquaga-Lackawanna channery loams, 8 to 15 percent slopes	Farmland of statewide importance
296348	Philo silt loam	All areas are prime farmland
296349	Pope silt loam	All areas are prime farmland
296350	Pope silt loam, high bottom	All areas are prime farmland
296351	Rexford gravelly silt loam, 0 to 3 percent slopes	Farmland of statewide importance
296355	Sheffield silt loam	Farmland of statewide importance
296376	Wellsboro channery loam, 3 to 8 percent slopes	All areas are prime farmland
296385	Wyoming gravelly sandy loam, 0 to 3 percent slopes	Farmland of statewide importance
296386	Wyoming gravelly sandy loam, 3 to 8 percent slopes	Farmland of statewide importance
296387	Wyoming gravelly sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
297190	Braceville fine sandy loam	All areas are prime farmland
297192	Pope fine sandy loam	All areas are prime farmland
297203	Delaware fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
297204	Delaware fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland
297209	Philo loam	All areas are prime farmland
297210	Barbour fine sandy loam	All areas are prime farmland
297229	Wyoming very cobbly sandy loam, 3 to 8 percent slopes	Farmland of statewide importance
297236	Suncook loamy sand, 0 to 8 percent slopes	Farmland of statewide importance
297237	Mardin channery silt loam, 0 to 8 percent slopes, stony	All areas are prime farmland
297238	Mardin channery silt loam, 8 to 15 percent slopes, stony	Farmland of statewide importance
297241	Unadilla silt loam	All areas are prime farmland
297247	Chenango gravelly fine sandy loam, 0 to 8 percent slopes	All areas are prime farmland
297248	Chenango gravelly fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance
298075	Colonie loamy fine sand, 3 to 8 percent slopes	Farmland of statewide importance
298255	Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	All areas are prime farmland
298256	Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	All areas are prime farmland
298257	Wallpack silt loam, 8 to 15 percent slopes	Farmland of statewide importance
298261	Wallpack silt loam, 3 to 8 percent slopes	All areas are prime farmland
318498	Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	All areas are prime farmland
318533	Hazen-Hoosic complex, 0 to 3 percent slopes, very stony	All areas are prime farmland
319783	Catden mucky peat, 0 to 2 percent slopes	Farmland of unique importance
543246	Buchanan gravelly loam, 3 to 8 percent slopes	All areas are prime farmland
543271	Delaware fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland
543327	Swartswood gravelly loam, 3 to 8 percent slopes	All areas are prime farmland
543328	Swartswood gravelly loam, 8 to 15 percent slopes	Farmland of statewide importance
543359	Volusia gravelly silt loam, 3 to 8 percent slopes	Farmland of statewide importance
543374	Wurtsboro gravelly silt loam, 3 to 8 percent slopes	All areas are prime farmland
543375	Wurtsboro gravelly silt loam, 8 to 15 percent slopes	Farmland of statewide importance
612280	Scio silt loam, 0 to 3 percent slopes	All areas are prime farmland
612666	Colonie loamy fine sand, 0 to 3 percent slopes	Farmland of statewide importance
612668	Hoosic-Hazen complex, 8 to 15 percent slopes, very stony	Farmland of statewide importance
612753	Wallpack fine sandy loam, aeolian mantle, 8 to 15 percent slopes, very stony	Farmland of statewide importance
612756	Wallpack fine sandy loam, aeolian mantle, 0 to 8 percent slopes, very stony	All areas are prime farmland

Table 3.--Prime Farmland and Other Important Farmland--Continued

Map unit symbol	Map unit name	Farmland classification
613447	Unadilla silt loam, 0 to 3 percent slopes	All areas are prime farmland
613448	Unadilla silt loam, 3 to 8 percent slopes	Farmland of statewide importance
624823	Lordstown-Wallpack complex, 8 to 15 percent slopes	Farmland of statewide importance
624824	Lordstown-Wallpack complex, 0 to 8 percent slopes	All areas are prime farmland
740953	Delaware fine sandy loam, 0 to 3 percent slopes, rarely flooded	All areas are prime farmland
740987	Scio silt loam, 0 to 3 percent slopes	All areas are prime farmland
740991	Unadilla silt loam, 0 to 3 percent slopes	All areas are prime farmland
740992	Unadilla silt loam, 3 to 8 percent slopes	Farmland of statewide importance
1147471	Catden mucky peat, 0 to 2 percent slopes	Farmland of unique importance
1147475	Colonie loamy fine sand, 0 to 3 percent slopes	Farmland of statewide importance
1147478	Delaware fine sandy loam, 3 to 8 percent slopes, rarely flooded	All areas are prime farmland
1147485	Hazen-Hoosic complex, 3 to 8 percent slopes, very stony	All areas are prime farmland
1147490	Hoosic-Hazen complex, 8 to 15 percent slopes, very stony	Farmland of statewide importance
1948749	Arnot channery silt loam, 3 to 8 percent slopes	Farmland of statewide importance
1948774	Conotton gravelly loam, 3 to 8 percent slopes	All areas are prime farmland
1948775	Conotton gravelly loam, 8 to 15 percent slopes	Farmland of statewide importance
1948797	Manlius channery silt loam, 3 to 8 percent slopes	All areas are prime farmland
1948802	Manlius channery silt loam, 8 to 15 percent slopes	Farmland of statewide importance
1948832	Penargyl channery silt loam, 3 to 8 percent slopes	All areas are prime farmland
1948846	Phelps gravelly silt loam, 3 to 8 percent slopes	All areas are prime farmland

Table 4.--Hydric Soils

[This report lists only those map unit components that are rated as hydric. Definitions of hydric criteria codes are included at the bottom of the table]

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
296265							
Alden mucky silt loam	Alden	100	Depressions on till plains	2B3, 3	Yes	No	Yes
296269							
Alluvial land	Holly	20	Depressions on flood plains, backswamps	2B3	Yes	No	No
296271							
Alvira and Watson very stony loams, 0 to 12 percent slopes	Shelmadine	10	Depressions	2B3	Yes	No	No
296280							
Braceville gravelly loam, 0 to 3 percent slopes	Rexford, poorly drained	10	Depressions	2B3	Yes	No	No
296281							
Braceville gravelly loam, 3 to 8 percent slopes	Rexford, poorly drained	5	Depressions	2B3	Yes	No	No
296283							
Buchanan extremely stony loam, 0 to 8 percent slopes	Shelmadine	5	Depressions	2B3	Yes	No	No
296288							
Chippewa and Norwich silt loams, 0 to 5 percent slopes	Chippewa	48	Depressions	2B3	Yes	No	No
	Norwich	48	Depressions	2B3	Yes	No	No
296289							
Chippewa and Norwich extremely stony soils, 0 to 8 percent slopes	Chippewa	47	Depressions	2B3	Yes	No	No
	Norwich	47	Depressions	2B3	Yes	No	No
296304							
Holly silt loam	Holly	100	Depressions on flood plains, backswamps	2B3	Yes	No	No
296329							
Mardin channery silt loam, 2 to 8 percent slopes	Chippewa	3	Depressions	2B3	Yes	No	No
296330							
Mardin channery silt loam, 8 to 15 percent slopes	Chippewa	2	Depressions	2B3	Yes	No	No

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
296331 Mardin very stony silt loam, 0 to 8 percent slopes	Chippewa	4	Depressions	2B3, 3	Yes	No	Yes
296332 Mardin very stony silt loam, 8 to 25 percent slopes	Chippewa	1	Depressions	3, 2B3	Yes	No	Yes
296338 Morris channery silt loam, 2 to 10 percent slopes	Norwich	20	Depressions	2B3	Yes	No	No
296339 Morris extremely stony silt loam, 0 to 8 percent slopes	Norwich	25	Depressions	2B3	Yes	No	No
296340 Morris extremely stony silt loam, 8 to 20 percent slopes	Norwich	20	Depressions	2B3	Yes	No	No
296341 Mucky peat, deep	Freetown, mucky peat	100	Swamps	3, 1	No	No	Yes
296342 Mucky peat, shallow	Paupack, mucky peat (shallow)	100	Swamps	1	No	No	No
296348 Philo silt loam	Holly	10	Depressions on flood plains, backswamps	2B3	Yes	No	No
296349 Pope silt loam	Holly	8	Depressions on flood plains, backswamps	2B3	Yes	No	No
296350 Pope silt loam, high bottom	Holly	10	Depressions on flood plains, backswamps	2B3	Yes	No	No
296351 Rexford gravelly silt loam, 0 to 3 percent slopes	Rexford, poorly drained	35	Depressions	2B3	Yes	No	No
296355 Sheffield silt loam	Sheffield	100	Depressions on till plains	2B3	Yes	No	No
296369 Wayland silty clay loam	Wayland	100	Flood plains	4, 3, 2B3	Yes	Yes	Yes

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
296376							
Wellsboro channery loam, 3 to 8 percent slopes	Norwich	8	Depressions	2B3	Yes	No	No
296379							
Wellsboro extremely stony loam, 8 to 25 percent slopes	Norwich	3	Depressions	2B3	Yes	No	No
297185							
Edgemere-Shohola complex, 3 to 15 percent slopes, very rubbly	Edgemere	42	Depressions	3, 2B3	Yes	No	Yes
	Freetown	5	Swamps	1, 3	No	No	Yes
297186							
Edgemere extremely stony loam, 0 to 3 percent slopes, very rubbly	Edgemere	75	Depressions	3, 2B3	Yes	No	Yes
	Freetown	4	Swamps	3, 1	No	No	Yes
	Wyalusing	4	Flood plains	4, 2B2	Yes	Yes	No
297190							
Braceville fine sandy loam	Rexford, poorly drained	3	Outwash terraces	2B3	Yes	No	No
297191							
Wyalusing fine sandy loam	Wyalusing	85	Flood plains	4, 2B2	Yes	Yes	No
297192							
Pope fine sandy loam	Wyalusing	5	Flood plains	2B2, 4	Yes	Yes	No
297193							
Paupack mucky peat	Paupack	90	Swamps	1	No	No	No
	Edgemere	8	Depressions	2B3, 3	Yes	No	Yes
	Kimbles	2	Depressions	2B3	Yes	No	No
297196							
Freetown mucky peat	Freetown	94	Swamps	3, 1	No	No	Yes
	Gleneyre	6	Relict lakebeds	4, 3, 2B3	Yes	Yes	Yes
297197							
Manlius very channery silt loam, 3 to 8 percent slopes, very bouldery	Edgemere	3	Depressions	3, 2B3	Yes	No	Yes
297198							
Manlius very channery silt loam, 8 to 15 percent slopes, very bouldery	Edgemere	2	Depressions	3, 2B3	Yes	No	Yes
297209							
Philo loam	Wyalusing	2	Flood plains	2B2, 4	Yes	Yes	No

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
297216 Wurtsboro stony fine sandy loam, 0 to 8 percent slopes, extremely stony	Edgemere	3	Depressions	2B3, 3	Yes	No	Yes
297217 Wurtsboro stony fine sandy loam, 8 to 15 percent slopes, extremely stony	Edgemere	1	Depressions	2B3, 3	Yes	No	Yes
297236 Suncook loamy sand, 0 to 8 percent slopes	Wyalusing	4	Flood plains	4, 2B2	Yes	Yes	No
297237 Mardin channery silt loam, 0 to 8 percent slopes, stony	Edgemere	3	Depressions	2B3, 3	Yes	No	Yes
297238 Mardin channery silt loam, 8 to 15 percent slopes, stony	Edgemere	3	Depressions	3, 2B3	Yes	No	Yes
297239 Mardin stony loam, 0 to 8 percent slopes, extremely stony	Edgemere	3	Depressions	3, 2B3	Yes	No	Yes
297240 Mardin stony loam, 8 to 15 percent slopes, extremely stony	Edgemere	3	Depressions	2B3, 3	Yes	No	Yes
297242 Shohola-Edgemere complex, 0 to 8 percent slopes, very rubbly	Edgemere	29	Depressions	2B3, 3	Yes	No	Yes
297243 Shohola-Edgemere complex, 8 to 15 percent slopes, very rubbly	Edgemere	29	Depressions	2B3, 3	Yes	No	Yes
297253 Craigsville-Wyoming complex, 0 to 8 percent slopes, extremely stony	Wyalusing	6	Flood plains	4, 2B2	Yes	Yes	No
298265 Venango silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	10	Interdrumlins	2B3	Yes	No	No

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
319783							
Catden mucky peat, 0 to 2 percent slopes	Catden	85	Depressions	1, 3	No	No	Yes
	Alden	13	Depressions	2B3, 3	Yes	No	Yes
	Wallkill	2	Flood plains	3, 2B3	Yes	No	Yes
319784							
Fredon-Halsey complex, 0 to 3 percent slopes, very stony	Halsey, very stony	40	Drainageways	2B3	Yes	No	No
543222							
Andover-Buchanan gravelly loams, 0 to 8 percent slopes, extremely stony	Andover, extremely stony	55	Sandstone and shale hillslopes	2B3	Yes	No	No
543243							
Berks-Weikert complex, 25 to 60 percent slopes	Brinkerton	2	Depressions	2B3	Yes	No	No
543246							
Buchanan gravelly loam, 3 to 8 percent slopes	Andover	10	Depressions	2B3	Yes	No	No
543247							
Buchanan gravelly loam, 0 to 8 percent slopes, extremely stony	Andover, extremely stony	5	Depressions	2B3	Yes	No	No
543257							
Chippewa silt loam, 0 to 3 percent slopes	Chippewa	90	Depressions	2B3	Yes	No	No
543258							
Chippewa silt loam, 3 to 8 percent slopes	Chippewa	90	Depressions	2B3	Yes	No	No
543259							
Chippewa gravelly silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	90	Depressions	2B3	Yes	No	No
543271							
Delaware fine sandy loam, 0 to 3 percent slopes	Hatboro	1	Flood plains	2B3	Yes	No	No
	Nanticoke	1	Tidal flats	3, 2B3	Yes	No	Yes
543276							
Fluvaquents	Fluvaquents	85	Flood plains	2B3	Yes	No	No
	Towhee	5	Depressions, mountain valleys	2B3	Yes	No	No
	Nanticoke	1	Tidal flats	2B3, 3	Yes	No	Yes

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
543299							
Laidig very gravelly loam, 0 to 8 percent slopes, extremely stony	Andover	4	Sandstone and shale hillslopes	2B3	Yes	No	No
543300							
Laidig very gravelly loam, 8 to 25 percent slopes, extremely stony	Andover, extremely stony	4	Sandstone and shale hillslopes	2B3	Yes	No	No
543304							
Laidig-Rubble land complex, 25 to 60 percent slopes	Andover	5	Sandstone and shale hillslopes	2B3	Yes	No	No
543327							
Swartswood gravelly loam, 3 to 8 percent slopes	Chippewa	3	Depressions	2B3	Yes	No	No
543328							
Swartswood gravelly loam, 8 to 15 percent slopes	Chippewa	3	Depressions	2B3	Yes	No	No
543330							
Swartswood and Wurtsboro soils, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	3	Depressions	2B3	Yes	No	No
543331							
Swartswood and Wurtsboro soils, 8 to 25 percent slopes, extremely stony	Chippewa, extremely stony	3	Depressions	2B3	Yes	No	No
543359							
Volusia gravelly silt loam, 3 to 8 percent slopes	Chippewa	10	Depressions	2B3	Yes	No	No
543360							
Volusia gravelly silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	10	Depressions	2B3	Yes	No	No
543374							
Wurtsboro gravelly silt loam, 3 to 8 percent slopes	Chippewa	2	Depressions	2B3	Yes	No	No
	Halsey	2	Flood plains	2B3	Yes	No	No
543375							
Wurtsboro gravelly silt loam, 8 to 15 percent slopes	Chippewa	2	Depressions	2B3	Yes	No	No
	Halsey	2	Flood plains	2B3	Yes	No	No

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
612732							
Atherton mucky silt loam, 0 to 3 percent slopes	Atherton, very poorly drained	60	Depressions	3, 2B3	Yes	No	Yes
	Atherton, poorly drained	30	Depressions	2B3, 3	Yes	No	Yes
612738							
Fluvaquents, loamy, 0 to 3 percent slopes, occasionally flooded	Fluvaquents, occasionally flooded	90	Flood plains	2B3	Yes	No	No
613393							
Alden silt loam, 0 to 8 percent slopes, extremely stony	Alden, extremely stony	90	Depressions	2B3, 3	Yes	No	Yes
	Chippewa, extremely stony	10	Depressions	2B3	Yes	No	No
623089							
Chippewa silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	80	Interdrumlins	2B3	Yes	No	No
	Alden, extremely stony	10	Interdrumlins	3, 2B3	Yes	No	Yes
626816							
Udifluvents, 0 to 3 percent slopes, occasionally flooded	Fluvaquents, occasionally flooded	10	Flood plains	2B3	Yes	No	No
	Fluvaquents, occasionally flooded	10	Flood plains	2B3	Yes	No	
1147465							
Alden silt loam, 0 to 8 percent slopes, extremely stony	Alden, extremely stony	90	Depressions	2B3, 3	Yes	No	Yes
	Chippewa, extremely stony	10	Depressions	2B3	Yes	No	No
1147470							
Atherton mucky silt loam, 0 to 3 percent slopes	Atherton, very poorly drained	60	Depressions	3, 2B3	Yes	No	Yes
	Atherton, poorly drained	30	Depressions	2B3, 3	Yes	No	Yes
1147471							
Catden mucky peat, 0 to 2 percent slopes	Catden	85	Depressions	3, 1	No	No	Yes
	Alden	13	Depressions	3, 2B3	Yes	No	Yes
	Wallkill	2	Flood plains	2B3, 3	Yes	No	Yes

Table 4.--Hydric Soils--Continued

Map unit symbol and map unit name	Component	Percent of map unit	Landform	Hydric soils criteria: Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
1147474							
Chippewa silt loam, 0 to 8 percent slopes, extremely stony	Chippewa, extremely stony	80	Interdrumlins	2B3	Yes	No	No
	Alden, extremely stony	10	Interdrumlins	2B3, 3	Yes	No	Yes
1147482							
Fredon-Halsey complex, 0 to 3 percent slopes, very stony	Halsey, very stony	40	Drainageways	2B3	Yes	No	No
1948846							
Phelps gravelly silt loam, 3 to 8 percent slopes	Halsey	4	Flood plains	2B3	Yes	No	No

Explanation of hydric criteria codes:

1. All Histels except for Folistels and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for periods of long or very long duration during the growing season.
4. Soils that are frequently flooded for periods of long or very long duration during the growing season.

Table 5.--Landscape, Landform, and Parent Material

[Only major components are displayed in the table. Miscellaneous nonsoil components may not be included. Components may not add up to 100 percent. MAP is the mean annual precipitation]

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
290836							
Hoosic, very stony-	50	25-60	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
Otisville, very stony----------	40	25-60	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
296265							
Alden----------	100	0-3	299-1499	30-45	Uplands	Depression on till plain	Till
296269							
Fluvents, (alluvial land)---	70	0-3	200-1001	35-45	River valley	Flood plain	Alluvium
296271							
Alvira----------	55	0-12	---	36-56	Uplands	Glaciated hillslope	Till
Watson----------	35	0-12	---	34-51	Uplands	Valley side	Old till derived from sedimentary rock
296272							
Bath----------	85	3-8	801-1801	30-40	Uplands	Glaciated mountain	Till
296273							
Bath----------	85	8-15	801-1801	30-40	Uplands	Glaciated mountain	Till
296274							
Bath----------	85	15-25	801-1801	30-40	Uplands	Glaciated mountain	Till
296275							
Bath----------	90	3-8	801-1801	30-40	Uplands	Glaciated mountain	Loamy till derived mainly from gray and brown siltstone, sandstone, and shale
296276							
Bath----------	90	8-25	801-1801	30-40	Uplands	Glaciated mountain	Loamy till derived mainly from gray and brown siltstone, sandstone, and shale
296277							
Benson----------	55	0-8	89-1001	28-45	Glaciated upland	Hillslope	Loamy till
296278							
Benson----------	60	8-25	89-1001	28-45	Glaciated upland	Hillslope	Loamy till
Rock outcrop-------	20	---	---	34-51	---	---	---

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
296279							
Benson----------	60	25-70	89-1001	28-45	Glaciated upland	Hillslope	Loamy till
Rock outcrop-------	25	---	---	34-51	---	---	---
296280							
Braceville---------	90	0-3	---	36-56	Upland	Outwash terrace	Coarse-loamy outwash
296281							
Braceville---------	90	3-8	---	36-56	Uplands	Outwash terrace	Coarse-loamy outwash
296283							
Buchanan----------	90	0-8	600-2402	38-46	Uplands	Mountain slope Valley side	Mountain slope colluvium derived from sedimentary rock
296288							
Chippewa----------	48	0-5	801-1801	30-45	Uplands	Depression	Till
Norwich----------	48	0-5	49-499	33-45	Uplands	Depression	Till
296289							
Chippewa----------	47	0-8	801-1801	30-45	Uplands	Depression	Till
Norwich----------	47	0-8	---	34-51	Uplands	Depression	Till
296295							
Udorthents, cut and fill----------	90	0-25	---	34-51	---	---	Manmade and altered materials from mixed rock types
296297							
Dekalb----------	100	8-25	1001-2799	36-60	Mountains	Mountain	Residuum weathered from sandstone and shale
296298							
Dekalb----------	100	25-80	1001-2799	36-60	Mountains	Mountain	Residuum weathered from sandstone and shale
296303							
Hazleton----------	100	8-25	1099-2500	36-55	Mountains	Gray & red sandstone mountain slope	Residuum weathered from sandstone
296304							
Holly----------	100	0-3	801-840	30-40	Floodplain	Backswamp Depression on flood plain	Loamy alluvium derived from sandstone and shale
296311							
Lackawanna---------	40	25-70	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Till
Bath----------	30	25-70	801-1801	30-40	Uplands	Glaciated mountain	Till

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
296312							
Lackawanna---------	80	3-8	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Till
296313							
Lackawanna---------	80	8-15	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Till
296315							
Lackawanna---------	80	3-8	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Till
296316							
Lackawanna---------	80	8-25	1099-1801	32-50	---	Glaciated hillslope Ridge	Till
296317							
Laidig----------	100	0-8	400-3799	34-40	---	Mountain	Colluvium derived from sandstone and siltstone
296326							
Lordstown----------	85	3-8	751-1801	32-50	Plateau	Hill	Till
296327							
Lordstown----------	85	8-25	751-1801	32-50	Plateau	Hill	Till
296328							
Lordstown----------	40	25-70	751-1801	32-50	Plateau	Hill	Till
Oquaga----------	35	25-60	699-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
296329							
Mardin----------	85	3-8	801-1801	30-40	Glaciated upland	Hill	Till
296330							
Mardin----------	85	8-15	801-1801	30-40	Glaciated upland	Hill	Loamy till
296331							
Mardin----------	85	3-8	801-1801	30-40	Glaciated upland	Hill	Loamy till
296332							
Mardin----------	87	8-25	801-1801	30-40	Glaciated upland	Hill	Loamy till
296335							
Meckesville--------	100	8-15	600-2799	34-48	Mountains	Mountain valley	Sandstone, siltstone, and shale colluvium derived from sedimentary rock

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
296337							
Meckesville--------	100	8-25	600-2799	34-48	Mountains	Mountain valley	Sandstone, siltstone, and shale colluvium derived from sedimentary rock
296338							
Morris----------	80	3-8	600-1801	32-50	Glacial upland	Till plain	Reddish ablation till derived from sandstone and siltstone
296339							
Morris----------	75	0-8	600-1801	32-50	Glacial upland	Till plain	Reddish ablation till derived from sandstone and siltstone
296340							
Morris----------	80	0-20	600-1801	32-50	Glacial upland	Till plain	Reddish ablation till derived from sandstone and siltstone
296341							
Freetown, mucky peat----------	100	0-2	---	34-51	Uplands	Swamp	Highly decomposed organic material
296342							
Paupack, mucky peat (shallow)----	100	0-2	801-2001	42-47	Uplands	Swamp	Woody organic material over gravelly alluvium
296343							
Oquaga----------	50	3-8	600-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
Lackawanna---------	35	3-8	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Reddish ablation till derived from sandstone and siltstone
296344							
Oquaga----------	55	8-15	600-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
296344							
Lackawanna---------	30	8-15	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Reddish ablation till derived from sandstone and siltstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
296346							
Oquaga----------	50	0-8	699-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
Lackawanna---------	35	0-8	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Reddish ablation till derived from sandstone and siltstone
296347							
Oquaga----------	60	8-25	699-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
Lackawanna---------	30	8-25	1099-1801	32-50	Uplands	Glaciated hillslope Ridge	Reddish ablation till derived from sandstone and siltstone
296348							
Philo----------	85	0-3	600-2999	40-55	River valley	Flood plain	Coarse-loamy alluvium derived from sandstone and siltstone
296349							
Pope----------	90	0-3	---	34-51	River valley	Flood plain	Coarse-loamy alluvium derived from sandstone and siltstone
296350							
Pope----------	90	0-3	---	34-51	River valley	Flood plain	Coarse-loamy alluvium derived from sandstone and siltstone
296351							
Rexford, somewhat poorly drained----	40	0-3	---	34-51	Uplands	Outwash plain	Coarse-loamy outwash derived from sandstone and shale
Rexford, poorly drained----------	35	0-3	---	34-51	Uplands	Depression	Coarse-loamy outwash derived from sandstone and shale
296355							
Sheffield----------	100	0-3	925-1089	34-44	Uplands	Depression on till plain	Till
296363							
Dystrochrepts, very stony--------	85	25-99	1099-2500	36-55	Mountains	Mountain slope	Colluvium
296369							
Wayland----------	100	0-3	200-1499	30-40	River valley	Flood plain	Recent alluvium

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
296376							
Wellsboro----------	80	3-8	1099-1801	32-50	Uplands	Valley side	Red till
296379							
Wellsboro----------	85	8-25	1099-1801	32-50	Uplands	Valley side	Red till
296385							
Wyoming----------	85	0-3	400-1801	42-50	Uplands	Terrace	Water sorted gravelly outwash derived from sandstone and siltstone and/or shale
296386							
Wyoming----------	85	3-8	400-1801	42-50	Uplands	Terrace	Water sorted gravelly outwash derived from sandstone and siltstone and/or shale
296387							
Wyoming----------	85	8-15	400-1801	42-50	Uplands	Terrace	Water sorted gravelly outwash derived from sandstone and siltstone and/or shale
296388							
Wyoming----------	85	15-25	400-1801	42-50	Uplands	Terrace	Water sorted gravelly outwash derived from sandstone and siltstone and/or shale
296389							
Wyoming----------	100	25-70	400-1801	42-50	Uplands	Terrace	Water sorted gravelly outwash derived from sandstone and siltstone and/or shale
296390							
Water----------	100	---	---	34-51	---	---	---
297185							
Edgemere----------	42	3-8	600-1299	35-50	---	Depression	Till
Shohola----------	42	3-15	600-1299	40-46	---	---	Till
297186							
Edgemere----------	75	0-3	600-1299	35-50	Uplands	Depression	Till
297188							
Manlius----------	40	15-30	200-1801	30-50	Uplands	Valley side	Channery till derived from shale
Arnot----------	35	15-30	---	34-51	Uplands	Valley side	Till
Rock outcrop-------	15	15-30	---	34-51	---	---	---

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
297189							
Manlius----------	40	30-80	200-1801	30-50	Uplands	Valley side	Channery till derived from shale
Arnot----------	35	30-80	---	34-51	Uplands	Valley side	Till
Rock outcrop-------	15	30-80	---	34-51	---	---	---
297190							
Braceville---------	82	0-3	400-899	44-47	Uplands	Outwash terrace	Outwash
297191							
Wyalusing----------	85	0-3	400-801	30-50	River valley	Flood plain	Coarse-loamy alluvium over sandy and gravelly alluvium
297192							
Pope----------	95	0-3	---	34-51	River valley	Flood plain	Acid alluvium derived from sedimentary rock
297193							
Paupack----------	90	0-2	801-2001	42-47	Uplands	Swamp	Woody organic material over gravelly alluvium
297196							
Freetown----------	94	0-1	---	34-51	Uplands	Swamp	Highly decomposed organic material
297197							
Manlius----------	90	3-8	200-1801	30-50	Uplands	Valley side	Channery till derived from shale
297198							
Manlius----------	86	8-15	200-1801	30-50	Uplands	Valley side	Channery till derived from shale
297201							
Oquaga----------	75	15-30	699-1801	35-50	Glaciated upland	Hillslope	Reddish ablation till derived from sandstone and siltstone
297203							
Delaware----------	93	0-3	400-600	35-50	River valley	Low to middle river terrace	Postglacial alluvium derived from sandstone and shale
297204							
Delaware----------	82	3-8	400-600	35-50	River valley	Low to middle river terrace	Postglacial alluvium derived from sandstone and shale
297205							
Delaware----------	80	8-20	400-600	35-50	River valley	Low to middle river terrace	Postglacial alluvium derived from sandstone and shale
297209							
Philo----------	85	0-3	600-1401	35-50	River valley	Flood plain	Coarse-loamy alluvium derived from sandstone and siltstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
297210							
Barbour----------	85	0-3	1000-1800	34-51	Valley	Flood plain	Recent alluvium
297216							
Wurtsboro----------	92	0-8	1000-1800	34-51	Glacial upland	Hill	Coarse-loamy till derived from sandstone
297217							
Wurtsboro----------	88	8-15	1000-1800	34-51	Glacial upland	Hill	Coarse-loamy till derived from sandstone
297227							
Arnot----------	88	3-15	1001-1801	35-45	Uplands	Valley side	Till
297228							
Arnot----------	85	15-35	1001-1801	35-45	Uplands	Valley side	Till
297229							
Wyoming----------	90	3-8	400-1801	42-50	Uplands	Terrace	Outwash
297230							
Wyoming----------	90	8-15	400-1801	42-50	Uplands	Terrace	Outwash
297231							
Wyoming----------	90	15-30	400-1801	42-50	Uplands	Terrace	Outwash
297236							
Suncook----------	91	0-8	400-1801	34-51	Valley	Flood plain	Sandy glaciofluvial deposits derived from sandstone
297237							
Mardin----------	85	0-8	801-1801	30-40	Uplands	Hill	Loamy till
297238					Uplands	Hill	Loamy till
297239							
Mardin----------	85	0-8	801-1801	30-40	Uplands	Hill	Loamy till
297240							
Mardin----------	85	8-15	801-1801	30-40	Uplands	Hill	Loamy till
297241							
Unadilla----------	90	0-3	400-600	42-50	Uplands	Outwash terrace	Outwash
297242							
Shohola----------	62	0-8	600-1299	40-46	Uplands	Bench	Till
Edgemere----------	29	0-8	600-1299	35-50	Uplands	Depression	Till
297243							
Shohola----------	62	8-15	600-1299	40-46	Uplands	Bench	---
Edgemere----------	29	8-15	600-1299	35-50	Uplands	Depression	Till
297244							
Lordstown----------	40	0-8	751-1801	32-50	Uplands	Hill	Till
Swartswood---------	35	0-8	1001-1801	40-46	Upland	Hill	Coarse-loamy till derived from sandstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
297247							
Chenango----------	86	0-8	400-1099	38-42	Uplands	Glacial outwash terrace	Till
297248							
Chenango----------	85	8-15	400-1099	38-42	Uplands	Glacial outwash terrace	Till
297249							
Chenango----------	90	15-25	400-1099	38-42	Uplands	Glacial outwash terrace	Till
297253							
Craigsville--------	50	0-5	899-3501	36-46	Mountains	Flood plain	---
Wyoming----------	40	0-8	400-1801	42-50	Uplands	Terrace	---
297254							
Pits, shale--------	40	0-40	---	36-46	---	---	---
Pits, gravel-------	40	0-40	---	36-46	---	---	---
298049							
Wurtsboro, extremely stony---	90	0-8	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298050							
Wurtsboro, extremely stony---	60	0-8	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Swartswood, extremely stony---	40	0-8	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
298051							
Wurtsboro, extremely stony---	60	8-15	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
298051							
Swartswood, extremely stony---	40	8-15	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
298075							
Colonie----------	80	3-8	755-1745	30-64	River valley	Outer terrace	Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
298188 Lackawanna, extremely stony	85	15-35	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
298189 Lackawanna, extremely stony	85	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
298221 Swartswood, extremely stony	90	0-8	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298222 Swartswood, extremely stony	90	8-15	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298223 Swartswood, extremely stony	85	15-35	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298255 Delaware, rarely flooded	80	3-8	400-600	30-64	River valley	Terrace	Postglacial coarse-loamy alluvium
298256 Delaware, rarely flooded	80	0-3	400-600	30-64	River valley	Terrace	Postglacial coarse-loamy alluvium
298257 Wallpack	85	8-15	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
298258 Wallpack	85	15-25	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
298259							
Wallpack, extremely stony---	85	0-8	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
298260							
Wallpack, extremely stony---	85	8-15	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
298261							
Wallpack----------	85	0-8	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
298262							
Wallpack, extremely stony---	85	15-35	400-1496	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
298265							
Venango, extremely stony----------	90	0-8	400-1001	30-64	Drumlin field	Drumlin	Fine-loamy till derived from limestone, sandstone, and shale
298266							
Venango, extremely stony----------	85	8-15	400-1001	30-64	Drumlin field	Drumlin	Fine-loamy till derived from limestone, sandstone, and shale
298409							
Swartswood, extremely stony---	90	0-8	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298411							
Swartswood, extremely stony---	90	8-15	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
298413							
Swartswood, extremely stony---	85	15-35	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
318498							
Hazen, very stony--	60	3-8	400-801	30-64	Outwash plain	Valley train	Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Hoosic, very stony-	35	3-8	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
318533							
Hazen, very stony--	50	0-3	400-801	30-64	Outwash plain	Valley train	Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Hoosic, very stony-	40	0-3	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
319783							
Catden----------	85	0-3	400-1804	30-64	Till plain	Depression	Herbaceous organic material and/or woody organic material
319784							
Fredon, very stony-	50	0-3	400-801	30-64	Outwash plain	Drainageway	Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
319784							
Halsey, very stony-	40	0-3	400-801	30-64	Outwash plain	Drainageway	Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
543222							
Andover, extremely stony----------	55	0-8	600-1001	35-50	Colluvial valley	Sandstone and shale hillslope	Brown fine-loamy colluvium derived from sandstone and siltstone
Buchanan, extremely stony---	40	0-8	600-2402	38-46	Colluvial valley	Sandstone and shale hillslope	Colluvium derived from sandstone and shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
543243							
Berks----------	65	25-60	499-1499	35-50	Uplands	Ridge Valley	Acid, brown residuum weathered from shale and siltstone
Weikert----------	25	25-60	499-1601	36-50	Valley	Shale hillslope	Acid, brown residuum weathered from shale and siltstone
543246							
Buchanan----------	75	3-8	700-1400	38-46	Mountains	Mountain slope Valley side	Colluvium derived from sandstone and shale
543247							
Buchanan, extremely stony---	80	0-8	700-1400	38-46	Mountains	Mountain slope Valley side	Stony colluvium derived from sandstone and shale
543257							
Chippewa----------	90	0-3	801-1801	30-45	Upland	Depression	Till derived from sedimentary rock
543258							
Chippewa----------	90	3-8	801-1801	30-45	Upland	Depression	Till derived from sedimentary rock
543259							
Chippewa, extremely stony---	90	0-8	801-1801	30-45	Upland	Depression	Till derived from sedimentary rock
543271							
Delaware----------	90	0-3	400-600	35-50	River valley	Low to middle river terrace	Postglacial alluvium derived from sandstone and shale
543276							
Fluvaquents--------	85	0-2	7-801	40-48	Valley	Flood plain	Alluvium derived from sedimentary rock
543292							
Hazleton, extremely stony---	90	8-25	1099-2500	36-55	Mountains	Gray & red sandstone mountain slope	Loamy residuum weathered from sandstone
543293							
Hazleton, extremely stony---	90	25-60	1099-2500	36-55	Mountains	Gray & red sandstone mountain slope	Loamy residuum weathered from sandstone
543299							
Laidig, extremely stony----------	90	0-8	400-3799	34-40	Mountains	Sandstone, conglomerate, quartzite, & shale colluvial mountain slope	Brown fine-loamy colluvium derived from sandstone and siltstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
543300							
Laidig, extremely stony----------	90	8-25	400-3799	34-40	Mountains	Sandstone, conglomerate, quartzite, & shale colluvial mountain slope	Brown fine-loamy colluvium derived from sandstone and siltstone
543304							
Laidig----------	50	25-60	400-3799	34-40	Mountains	Sandstone, conglomerate, quartzite, & shale colluvial mountain slope	Brown fine-loamy colluvium derived from sandstone and siltstone
Rubble land--------	40	25-60	1001-2999	36-50	Mountains	Sandstone, conglomerate, quartzite, & shale colluvial mountain slope	Stones and boulder fields of sandstone
543318							
Rubble land--------	75	0-90	600-2000	36-50	Mountains	Mountain slope	Stones and boulder fields of sandstone
543327							
Swartswood---------	90	3-8	1001-1801	40-46	Upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
543328							
Swartswood---------	90	8-15	1001-1801	40-46	Upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
543330							
Swartswood, extremely stony---	50	0-8	1001-1801	40-46	Upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
Wurtsboro, extremely stony---	30	0-8	1001-1801	40-46	Glacial upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
543331							
Swartswood, extremely stony---	50	8-25	1001-1801	40-46	Upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
543331							
Wurtsboro, extremely stony---	30	8-25	1001-1801	40-46	Glacial upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
543359							
Volusia----------	85	3-8	801-1801	30-40	Plateau	Valley side	Fine-loamy basal till derived from sandstone and siltstone
543360							
Volusia, extremely stony----------	85	0-8	801-1801	30-40	Plateau	Valley side	Fine-loamy basal till derived from sandstone and siltstone
543374							
Wurtsboro----------	90	3-8	1001-1801	40-46	Glacial upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
543375							
Wurtsboro----------	90	8-15	1001-1801	40-46	Glacial upland	Hill	Glacial till derived from quartzite, conglomerate, and/or sandstone
612280							
Scio----------	80	0-3	98-1001	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
612666							
Colonie----------	80	0-3	755-1745	30-64	River valley	Outer terrace	Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
612668							
Hoosic, very stony-	60	8-15	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
Hazen, very stony--	30	8-15	400-801	30-64	Outwash plain	Valley train	Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
612724							
Lordstown, very rocky----------	50	15-35	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
Wallpack, very rocky----------	40	15-35	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
612732							
Atherton, very poorly drained----	60	0-3	49-1499	30-64	River valley	Depression	Postglacial fine-silty alluvium
Atherton, poorly drained----------	30	0-3	49-1499	30-64	River valley	Depression	Postglacial fine-silty alluvium
612738							
Fluvaquents, occasionally flooded----------	90	0-3	---	30-64	River valley	Flood plain	Recent alluvium
612753							
Wallpack, aeolian mantle, very stony	85	8-15	400-801	30-64	Till plain	Ridge	Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
612756							
Wallpack, aeolian mantle, very stony	85	0-8	400-801	30-64	Till plain	Ridge	Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
612757							
Wallpack, aeolian mantle, very stony	85	15-35	400-801	30-64	Till plain	Ridge	Eolian deposits over coarse-loamy till derived from limestone, sandstone, and shale
612767							
Wellsboro, extremely stony---	85	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
612768							
Wellsboro, extremely stony---	85	0-8	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
613393							
Alden, extremely stony----------	90	0-8	400-1804	30-64	Till plain	Depression	Silty colluvium derived from sandstone over fine-loamy till derived from sandstone
613447							
Unadilla----------	85	0-3	600-1801	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
613448							
Unadilla----------	85	3-8	600-1801	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
614075							
Wurtsboro, extremely stony---	80	15-35	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Swartswood, extremely stony---	20	15-35	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
620179							
Arnot, very rocky--	55	0-15	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Lordstown, very rocky----------	40	0-15	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
620180							
Arnot----------	45	15-35	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Lordstown----------	40	15-35	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
Rock outcrop-------	15	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
620181							
Arnot----------	60	35-60	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
620181							
Lordstown----------	25	35-60	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
Rock outcrop-------	15	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
623089							
Chippewa, extremely stony---	80	0-8	400-1001	30-64	Drumlin field	Interdrumlin	Fine-loamy till derived from limestone, sandstone, and shale
623109							
Farmington---------	50	0-15	400-902	30-64	Till plain	Ground moraine	Loamy till derived from limestone and dolomite
Rock outcrop-------	40	---	400-902	30-64	Till plain	Ground moraine	Limestone and dolomite
624811							
Galway, very rocky-	80	35-60	400-902	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone and dolomite
624813							
Lackawanna, extremely stony---	85	0-8	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
624816							
Lordstown, very rocky----------	50	8-15	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
Wallpack, very rocky----------	35	8-15	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
624822							
Lordstown----------	50	15-25	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
Wallpack----------	35	15-25	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
624823							
Lordstown----------	50	8-15	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
Wallpack----------	35	8-15	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
624824							
Lordstown----------	50	0-8	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
Wallpack----------	35	0-8	400-801	30-64	Till plain	Ridge	Coarse-loamy till derived from limestone, sandstone, and shale
624826							
Manlius, very rocky	60	35-60	400-801	30-64	Till plain	Ridge	Loamy till derived from acid shale
Nassau, very rocky-	25	35-60	400-801	30-64	Till plain	Ridge	Loamy till derived from acid shale
624827							
Nassau, very rocky-	55	0-8	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Manlius, very rocky	44	0-8	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
624828							
Nassau, very rocky-	55	8-15	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Manlius, very rocky	44	8-15	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
624829							
Nassau, very rocky-	55	15-35	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Manlius, very rocky	44	15-35	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
624832							
Nassau----------	50	35-60	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Rock outcrop-------	45	---	400-1552	30-64	Till plain	Ground moraine	Acid shale
624841							
Oquaga----------	60	35-60	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Rock outcrop-------	25	---	699-1801	30-64	Mountains	Ground moraine	Sandstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
624845							
Rock outcrop-------	45	---	400-902	30-64	Till plain	Ground moraine	Limestone and dolomite
Farmington---------	35	15-35	400-902	30-64	Till plain	Ground moraine	Loamy till derived from limestone and dolomite
Galway----------	20	15-35	400-902	30-64	Till plain	Ground moraine	Coarse-loamy till derived from limestone and dolomite
624846							
Rock outcrop-------	40	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
Arnot----------	30	60-80	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Rubble land--------	20	60-80	400-1804	30-64	Mountains	Talus slope	Talus derived from conglomerate
626816							
Udifluvents, occasionally flooded----------	90	0-3	---	30-64	River valley	Flood plain	Coarse-loamy alluvium
635458							
Oquaga, very rocky-	55	8-15	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Lackawanna, very rocky----------	30	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
635459							
Oquaga, very rocky-	50	15-35	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Lackawanna, very rocky----------	35	15-35	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
740953							
Delaware, rarely flooded----------	80	0-3	400-600	30-64	River valley	Terrace	Postglacial coarse-loamy alluvium

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
740968							
Nassau, very rocky-	55	8-15	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Manlius, very rocky	44	8-15	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
740969							
Nassau, very rocky-	55	15-35	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
Manlius, very rocky	44	15-35	400-1552	30-64	Till plain	Ground moraine	Loamy till derived from acid shale
740971							
Oquaga, very rocky-	55	8-15	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Lackawanna, very rocky----------	30	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
740972							
Oquaga, very rocky-	50	15-35	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Lackawanna, very rocky----------	35	15-35	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
740974							
Oquaga----------	60	35-60	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Rock outcrop-------	25	---	699-1801	30-64	Mountains	Ground moraine	Sandstone
740975							
Rock outcrop-------	40	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
Arnot----------	30	60-80	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Rubble land--------	20	60-80	400-1804	30-64	Mountains	Talus slope	Talus derived from conglomerate

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
740987							
Scio----------	80	0-3	98-1001	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
740988							
Udifluvents, occasionally flooded----------	90	0-3	---	30-64	River valley	Flood plain	Coarse-loamy alluvium
740991							
Unadilla----------	85	0-3	600-1801	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
740992							
Unadilla----------	85	3-8	600-1801	30-64	River valley	Inner terrace	Postglacial coarse-silty alluvium
740995							
Wellsboro, extremely stony---	85	0-8	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
740996							
Wellsboro, extremely stony---	85	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
741149							
Lackawanna, extremely stony---	85	8-15	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
741150							
Lackawanna, extremely stony---	85	15-35	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from sandstone and siltstone and/or coarse-loamy till derived from shale
801114							
Oquaga----------	75	0-15	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Rock outcrop-------	15	---	699-1801	30-64	Mountains	Ground moraine	Sandstone

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
810906							
Oquaga----------	75	0-15	699-1801	30-64	Mountains	Ground moraine	Loamy till derived from sandstone and siltstone and/or loamy till derived from shale
Rock outcrop-------	15	---	699-1801	30-64	Mountains	Ground moraine	Sandstone
1147465							
Alden, extremely stony----------	90	0-8	400-1804	30-64	Till plain	Depression	Silty colluvium derived from sandstone over fine-loamy till derived from sandstone
1147467							
Arnot, very rocky--	55	0-15	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Lordstown, very rocky----------	40	0-15	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
1147468							
Arnot----------	45	15-35	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Lordstown----------	40	15-35	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
Rock outcrop-------	15	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
1147469							
Arnot----------	60	35-60	400-1804	30-64	Mountains	Ground moraine	Loamy till derived from conglomerate
Lordstown----------	25	35-60	400-1804	30-64	Mountains	Ground moraine	Coarse-loamy till derived from conglomerate
Rock outcrop-------	15	---	400-1804	30-64	Mountains	Ground moraine	Conglomerate
1147470							
Atherton, very poorly drained----	60	0-3	49-1499	30-64	River valley	Depression	Postglacial fine-silty alluvium
Atherton, poorly drained----------	30	0-3	49-1499	30-64	River valley	Depression	Postglacial fine-silty alluvium
1147471							
Catden----------	85	0-3	400-1804	30-64	Till plain	Depression	Herbaceous organic material and/or woody organic material

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
1147474							
Chippewa, extremely stony---	80	0-8	400-1001	30-64	Drumlin field	Interdrumlin	Fine-loamy till derived from limestone, sandstone, and shale
1147475							
Colonie----------	80	0-3	755-1745	30-64	River valley	Outer terrace	Postglacial sandy alluvium, sandy eolian deposits, and/or glaciofluvial deposits
1147478							
Delaware, rarely flooded----------	80	3-8	400-600	30-64	River valley	Terrace	Postglacial coarse-loamy alluvium
1147482							
Fredon, very stony-	50	0-3	400-801	30-64	Outwash plain	Drainageway	Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
Halsey, very stony-	40	0-3	400-801	30-64	Outwash plain	Drainageway	Coarse-loamy over sandy and gravelly glaciofluvial deposits derived from limestone, sandstone, and shale
1147485							
Hazen, very stony--	60	3-8	400-801	30-64	Outwash plain	Valley train	Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale
Hoosic, very stony-	35	3-8	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
1147490							
Hoosic, very stony-	60	8-15	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
Hazen, very stony--	30	8-15	400-801	30-64	Outwash plain	Valley train	Coarse-loamy glaciofluvial deposits derived from limestone, sandstone, and shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
1147491							
Hoosic, very stony-	50	25-60	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
Otisville, very stony----------	40	25-60	400-801	30-64	Outwash plain	Valley train	Glaciofluvial deposits derived from sandstone and shale
1147492							
Lackawanna, extremely stony---	85	0-8	1099-1801	30-64	Mountains	Ground moraine	Coarse-loamy till derived from shale and/or coarse-loamy till derived from sandstone and siltstone
1147500							
Wurtsboro, extremely stony---	90	0-8	400-1804	30-64	Till plain	Ground moraine	Coarse-loamy till derived from sandstone
1147501							
Wurtsboro, extremely stony---	60	0-8	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Swartswood, extremely stony---	40	0-8	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
1147502							
Wurtsboro, extremely stony---	60	8-15	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Swartswood, extremely stony---	40	8-15	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
1147527							
Udorthents---------	60	0-8	400-1496	30-64	Upland	Low hill	Fill and/or disturbed original soil material

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
1147527							
Urban land---------	40	0-3	400-1496	30-64	Upland	Low hill	Buildings, pavement, and other impervious surfaces over fill and/or disturbed original soil material
1147532							
Udorthents---------	100	0-8	400-1496	30-64	Upland	Low hill	Fill and/or disturbed original soil material
1147533							
Wurtsboro, extremely stony---	80	15-35	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
Swartswood, extremely stony---	20	15-35	400-1102	30-64	Till plain	Ground moraine	Bouldery, quartzose, coarse-loamy drift derived from conglomerate
1948749							
Arnot----------	90	3-8	1001-1801	35-45	Till plain	Valley side	Glacial till derived from sedimentary rock
1948750							
Arnot----------	90	8-15	1001-1801	35-45	Till plain	Valley side	Glacial till derived from sedimentary rock
1948751							
Arnot----------	90	15-25	1001-1801	35-45	Till plain	Valley side	Glacial till derived from sedimentary rock
1948774							
Conotton----------	90	3-8	620-909	32-45	Outwash plain	Stream terrace	Stratified sand and gravel outwash
1948775							
Conotton----------	95	8-15	620-909	32-45	Outwash plain	Stream terrace	Stratified sand and gravel outwash
1948776							
Conotton----------	95	15-25	620-909	32-45	Outwash plain	Stream terrace	Stratified sand and gravel outwash
1948777							
Conotton----------	95	25-65	620-909	32-45	Outwash plain	Stream terrace	Stratified sand and gravel outwash
1948797							
Manlius----------	90	3-8	200-1801	30-50	Till plain	Valley side	Thin till derived from shale

Table 5.--Landscape, Landform, and Parent Material--Continued

Map unit symbol and soil name	Percent of map unit	Slope	Elevation	MAP	Landscape	Landform	Parent material
	Pct	*Pct*	*Ft*	*In*			
1948802							
Manlius----------	90	8-15	200-1801	30-50	Till plain	Valley side	Thin till derived from shale
1948818							
Manlius----------	90	15-25	200-1801	30-50	Till plain	Valley side	Thin till derived from shale
1948832							
Penargyl----------	90	3-8	299-2100	34-50	Upland	Valley side	Colluvium derived from shale and siltstone and/or loamy glacial till derived from sedimentary rock
1948846							
Phelps----------	90	3-8	---	30-45	Outwash plain	Terrace	Silty or loamy over glacial outwash
1948855							
Udorthents, loamy--	95	0-8	299-899	42-48	Upland	Ridge	Graded areas of loamy sedimentary rock
1948989							
Urban land---------	65	0-8	---	36-46	Mountains	Hill Ridge Valley	Pavement, buildings, and other artificially covered areas
Delaware----------	25	0-8	400-600	35-50	River valley	Low to middle river terrace	Postglacial alluvium derived from sandstone and shale

Table 6a.--Land Management, Part I (Planting)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
290836							
Hoosic, very stony--	50	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Rock fragments	0.50	Rock fragments	0.50		
Otisville, very stony----------	40	Moderately suited		Unsuited		Moderate	
		Sandiness	0.50	Slope	1.00	Low strength	0.50
		Slope	0.50	Rock fragments	0.50		
				Sandiness	0.50		
296265							
Alden----------	100	Well suited		Well suited		Severe	
						Low strength	1.00
296269							
Fluvents, (alluvial land)----------	70	Well suited		Well suited		Moderate	
						Low strength	0.50
296271							
Alvira----------	55	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
Watson----------	35	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
296272							
Bath----------	85	Well suited		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
				Rock fragments	0.50		
296273							
Bath----------	85	Well suited		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
				Rock fragments	0.50		
296274							
Bath----------	85	Well suited		Poorly suited		Slight	
				Slope	0.75	Strength	0.10
				Rock fragments	0.50		
296275							
Bath----------	90	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Rock fragments	0.75	Strength	0.10
				Slope	0.50		
296276							
Bath----------	90	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Slope	0.75	Strength	0.10
				Rock fragments	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
296277							
Benson	55	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
296278							
Benson	60	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.75		
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Moderately suited		Unsuited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Rock outcrop	25	Not rated		Not rated		Not rated	
296280							
Braceville	90	Well suited		Well suited		Severe	
						Low strength	1.00
296281							
Braceville	90	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
296283							
Buchanan	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
296288							
Chippewa	48	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
Norwich	48	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
296289							
Chippewa	47	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
Norwich	47	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
296295							
Udorthents, cut and fill	90	Not rated		Not rated		Not rated	
296297							
Dekalb	100	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Slope	0.75	Strength	0.10
				Rock fragments	0.75		
296298							
Dekalb	100	Moderately suited		Unsuited		Slight	
		Rock fragments	0.50	Slope	1.00	Strength	0.10
		Slope	0.50	Rock fragments	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
296303							
Hazleton	100	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Rock fragments	0.75	Strength	0.10
				Slope	0.75		
296304							
Holly	100	Well suited		Well suited		Severe	
						Low strength	1.00
296311							
Lackawanna	40	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	0.75		
Bath	30	Moderately suited		Unsuited		Slight	
		Rock fragments	0.50	Slope	1.00	Strength	0.10
		Slope	0.50	Rock fragments	0.75		
296312							
Lackawanna	80	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
296313							
Lackawanna	80	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
296315							
Lackawanna	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
296316							
Lackawanna	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
296317							
Laidig	100	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
296326							
Lordstown	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
296327							
Lordstown	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
296328							
Lordstown	40	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	0.75		
Oquaga	35	Moderately suited		Unsuited		Slight	
		Rock fragments	0.50	Slope	1.00	Strength	0.10
		Slope	0.50	Rock fragments	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
296329							
Mardin	85	Well suited		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
				Rock fragments	0.50		
296330							
Mardin	85	Well suited		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
				Rock fragments	0.50		
296331							
Mardin	85	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
296332							
Mardin	87	Well suited		Poorly suited		Severe	
				Slope	0.75	Low strength	1.00
				Rock fragments	0.50		
296335							
Meckesville	100	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
296337							
Meckesville	100	Well suited		Poorly suited		Severe	
				Slope	0.75	Low strength	1.00
				Rock fragments	0.50		
296338							
Morris	80	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
296339							
Morris	75	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
296340							
Morris	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
296341							
Freetown, mucky peat	100	Poorly suited		Poorly suited		Moderate	
		Wetness	0.75	Wetness	0.75	Wetness	0.50
		Sandiness	0.50	Sandiness	0.50		
296342							
Paupack, mucky peat (shallow)	100	Poorly suited		Poorly suited		Moderate	
		Wetness	0.75	Wetness	0.75	Wetness	0.50
		Sandiness	0.50	Sandiness	0.50	Low strength	0.50
296343							
Oquaga	50	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
296343							
Lackawanna	35	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
296344							
Oquaga	55	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
Lackawanna	30	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
296346							
Oquaga	50	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Rock fragments	0.75	Strength	0.10
Lackawanna	35	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
296347							
Oquaga	60	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Slope	0.75	Strength	0.10
				Rock fragments	0.75		
Lackawanna	30	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75		
296348							
Philo	85	Well suited		Well suited		Severe	
						Low strength	1.00
296349							
Pope	90	Well suited		Well suited		Severe	
						Low strength	1.00
296350							
Pope	90	Well suited		Well suited		Severe	
						Low strength	1.00
296351							
Rexford, somewhat poorly drained	40	Well suited		Well suited		Severe	
						Low strength	1.00
Rexford, poorly drained	35	Well suited		Well suited		Severe	
						Low strength	1.00
296355							
Sheffield	100	Well suited		Well suited		Severe	
						Low strength	1.00
296363							
Dystrochrepts, very stony	85	Moderately suited		Unsuited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Rock fragments	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
296369							
Wayland	100	Well suited		Well suited		Severe	
						Low strength	1.00
296376							
Wellsboro	80	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
296379							
Wellsboro	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
296385							
Wyoming	85	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
296386							
Wyoming	85	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
296387							
Wyoming	85	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
296388							
Wyoming	85	Well suited		Poorly suited		Moderate	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50		
296389							
Wyoming	100	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
				Rock fragments	0.50		
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Unsuited		Unsuited		Moderate	
		Rock fragments	1.00	Rock fragments	1.00	Low strength	0.50
				Slope	0.50		
Shohola	42	Unsuited		Unsuited		Moderate	
		Rock fragments	1.00	Rock fragments	1.00	Low strength	0.50
				Slope	0.50		
297186							
Edgemere	75	Unsuited		Unsuited		Moderate	
		Rock fragments	1.00	Rock fragments	1.00	Low strength	0.50
297188							
Manlius	40	Poorly suited		Unsuited		Slight	
		Rock fragments	0.75	Rock fragments	1.00	Strength	0.10
				Slope	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
297188							
Arnot	35	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Poorly suited		Unsuited		Slight	
		Rock fragments	0.75	Slope	1.00	Strength	0.10
		Slope	0.50	Rock fragments	1.00		
Arnot	35	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
297190							
Braceville	82	Well suited		Well suited		Moderate	
						Low strength	0.50
297191							
Wyalusing	85	Well suited		Well suited		Severe	
						Low strength	1.00
297192							
Pope	95	Well suited		Well suited		Moderate	
						Low strength	0.50
297193							
Paupack	90	Poorly suited		Poorly suited		Moderate	
		Wetness	0.75	Wetness	0.75	Wetness	0.50
		Sandiness	0.50	Sandiness	0.50	Low strength	0.50
297196							
Freetown	94	Poorly suited		Poorly suited		Moderate	
		Wetness	0.75	Wetness	0.75	Wetness	0.50
		Sandiness	0.50	Sandiness	0.50		
297197							
Manlius	90	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
297198							
Manlius	86	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
297201							
Oquaga	75	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75		
297203							
Delaware	93	Well suited		Well suited		Severe	
						Low strength	1.00

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
297204							
Delaware	82	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
297205							
Delaware	80	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
297209							
Philo	85	Well suited		Well suited		Severe	
						Low strength	1.00
297210							
Barbour	85	Well suited		Well suited		Severe	
						Low strength	1.00
297216							
Wurtsboro	92	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
297217							
Wurtsboro	88	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
				Slope	0.50		
297227							
Arnot	88	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Rock fragments	0.75	Strength	0.10
				Slope	0.50		
297228							
Arnot	85	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Slope	0.75	Strength	0.10
				Rock fragments	0.75		
297229							
Wyoming	90	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
297230							
Wyoming	90	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
297231							
Wyoming	90	Well suited		Poorly suited		Moderate	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50		
297236							
Suncook	91	Well suited		Well suited		Moderate	
						Low strength	0.50
297237							
Mardin	85	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
297238							
Mardin	85	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
297239							
Mardin	85	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
297240							
Mardin	85	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
				Slope	0.50		
297241							
Unadilla	90	Well suited		Well suited		Severe	
						Low strength	1.00
297242							
Shohola	62	Unsuited		Unsuited		Moderate	
		Rock fragments	1.00	Rock fragments	1.00	Low strength	0.50
Edgemere	29	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
297243							
Shohola	62	Unsuited		Unsuited		Moderate	
		Rock fragments	1.00	Rock fragments	1.00	Low strength	0.50
				Slope	0.50		
Edgemere	29	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
				Slope	0.50		
297244							
Lordstown	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
Swartswood	35	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
297247							
Chenango	86	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
297248							
Chenango	85	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
297249							
Chenango	90	Well suited		Poorly suited		Moderate	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50		
297253							
Craigsville	50	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
297253							
Wyoming----------	40	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
297254							
Pits, shale---------	40	Not rated		Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony----	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
298050							
Wurtsboro, extremely stony----	60	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
Swartswood, extremely stony----	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
298051							
Wurtsboro, extremely stony----	60	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Swartswood, extremely stony----	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
298075							
Colonie----------	80	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
298188							
Lackawanna, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
298189							
Lackawanna, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
298221							
Swartswood, extremely stony----	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
298222							
Swartswood, extremely stony----	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
298223 Swartswood, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
298255 Delaware, rarely flooded	80	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
298256 Delaware, rarely flooded	80	Well suited		Well suited		Moderate	
						Low strength	0.50
298257 Wallpack	85	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
298258 Wallpack	85	Well suited		Poorly suited		Severe	
				Slope	0.75	Low strength	1.00
298259 Wallpack, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
298260 Wallpack, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
298261 Wallpack	85	Well suited		Well suited		Severe	
						Low strength	1.00
298262 Wallpack, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
298265 Venango, extremely stony	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
298266 Venango, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
298409 Swartswood, extremely stony	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
298411							
Swartswood, extremely stony----	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
298413							
Swartswood, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
298461							
Water----------	100	Not rated		Not rated		Not rated	
318498							
Hazen, very stony---	60	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
Hoosic, very stony--	35	Moderately suited		Moderately suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
318533							
Hazen, very stony---	50	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
Hoosic, very stony--	40	Moderately suited		Moderately suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
319783							
Catden----------	85	Well suited		Well suited		Severe	
						Low strength	1.00
319784							
Fredon, very stony--	50	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
Halsey, very stony--	40	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
543222							
Andover, extremely stony----------	55	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
Buchanan, extremely stony----------	40	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
543243							
Berks----------	65	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
				Rock fragments	0.50		
Weikert----------	25	Moderately suited		Unsuited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
				Rock fragments	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
543246							
Buchanan	75	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
543247							
Buchanan, extremely stony	80	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
543257							
Chippewa	90	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
543258							
Chippewa	90	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
543259							
Chippewa, extremely stony	90	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
543271							
Delaware	90	Well suited		Well suited		Moderate	
						Low strength	0.50
543276							
Fluvaquents	85	Well suited		Well suited		Moderate	
						Low strength	0.50
543292							
Hazleton, extremely stony	90	Moderately suited		Poorly suited		Slight	
		Rock fragments	0.50	Rock fragments	0.75	Strength	0.10
				Slope	0.75		
543293							
Hazleton, extremely stony	90	Moderately suited		Unsuited		Slight	
		Rock fragments	0.50	Slope	1.00	Strength	0.10
		Slope	0.50	Rock fragments	0.75		
543299							
Laidig, extremely stony	90	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
543300							
Laidig, extremely stony	90	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75		
543304							
Laidig	50	Moderately suited		Unsuited		Moderate	
		Rock fragments	0.50	Slope	1.00	Low strength	0.50
		Slope	0.50	Rock fragments	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
543304							
Rubble land	40	Moderately suited		Unsuited		Slight	
		Sandiness	0.50	Rock fragments	1.00	Strength	0.10
		Rock fragments	0.50	Slope	1.00		
		Slope	0.50	Sandiness	0.50		
543318							
Rubble land	75	Moderately suited		Unsuited		Slight	
		Slope	0.50	Rock fragments	1.00	Strength	0.10
		Sandiness	0.50	Slope	1.00		
		Rock fragments	0.50	Sandiness	0.50		
543327							
Swartswood	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
543328							
Swartswood	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
543330							
Swartswood, extremely stony	50	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
Wurtsboro, extremely stony	30	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	0.50
543331							
Swartswood, extremely stony	50	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75		
Wurtsboro, extremely stony	30	Moderately suited		Poorly suited		Moderate	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75		
543359							
Volusia	85	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
543360							
Volusia, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
543374							
Wurtsboro	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
543375							
Wurtsboro	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
612280							
Scio	80	Well suited		Well suited		Severe	
						Low strength	1.00
612666							
Colonie	80	Well suited		Well suited		Moderate	
						Low strength	0.50
612668							
Hoosic, very stony	60	Moderately suited		Moderately suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
Hazen, very stony	30	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
612724							
Lordstown, very rocky	50	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Wallpack, very rocky	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
612732							
Atherton, very poorly drained	60	Poorly suited		Poorly suited		Severe	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
Atherton, poorly drained	30	Well suited		Well suited		Severe	
						Low strength	1.00
612738							
Fluvaquents, occasionally flooded	90	Moderately suited		Moderately suited		Severe	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	1.00
612753							
Wallpack, aeolian mantle, very stony	85	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
612756							
Wallpack, aeolian mantle, very stony	85	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
612757							
Wallpack, aeolian mantle, very stony	85	Well suited		Poorly suited		Moderate	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
612767							
Wellsboro, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
612768							
Wellsboro, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
613393							
Alden, extremely stony	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
613447							
Unadilla	85	Well suited		Well suited		Severe	
						Low strength	1.00
613448							
Unadilla	85	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
614075							
Wurtsboro, extremely stony	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Swartswood, extremely stony	20	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
620179							
Arnot, very rocky	55	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
Lordstown, very rocky	40	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
620180							
Arnot	45	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Lordstown	40	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Rock outcrop	15	Not rated		Not rated		Not rated	
620181							
Arnot	60	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
620181							
Lordstown	25	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
623109							
Farmington	50	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
Rock outcrop	40	Not rated		Not rated		Not rated	
624811							
Galway, very rocky	80	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
624813							
Lackawanna, extremely stony	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
624816							
Lordstown, very rocky	50	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Wallpack, very rocky	35	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
624822							
Lordstown	50	Well suited		Poorly suited		Severe	
				Slope	0.75	Low strength	1.00
				Rock fragments	0.50		
Wallpack	35	Well suited		Poorly suited		Severe	
				Slope	0.75	Low strength	1.00
624823							
Lordstown	50	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
Wallpack	35	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
624824							
Lordstown	50	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
Wallpack	35	Well suited		Well suited		Severe	
						Low strength	1.00

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
624826							
Manlius, very rocky-	60	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Rock fragments	0.50	Rock fragments	1.00		
Nassau, very rocky--	25	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Rock fragments	0.50	Rock fragments	1.00		
624827							
Nassau, very rocky--	55	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
Manlius, very rocky-	44	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
624828							
Nassau, very rocky--	55	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
Manlius, very rocky-	44	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
624829							
Nassau, very rocky--	55	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Manlius, very rocky-	44	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
624832							
Nassau----------	50	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Rock fragments	0.50	Rock fragments	1.00		
Rock outcrop--------	45	Not rated		Not rated		Not rated	
624841							
Oquaga----------	60	Moderately suited		Unsuited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Rock outcrop--------	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop--------	45	Not rated		Not rated		Not rated	
Farmington----------	35	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Galway----------	20	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
624846							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Rubble land---------	20	Unsuited		Unsuited		Slight	
		Rock fragments	1.00	Slope	1.00		
		Slope	0.50	Rock fragments	1.00		
		Sandiness	0.50	Sandiness	0.50		
626816							
Udifluvents, occasionally flooded----------	90	Well suited		Well suited		Moderate	
						Low strength	0.50
635458							
Oquaga, very rocky--	55	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Lackawanna, very rocky----------	30	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
635459							
Oquaga, very rocky--	50	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Lackawanna, very rocky----------	35	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
740953							
Delaware, rarely flooded----------	80	Well suited		Well suited		Moderate	
						Low strength	0.50
740968							
Nassau, very rocky--	55	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
Manlius, very rocky-	44	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
740969							
Nassau, very rocky--	55	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Manlius, very rocky-	44	Moderately suited		Unsuited		Severe	
		Rock fragments	0.50	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
740971							
Oquaga, very rocky	55	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Lackawanna, very rocky	30	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
740972							
Oquaga, very rocky	50	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Lackawanna, very rocky	35	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
740974							
Oquaga	60	Moderately suited		Unsuited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Rock outcrop	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop	40	Not rated		Not rated		Not rated	
Arnot	30	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Rubble land	20	Unsuited		Unsuited		Slight	
		Rock fragments	1.00	Slope	1.00		
		Slope	0.50	Rock fragments	1.00		
		Sandiness	0.50	Sandiness	0.50		
740987							
Scio	80	Well suited		Well suited		Severe	
						Low strength	1.00
740988							
Udifluvents, occasionally flooded	90	Well suited		Well suited		Moderate	
						Low strength	0.50
740991							
Unadilla	85	Well suited		Well suited		Severe	
						Low strength	1.00
740992							
Unadilla	85	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
740995							
Wellsboro, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
740996							
Wellsboro, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
741149							
Lackawanna, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
741150							
Lackawanna, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
801114							
Oquaga----------	75	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Rock outcrop--------	15	Not rated		Not rated		Not rated	
810906							
Oquaga----------	75	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Rock outcrop--------	15	Not rated		Not rated		Not rated	
1147465							
Alden, extremely stony----------	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
1147467							
Arnot, very rocky---	55	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
Lordstown, very rocky----------	40	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.50		
1147468							
Arnot----------	45	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
1147468							
Lordstown	40	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Rock fragments	1.00	Low strength	1.00
				Slope	0.75		
Rock outcrop	15	Not rated		Not rated		Not rated	
1147469							
Arnot	60	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Lordstown	25	Poorly suited		Unsuited		Severe	
		Rock fragments	0.75	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained	60	Poorly suited		Poorly suited		Severe	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
Atherton, poorly drained	30	Well suited		Well suited		Severe	
						Low strength	1.00
1147471							
Catden	85	Well suited		Well suited		Severe	
						Low strength	1.00
1147474							
Chippewa, extremely stony	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
1147475							
Colonie	80	Well suited		Well suited		Moderate	
						Low strength	0.50
1147478							
Delaware, rarely flooded	80	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
1147482							
Fredon, very stony	50	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
Halsey, very stony	40	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
1147485							
Hazen, very stony	60	Well suited		Moderately suited		Severe	
				Rock fragments	0.50	Low strength	1.00
				Slope	0.50		
Hoosic, very stony	35	Moderately suited		Moderately suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
1147490							
Hoosic, very stony--	60	Moderately suited		Moderately suited		Moderate	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
Hazen, very stony---	30	Well suited		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Rock fragments	0.50		
1147491							
Hoosic, very stony--	50	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
		Rock fragments	0.50	Rock fragments	0.50		
Otisville, very stony----------	40	Moderately suited		Unsuited		Moderate	
		Sandiness	0.50	Slope	1.00	Low strength	0.50
		Slope	0.50	Rock fragments	0.50		
				Sandiness	0.50		
1147492							
Lackawanna, extremely stony----	85	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
1147500							
Wurtsboro, extremely stony----	90	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
1147501							
Wurtsboro, extremely stony----	60	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
Swartswood, extremely stony----	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
1147502							
Wurtsboro, extremely stony----	60	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
Swartswood, extremely stony----	40	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Rock fragments	0.75	Low strength	1.00
				Slope	0.50		
1147527							
Udorthents----------	60	Well suited		Well suited		Severe	
						Low strength	1.00
Urban land----------	40	Not rated		Not rated		Not rated	
1147532							
Udorthents----------	100	Well suited		Well suited		Severe	
						Low strength	1.00

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
1147533							
Wurtsboro, extremely stony	80	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
Swartswood, extremely stony	20	Moderately suited		Poorly suited		Severe	
		Rock fragments	0.50	Slope	0.75	Low strength	1.00
				Rock fragments	0.75		
1948749							
Arnot	90	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
1948750							
Arnot	90	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
1948751							
Arnot	90	Well suited		Poorly suited		Slight	
				Slope	0.75	Strength	0.10
				Rock fragments	0.50		
1948774							
Conotton	90	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
1948775							
Conotton	95	Well suited		Moderately suited		Moderate	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
1948776							
Conotton	95	Well suited		Poorly suited		Moderate	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50		
1948777							
Conotton	95	Moderately suited		Unsuited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
				Rock fragments	0.50		
1948797							
Manlius	90	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
1948802							
Manlius	90	Well suited		Moderately suited		Slight	
				Rock fragments	0.50	Strength	0.10
				Slope	0.50		
1948818							
Manlius	90	Well suited		Poorly suited		Slight	
				Slope	0.75	Strength	0.10
				Rock fragments	0.50		

Table 6a.--Land Management, Part I (Planting)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
1948832							
Penargyl	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
1948846							
Phelps	90	Well suited		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
1948855							
Udorthents, loamy	95	Well suited		Well suited		Severe	
						Low strength	1.00
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Well suited		Well suited		Moderate	
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
290836							
Hoosic, very stony	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Otisville, very stony	40	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Sandiness	0.50
296265							
Alden	100	Slight		Slight		Poorly suited	
						Low strength	1.00
						Ponding	1.00
						Wetness	1.00
296269							
Fluvents, (alluvial land)	70	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	0.50
296271							
Alvira	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Low strength	0.50
						Slope	0.50
Watson	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
						Wetness	0.50
						Stickiness; high plasticity index	0.50
296272							
Bath	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
296273							
Bath	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
296274							
Bath	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
296275							
Bath	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Slope	0.50
296276							
Bath	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296277							
Benson	55	Slight		Slight		Moderately suited	
						Low strength	0.50
296278							
Benson	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rock outcrop	25	Not rated		Not rated		Not rated	
296280							
Braceville	90	Slight		Slight		Moderately suited	
						Low strength	0.50
296281							
Braceville	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
296283							
Buchanan	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
296288							
Chippewa	48	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Low strength	0.50
Norwich	48	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Low strength	0.50
296289							
Chippewa	47	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Rock fragments	0.50
Norwich	47	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Rock fragments	0.50
						Low strength	0.50
296295							
Udorthents, cut and fill	90	Not rated		Not rated		Not rated	
296297							
Dekalb	100	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296298							
Dekalb	100	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
296303							
Hazleton	100	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
						Rock fragments	0.50
296304							
Holly	100	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
296311							
Lackawanna	40	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Bath	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
296312							
Lackawanna	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
296313							
Lackawanna	80	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
296315							
Lackawanna	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
						Slope	0.50
296316							
Lackawanna	80	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
296317							
Laidig	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
296326							
Lordstown	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
						Slope	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296327							
Lordstown	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
296328							
Lordstown	40	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Oquaga	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
296329							
Mardin	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Slope	0.50
296330							
Mardin	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Wetness	0.50
296331							
Mardin	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Low strength	0.50
						Slope	0.50
296332							
Mardin	87	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Wetness	0.50
						Low strength	0.50
296335							
Meckesville	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
296337							
Meckesville	100	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
						Stickiness; high plasticity index	0.50
296338							
Morris	80	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Low strength	0.50
						Slope	0.50
296339							
Morris	75	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Rock fragments	0.50
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296340							
Morris	80	Slight		Severe		Poorly suited	
				Slope/erodibility	0.95	Wetness	1.00
						Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
296341							
Freetown, mucky peat	100	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
296342							
Paupack, mucky peat (shallow)	100	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
296343							
Oquaga	50	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
Lackawanna	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Stickiness; high plasticity index	0.50
296344							
Oquaga	55	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Lackawanna	30	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Stickiness; high plasticity index	0.50
296346							
Oquaga	50	Slight		Slight		Moderately suited	
						Rock fragments	0.50
Lackawanna	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50
296347							
Oquaga	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Lackawanna	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296348							
Philo	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
296349							
Pope	90	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
296350							
Pope	90	Slight		Slight		Moderately suited	
						Low strength	0.50
296351							
Rexford, somewhat poorly drained	40	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
Rexford, poorly drained	35	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
296355							
Sheffield	100	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
						Low strength	0.50
296363							
Dystrochrepts, very stony	85	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
296369							
Wayland	100	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
296376							
Wellsboro	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Low strength	0.50
						Slope	0.50
296379							
Wellsboro	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Wetness	0.50
						Rock fragments	0.50
						Low strength	0.50
296385							
Wyoming	85	Slight		Slight		Well suited	

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
296386							
Wyoming	85	Slight		Slight		Moderately suited	
						Slope	0.50
296387							
Wyoming	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
296388							
Wyoming	85	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
296389							
Wyoming	100	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Ponding	1.00
						Wetness	1.00
						Low strength	0.50
						Slope	0.50
Shohola	42	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Wetness	0.50
						Slope	0.50
						Low strength	0.50
297186							
Edgemere	75	Slight		Slight		Poorly suited	
						Rock fragments	1.00
						Ponding	1.00
						Wetness	1.00
						Low strength	0.50
297188							
Manlius	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Arnot	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
						Low strength	0.50
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
297189							
Arnot	35	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
						Low strength	0.50
Rock outcrop	15	Not rated		Not rated		Not rated	
297190							
Braceville	82	Slight		Slight		Moderately suited	
						Wetness	0.50
297191							
Wyalusing	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
297192							
Pope	95	Slight		Slight		Poorly suited	
						Flooding	1.00
297193							
Paupack	90	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
297196							
Freetown	94	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
297197							
Manlius	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Slope	0.50
297198							
Manlius	86	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
297201							
Oquaga	75	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
						Rock fragments	1.00
297203							
Delaware	93	Slight		Slight		Moderately suited	
						Low strength	0.50
297204							
Delaware	82	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
297205							
Delaware	80	Slight		Severe		Poorly suited	
				Slope/erodibility	0.95	Slope	1.00

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
297209							
Philo	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
297210							
Barbour	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
297216							
Wurtsboro	92	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
297217							
Wurtsboro	88	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Wetness	0.50
297227							
Arnot	88	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
297228							
Arnot	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
297229							
Wyoming	90	Slight		Slight		Well suited	
297230							
Wyoming	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
297231							
Wyoming	90	Moderate		Moderate		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	1.00
297236							
Suncook	91	Slight		Slight		Poorly suited	
						Flooding	1.00
297237							
Mardin	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
297238							
Mardin	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Wetness	0.50
297239							
Mardin	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
297240							
Mardin	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Wetness	0.50
						Rock fragments	0.50
297241							
Unadilla	90	Slight		Slight		Moderately suited	
						Low strength	0.50
297242							
Shohola	62	Slight		Slight		Poorly suited	
						Rock fragments	1.00
						Wetness	0.50
						Low strength	0.50
Edgemere	29	Slight		Slight		Poorly suited	
						Ponding	1.00
						Wetness	1.00
						Rock fragments	0.50
						Low strength	0.50
297243							
Shohola	62	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50
						Wetness	0.50
						Low strength	0.50
Edgemere	29	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Ponding	1.00
						Wetness	1.00
						Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
297244							
Lordstown	40	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
Swartswood	35	Slight		Slight		Moderately suited	
						Rock fragments	0.50
297247							
Chenango	86	Slight		Slight		Well suited	
297248							
Chenango	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
297249							
Chenango	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
297253							
Craigsville	50	Slight		Slight		Poorly suited	
						Flooding	1.00
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
297253							
Wyoming	40	Slight		Slight		Moderately suited	
						Rock fragments	0.50
297254							
Pits, shale	40	Not rated		Not rated		Not rated	
Pits, gravel	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
298050							
Wurtsboro, extremely stony	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony	40	Slight		Slight		Moderately suited	
						Rock fragments	0.50
298051							
Wurtsboro, extremely stony	60	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony	40	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
298075							
Colonie	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
298188							
Lackawanna, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
298189							
Lackawanna, extremely stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
298221							
Swartswood, extremely stony	90	Slight		Slight		Moderately suited	
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
298222							
Swartswood, extremely stony	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
298223							
Swartswood, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
298255							
Delaware, rarely flooded	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
298256							
Delaware, rarely flooded	80	Slight		Slight		Well suited	
298257							
Wallpack	85	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
298258							
Wallpack	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
298259							
Wallpack, extremely stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
298260							
Wallpack, extremely stony	85	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
298261							
Wallpack	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
298262							
Wallpack, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
298265							
Venango, extremely stony	90	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Rock fragments	0.50
						Low strength	0.50
298266							
Venango, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Wetness	1.00
						Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
298409							
Swartswood, extremely stony	90	Slight		Slight		Moderately suited	
						Rock fragments	0.50
298411							
Swartswood, extremely stony	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
298413							
Swartswood, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
318498							
Hazen, very stony	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
Hoosic, very stony	35	Slight		Slight		Moderately suited	
						Slope	0.50
318533							
Hazen, very stony	50	Slight		Slight		Moderately suited	
						Low strength	0.50
Hoosic, very stony	40	Slight		Slight		Well suited	
319783							
Catden	85	Slight		Slight		Poorly suited	
						Low strength	1.00
						Ponding	1.00
						Wetness	1.00
319784							
Fredon, very stony	50	Slight		Slight		Moderately suited	
						Wetness	0.50
						Low strength	0.50
Halsey, very stony	40	Slight		Slight		Poorly suited	
						Ponding	1.00
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
543222							
Andover, extremely stony	55	Slight		Slight		Poorly suited	
						Wetness	1.00
						Rock fragments	0.50
						Low strength	0.50
Buchanan, extremely stony	40	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
543243							
Berks	65	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Weikert	25	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
543246							
Buchanan	75	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Wetness	0.50
543247							
Buchanan, extremely stony	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
543257							
Chippewa	90	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
543258							
Chippewa	90	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Low strength	0.50
543259							
Chippewa, extremely stony	90	Slight		Slight		Poorly suited	
						Wetness	1.00
						Rock fragments	0.50
543271							
Delaware	90	Slight		Slight		Well suited	
543276							
Fluvaquents	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
543292							
Hazleton, extremely stony	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
543293							
Hazleton, extremely stony	90	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
543299							
Laidig, extremely stony	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Low strength	0.50
543300							
Laidig, extremely stony	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
543304							
Laidig	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Rubble land	40	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Sandiness	0.50
543318							
Rubble land	75	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Sandiness	0.50
543327							
Swartswood	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
543328							
Swartswood	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
543330							
Swartswood, extremely stony	50	Slight		Slight		Moderately suited	
						Rock fragments	0.50
Wurtsboro, extremely stony	30	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Stickiness; high plasticity index	0.50
543331							
Swartswood, extremely stony	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
543331							
Wurtsboro, extremely stony	30	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Stickiness; high plasticity index	0.50
543359							
Volusia	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Low strength	0.50
543360							
Volusia, extremely stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Wetness	0.50
						Rock fragments	0.50
						Low strength	0.50
543374							
Wurtsboro	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
543375							
Wurtsboro	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
612280							
Scio	80	Slight		Slight		Moderately suited	
						Low strength	0.50
						Wetness	0.50
612666							
Colonie	80	Slight		Slight		Well suited	
612668							
Hoosic, very stony	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
Hazen, very stony	30	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
612724							
Lordstown, very rocky	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Wallpack, very rocky	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
612732							
Atherton, very poorly drained	60	Slight		Slight		Poorly suited	
						Low strength	1.00
						Ponding	1.00

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
612732 Atherton, poorly drained	30	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
612738 Fluvaquents, occasionally flooded	90	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
612753 Wallpack, aeolian mantle, very stony	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
612756 Wallpack, aeolian mantle, very stony	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
612757 Wallpack, aeolian mantle, very stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
612767 Wellsboro, extremely stony	85	Moderate		Moderate		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
612768 Wellsboro, extremely stony	85	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
613393 Alden, extremely stony	90	Slight		Slight		Poorly suited	
						Ponding	1.00
						Rock fragments	0.50
						Low strength	0.50
613447 Unadilla	85	Slight		Slight		Moderately suited	
						Low strength	0.50
613448 Unadilla	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
614075							
Wurtsboro, extremely stony	80	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony	20	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
620179							
Arnot, very rocky	55	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50
Lordstown, very rocky	40	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50
620180							
Arnot	45	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Lordstown	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
620181							
Arnot	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Lordstown	25	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony	80	Slight		Slight		Poorly suited	
						Ponding	1.00
						Rock fragments	0.50
						Low strength	0.50
623109							
Farmington	50	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50
						Low strength	0.50
Rock outcrop	40	Not rated		Not rated		Not rated	

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
624811							
Galway, very rocky--	80	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
624813							
Lackawanna, extremely stony----	85	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
624816							
Lordstown, very rocky----------	50	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
Wallpack, very rocky	35	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
624822							
Lordstown----------	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Wallpack----------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
624823							
Lordstown----------	50	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
Wallpack----------	35	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
624824							
Lordstown----------	50	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
Wallpack----------	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
624826							
Manlius, very rocky-	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Nassau, very rocky--	25	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
624827							
Nassau, very rocky--	55	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
624827							
Manlius, very rocky-	44	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
624828							
Nassau, very rocky--	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Manlius, very rocky-	44	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
624829							
Nassau, very rocky--	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Manlius, very rocky-	44	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
624832							
Nassau----------	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop--------	45	Not rated		Not rated		Not rated	
624841							
Oquaga----------	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop--------	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop--------	45	Not rated		Not rated		Not rated	
Farmington----------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Galway----------	20	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
624846							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
624846							
Rubble land	20	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
						Sandiness	0.50
						Stickiness; high plasticity index	0.50
626816							
Udifluvents, occasionally flooded	90	Slight		Slight		Poorly suited	
						Flooding	1.00
635458							
Oquaga, very rocky	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
Lackawanna, very rocky	30	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
635459							
Oquaga, very rocky	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Lackawanna, very rocky	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
740953							
Delaware, rarely flooded	80	Slight		Slight		Well suited	
740968							
Nassau, very rocky	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Manlius, very rocky	44	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
740969							
Nassau, very rocky	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Manlius, very rocky	44	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
740971							
Oquaga, very rocky--	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
Lackawanna, very rocky----------	30	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
740972							
Oquaga, very rocky--	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Lackawanna, very rocky----------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
740974							
Oquaga----------	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop--------	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Rubble land---------	20	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
						Sandiness	0.50
						Stickiness; high plasticity index	0.50
740987							
Scio----------	80	Slight		Slight		Moderately suited	
						Low strength	0.50
						Wetness	0.50
740988							
Udifluvents, occasionally flooded----------	90	Slight		Slight		Poorly suited	
						Flooding	1.00
740991							
Unadilla----------	85	Slight		Slight		Moderately suited	
						Low strength	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
740992							
Unadilla	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
740995							
Wellsboro, extremely stony	85	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
740996							
Wellsboro, extremely stony	85	Moderate		Moderate		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
741149							
Lackawanna, extremely stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
741150							
Lackawanna, extremely stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
801114							
Oquaga	75	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
Rock outcrop	15	Not rated		Not rated		Not rated	
810906							
Oquaga	75	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
Rock outcrop	15	Not rated		Not rated		Not rated	
1147465							
Alden, extremely stony	90	Slight		Slight		Poorly suited	
						Ponding	1.00
						Rock fragments	0.50
						Low strength	0.50
1147467							
Arnot, very rocky	55	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
1147467							
Lordstown, very rocky	40	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Rock fragments	1.00
						Slope	0.50
1147468							
Arnot	45	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Lordstown	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
1147469							
Arnot	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Lordstown	25	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained	60	Slight		Slight		Poorly suited	
						Low strength	1.00
						Ponding	1.00
Atherton, poorly drained	30	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
1147471							
Catden	85	Slight		Slight		Poorly suited	
						Low strength	1.00
						Ponding	1.00
						Wetness	1.00
1147474							
Chippewa, extremely stony	80	Slight		Slight		Poorly suited	
						Ponding	1.00
						Rock fragments	0.50
						Low strength	0.50
1147475							
Colonie	80	Slight		Slight		Well suited	
1147478							
Delaware, rarely flooded	80	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
1147482							
Fredon, very stony--	50	Slight		Slight		Moderately suited	
						Wetness	0.50
						Low strength	0.50
Halsey, very stony--	40	Slight		Slight		Poorly suited	
						Ponding	1.00
						Low strength	0.50
1147485							
Hazen, very stony---	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
						Slope	0.50
Hoosic, very stony--	35	Slight		Slight		Moderately suited	
						Slope	0.50
1147490							
Hoosic, very stony--	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
Hazen, very stony---	30	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
1147491							
Hoosic, very stony--	50	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Otisville, very stony----------	40	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Sandiness	0.50
1147492							
Lackawanna, extremely stony----	85	Slight		Slight		Moderately suited	
						Rock fragments	0.50
						Low strength	0.50
1147500							
Wurtsboro, extremely stony----	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
1147501							
Wurtsboro, extremely stony----	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony----	40	Slight		Slight		Moderately suited	
						Rock fragments	0.50

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
1147502							
Wurtsboro, extremely stony----	60	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony----	40	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
1147527							
Udorthents----------	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
Urban land----------	40	Not rated		Not rated		Not rated	
1147532							
Udorthents----------	100	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
1147533							
Wurtsboro, extremely stony----	80	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Wetness	0.50
Swartswood, extremely stony----	20	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
1948749							
Arnot----------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
1948750							
Arnot----------	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
1948751							
Arnot----------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
1948774							
Conotton----------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
1948775							
Conotton----------	95	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
1948776							
Conotton----------	95	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
1948777							
Conotton----------	95	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00

Table 6b.--Land Management, Part II (Hazard of Erosion and Suitability for Roads)--Continued

Map unit symbol and soil name	Pct. of map unit	Hazard of erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
1948797							
Manlius	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
1948802							
Manlius	90	Slight		Severe Slope/erodibility	0.95	Moderately suited Slope	0.50
1948818							
Manlius	90	Moderate Slope/erodibility	0.50	Severe Slope/erodibility	0.95	Poorly suited Slope	1.00
1948832							
Penargyl	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Slope	0.50
1948846							
Phelps	90	Slight		Moderate Slope/erodibility	0.50	Moderately suited Wetness	0.50
1948855							
Udorthents, loamy	95	Slight		Moderate Slope/erodibility	0.50	Moderately suited Low strength Wetness	0.50 0.50
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Slight		Moderate Slope/erodibility	0.50	Well suited	

Table 6c.--Land Management, Part III (Site Preparation)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
290836					
Hoosic, very stony--	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
				Rock fragments	0.50
Otisville, very stony----------	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
296265					
Alden----------	100	Well suited		Well suited	
296269					
Fluvents, (alluvial land)----------	70	Well suited		Well suited	
296271					
Alvira----------	55	Well suited		Well suited	
Watson----------	35	Well suited		Well suited	
296272					
Bath----------	85	Well suited		Well suited	
296273					
Bath----------	85	Well suited		Well suited	
296274					
Bath----------	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
296275					
Bath----------	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296276					
Bath----------	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
296277					
Benson----------	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
296278					
Benson----------	60	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50	Rock fragments	0.50
Rock outcrop--------	20	Not rated		Not rated	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296279					
Benson	60	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
Rock outcrop	25	Not rated		Not rated	
296280					
Braceville	90	Well suited		Well suited	
296281					
Braceville	90	Well suited		Well suited	
296283					
Buchanan	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296288					
Chippewa	48	Well suited		Well suited	
Norwich	48	Well suited		Well suited	
296289					
Chippewa	47	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Norwich	47	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296295					
Udorthents, cut and fill	90	Not rated		Not rated	
296297					
Dekalb	100	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50	Slope	0.50
		Slope	0.50		
296298					
Dekalb	100	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
		Rock fragments	0.50		
296303					
Hazleton	100	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
296304					
Holly	100	Well suited		Well suited	
296311					
Lackawanna	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value
296311					
Bath	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
296312					
Lackawanna	80	Well suited		Well suited	
296313					
Lackawanna	80	Well suited		Well suited	
296315					
Lackawanna	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296316					
Lackawanna	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
296317					
Laidig	100	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296326					
Lordstown	85	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
296327					
Lordstown	85	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50	Slope	0.50
		Slope	0.50		
296328					
Lordstown	40	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Oquaga	35	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
		Rock fragments	0.50		
296329					
Mardin	85	Well suited		Well suited	
296330					
Mardin	85	Well suited		Well suited	
296331					
Mardin	85	Well suited		Well suited	
296332					
Mardin	87	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value
296335					
Meckesville	100	Well suited		Well suited	
296337					
Meckesville	100	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
296338					
Morris	80	Well suited		Well suited	
296339					
Morris	75	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296340					
Morris	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296341					
Freetown, mucky peat	100	Unsuited		Poorly suited	
		Wetness	1.00	Wetness	0.75
296342					
Paupack, mucky peat (shallow)	100	Unsuited		Poorly suited	
		Wetness	1.00	Wetness	0.75
296343					
Oquaga	50	Unsuited		Well suited	
		Restrictive layer	1.00		
Lackawanna	35	Well suited		Well suited	
296344					
Oquaga	55	Unsuited		Well suited	
		Restrictive layer	1.00		
Lackawanna	30	Well suited		Well suited	
296346					
Oquaga	50	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Lackawanna	35	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
296347					
Oquaga	60	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50	Slope	0.50
		Slope	0.50		
Lackawanna	30	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
296348					
Philo	85	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
296349					
Pope	90	Well suited		Well suited	
296350					
Pope	90	Well suited		Well suited	
296351					
Rexford, somewhat poorly drained	40	Well suited		Well suited	
Rexford, poorly drained	35	Well suited		Well suited	
296355					
Sheffield	100	Well suited		Well suited	
296363					
Dystrochrepts, very stony	85	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
296369					
Wayland	100	Well suited		Well suited	
296376					
Wellsboro	80	Well suited		Well suited	
296379					
Wellsboro	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
296385					
Wyoming	85	Well suited		Well suited	
296386					
Wyoming	85	Well suited		Well suited	
296387					
Wyoming	85	Well suited		Well suited	
296388					
Wyoming	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
296389					
Wyoming	100	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
Shohola	42	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
297186					
Edgemere	75	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
297188					
Manlius	40	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00	Slope	0.50
		Slope	0.50		
Arnot	35	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00	Slope	0.50
		Slope	0.50		
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Arnot	35	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Rock outcrop	15	Not rated		Not rated	
297190					
Braceville	82	Well suited		Well suited	
297191					
Wyalusing	85	Well suited		Well suited	
297192					
Pope	95	Well suited		Well suited	
297193					
Paupack	90	Unsuited		Poorly suited	
		Wetness	1.00	Wetness	0.75
297196					
Freetown	94	Unsuited		Poorly suited	
		Wetness	1.00	Wetness	0.75
297197					
Manlius	90	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
297198					
Manlius	86	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
297201					
Oquaga	75	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Slope	0.50	Slope	0.50
		Rock fragments	0.50		

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
297203					
Delaware	93	Well suited		Well suited	
297204					
Delaware	82	Well suited		Well suited	
297205					
Delaware	80	Well suited		Well suited	
297209					
Philo	85	Well suited		Well suited	
297210					
Barbour	85	Well suited		Well suited	
297216					
Wurtsboro	92	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297217					
Wurtsboro	88	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297227					
Arnot	88	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
297228					
Arnot	85	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50	Rock fragments	0.50
297229					
Wyoming	90	Well suited		Well suited	
297230					
Wyoming	90	Well suited		Well suited	
297231					
Wyoming	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
297236					
Suncook	91	Well suited		Well suited	
297237					
Mardin	85	Well suited		Well suited	
297238					
Mardin	85	Well suited		Well suited	
297239					
Mardin	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297240					
Mardin	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
297241					
Unadilla	90	Well suited		Well suited	
297242					
Shohola	62	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
Edgemere	29	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297243					
Shohola	62	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
Edgemere	29	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297244					
Lordstown	40	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Swartswood	35	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297247					
Chenango	86	Well suited		Well suited	
297248					
Chenango	85	Well suited		Well suited	
297249					
Chenango	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
297253					
Craigsville	50	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Wyoming	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
297254					
Pits, shale	40	Not rated		Not rated	
Pits, gravel	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298050					
Wurtsboro, extremely stony	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
298050					
Swartswood, extremely stony	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298051					
Wurtsboro, extremely stony	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Swartswood, extremely stony	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298075					
Colonie	80	Well suited		Well suited	
298188					
Lackawanna, extremely stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
298189					
Lackawanna, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298221					
Swartswood, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298222					
Swartswood, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298223					
Swartswood, extremely stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
298255					
Delaware, rarely flooded	80	Well suited		Well suited	
298256					
Delaware, rarely flooded	80	Well suited		Well suited	
298257					
Wallpack	85	Well suited		Well suited	
298258					
Wallpack	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
298259					
Wallpack, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298260					
Wallpack, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298261					
Wallpack	85	Well suited		Well suited	
298262					
Wallpack, extremely stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
298265					
Venango, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298266					
Venango, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298409					
Swartswood, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298411					
Swartswood, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
298413					
Swartswood, extremely stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
318498					
Hazen, very stony	60	Poorly suited		Well suited	
		Rock fragments	0.50		
Hoosic, very stony	35	Well suited		Poorly suited	
				Rock fragments	0.50
318533					
Hazen, very stony	50	Poorly suited		Well suited	
		Rock fragments	0.50		
Hoosic, very stony	40	Well suited		Poorly suited	
				Rock fragments	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value
319783					
Catden	85	Well suited		Well suited	
319784					
Fredon, very stony	50	Well suited		Well suited	
Halsey, very stony	40	Well suited		Well suited	
543222					
Andover, extremely stony	55	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Buchanan, extremely stony	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543243					
Berks	65	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00		
Weikert	25	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00		
543246					
Buchanan	75	Well suited		Well suited	
543247					
Buchanan, extremely stony	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543257					
Chippewa	90	Well suited		Well suited	
543258					
Chippewa	90	Well suited		Well suited	
543259					
Chippewa, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543271					
Delaware	90	Well suited		Well suited	
543276					
Fluvaquents	85	Well suited		Well suited	
543292					
Hazleton, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
543293					
Hazleton, extremely stony	90	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
543299					
Laidig, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543300					
Laidig, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
543304					
Laidig	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Rubble land	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
543318					
Rubble land	75	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
543327					
Swartswood	90	Well suited		Well suited	
543328					
Swartswood	90	Well suited		Well suited	
543330					
Swartswood, extremely stony	50	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Wurtsboro, extremely stony	30	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543331					
Swartswood, extremely stony	50	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
Wurtsboro, extremely stony	30	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Slope	0.50	Slope	0.50
543359					
Volusia	85	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
543360					
Volusia, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
543374					
Wurtsboro	90	Well suited		Well suited	
543375					
Wurtsboro	90	Well suited		Well suited	
612280					
Scio	80	Well suited		Well suited	
612666					
Colonie	80	Well suited		Well suited	
612668					
Hoosic, very stony	60	Well suited		Poorly suited	
				Rock fragments	0.50
Hazen, very stony	30	Poorly suited		Well suited	
		Rock fragments	0.50		
612724					
Lordstown, very rocky	50	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Wallpack, very rocky	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
612732					
Atherton, very poorly drained	60	Unsuited		Poorly suited	
		Wetness	0.75	Wetness	0.75
Atherton, poorly drained	30	Well suited		Well suited	
612738					
Fluvaquents, occasionally flooded	90	Well suited		Well suited	
612753					
Wallpack, aeolian mantle, very stony	85	Well suited		Well suited	
612756					
Wallpack, aeolian mantle, very stony	85	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
612757					
Wallpack, aeolian mantle, very stony-	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
612767					
Wellsboro, extremely stony----	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
612768					
Wellsboro, extremely stony----	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
613393					
Alden, extremely stony----------	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
613447					
Unadilla----------	85	Well suited		Well suited	
613448					
Unadilla----------	85	Well suited		Well suited	
614075					
Wurtsboro, extremely stony----	80	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
Swartswood, extremely stony----	20	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
620179					
Arnot, very rocky---	55	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Lordstown, very rocky----------	40	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50		
620180					
Arnot----------	45	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00	Slope	0.50
		Slope	0.50		
Lordstown----------	40	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50		
Rock outcrop--------	15	Not rated		Not rated	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
620181					
Arnot	60	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Lordstown	25	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50		
Rock outcrop	15	Not rated		Not rated	
623089					
Chippewa, extremely stony	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
623109					
Farmington	50	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Rock outcrop	40	Not rated		Not rated	
624811					
Galway, very rocky	80	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50		
624813					
Lackawanna, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
624816					
Lordstown, very rocky	50	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Wallpack, very rocky	35	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
624822					
Lordstown	50	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50		
Wallpack	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
624823					
Lordstown	50	Poorly suited		Well suited	
		Restrictive layer	0.50		
Wallpack	35	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value
624824					
Lordstown	50	Poorly suited		Well suited	
		Restrictive layer	0.50		
Wallpack	35	Well suited		Well suited	
624826					
Manlius, very rocky	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Nassau, very rocky	25	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
		Rock fragments	0.50		
624827					
Nassau, very rocky	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Manlius, very rocky	44	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Restrictive layer	0.50		
624828					
Nassau, very rocky	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Manlius, very rocky	44	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Restrictive layer	0.50		
624829					
Nassau, very rocky	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Manlius, very rocky	44	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
		Restrictive layer	0.50		
624832					
Nassau	50	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Rock outcrop	45	Not rated		Not rated	
624841					
Oquaga	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
624841					
Rock outcrop--------	25	Not rated		Not rated	
624845					
Rock outcrop--------	45	Not rated		Not rated	
Farmington----------	35	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Galway----------	20	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
624846					
Rock outcrop--------	40	Not rated		Not rated	
Arnot----------	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Rubble land---------	20	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
626816					
Udifluvents, occasionally flooded----------	90	Well suited		Well suited	
635458					
Oquaga, very rocky--	55	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Lackawanna, very rocky----------	30	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
635459					
Oquaga, very rocky--	50	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Lackawanna, very rocky----------	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
740953					
Delaware, rarely flooded----------	80	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
740968					
Nassau, very rocky--	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Rock fragments	0.50
		Rock fragments	0.50		
Manlius, very rocky-	44	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
		Restrictive layer	0.50		
740969					
Nassau, very rocky--	55	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Manlius, very rocky-	44	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
		Restrictive layer	0.50		
740971					
Oquaga, very rocky--	55	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Lackawanna, very rocky----------	30	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
740972					
Oquaga, very rocky--	50	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Lackawanna, very rocky----------	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
740974					
Oquaga----------	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Rock outcrop--------	25	Not rated		Not rated	
740975					
Rock outcrop--------	40	Not rated		Not rated	
Arnot----------	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Rubble land---------	20	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
740987					
Scio	80	Well suited		Well suited	
740988					
Udifluvents, occasionally flooded	90	Well suited		Well suited	
740991					
Unadilla	85	Well suited		Well suited	
740992					
Unadilla	85	Well suited		Well suited	
740995					
Wellsboro, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
740996					
Wellsboro, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
741149					
Lackawanna, extremely stony	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
741150					
Lackawanna, extremely stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
801114					
Oquaga	75	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Rock outcrop	15	Not rated		Not rated	
810906					
Oquaga	75	Poorly suited		Poorly suited	
		Restrictive layer	0.50	Rock fragments	0.50
		Rock fragments	0.50		
Rock outcrop	15	Not rated		Not rated	
1147465					
Alden, extremely stony	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147467					
Arnot, very rocky	55	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00		

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1147467					
Lordstown, very rocky	40	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50		
1147468					
Arnot	45	Unsuited		Unsuited	
		Restrictive layer	1.00	Rock fragments	1.00
		Rock fragments	1.00	Slope	0.50
		Slope	0.50		
Lordstown	40	Unsuited		Unsuited	
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50	Slope	0.50
		Slope	0.50		
Rock outcrop	15	Not rated		Not rated	
1147469					
Arnot	60	Unsuited		Unsuited	
		Restrictive layer	1.00	Slope	1.00
		Slope	1.00	Rock fragments	1.00
		Rock fragments	1.00		
Lordstown	25	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	1.00	Rock fragments	1.00
		Restrictive layer	0.50		
Rock outcrop	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained	60	Unsuited		Poorly suited	
		Wetness	0.75	Wetness	0.75
Atherton, poorly drained	30	Well suited		Well suited	
1147471					
Catden	85	Well suited		Well suited	
1147474					
Chippewa, extremely stony	80	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147475					
Colonie	80	Well suited		Well suited	
1147478					
Delaware, rarely flooded	80	Well suited		Well suited	
1147482					
Fredon, very stony	50	Well suited		Well suited	
Halsey, very stony	40	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value
1147485					
Hazen, very stony---	60	Poorly suited		Well suited	
		Rock fragments	0.50		
Hoosic, very stony--	35	Well suited		Poorly suited	
				Rock fragments	0.50
1147490					
Hoosic, very stony--	60	Well suited		Poorly suited	
				Rock fragments	0.50
Hazen, very stony---	30	Poorly suited		Well suited	
		Rock fragments	0.50		
1147491					
Hoosic, very stony--	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
				Rock fragments	0.50
Otisville, very stony----------	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
1147492					
Lackawanna, extremely stony----	85	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147500					
Wurtsboro, extremely stony----	90	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147501					
Wurtsboro, extremely stony----	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Swartswood, extremely stony----	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147502					
Wurtsboro, extremely stony----	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Swartswood, extremely stony----	40	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
1147527					
Udorthents----------	60	Well suited		Well suited	
Urban land----------	40	Not rated		Not rated	
1147532					
Udorthents----------	100	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1147533					
Wurtsboro, extremely stony	80	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
Swartswood, extremely stony	20	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
1948749					
Arnot	90	Unsuited		Well suited	
		Restrictive layer	1.00		
1948750					
Arnot	90	Unsuited		Well suited	
		Restrictive layer	1.00		
1948751					
Arnot	90	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50		
1948774					
Conotton	90	Well suited		Well suited	
1948775					
Conotton	95	Well suited		Well suited	
1948776					
Conotton	95	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
1948777					
Conotton	95	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
1948797					
Manlius	90	Unsuited		Well suited	
		Restrictive layer	1.00		
1948802					
Manlius	90	Unsuited		Well suited	
		Restrictive layer	1.00		
1948818					
Manlius	90	Unsuited		Poorly suited	
		Restrictive layer	1.00	Slope	0.50
		Slope	0.50		
1948832					
Penargyl	90	Well suited		Well suited	
1948846					
Phelps	90	Well suited		Well suited	
1948855					
Udorthents, loamy	95	Well suited		Well suited	

Table 6c.--Land Management, Part III (Site Preparation)--Continued

Map unit symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (deep)		Suitability for mechanical site preparation (surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1948989					
Urban land----------	65	Not rated		Not rated	
Delaware----------	25	Well suited		Well suited	

Table 6d.--Land Management, Part IV (Site Restoration)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
290836					
Hoosic, very stony--	50	Low Texture/slope/ rock fragments	0.10	Low	
Otisville, very stony----------	40	Moderate Texture/slope/ surface layer thickness/rock fragments	0.50	Low	
296265					
Alden----------	100	Low Texture/rock fragments	0.10	High Wetness	1.00
296269					
Fluvents, (alluvial land)----------	70	Moderate Texture/rock fragments	0.50	Low	
296271					
Alvira----------	55	Moderate Texture/rock fragments	0.50	High Wetness	1.00
Watson----------	35	Low Texture/rock fragments	0.10	Low	
296272					
Bath----------	85	Low Texture/rock fragments	0.10	Low	
296273					
Bath----------	85	Low Texture/rock fragments	0.10	Low	
296274					
Bath----------	85	Low Texture/rock fragments	0.10	Low	
296275					
Bath----------	90	Low Texture/rock fragments	0.10	Low	

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296276					
Bath	90	Low		Low	
		Texture/rock fragments	0.10		
296277					
Benson	55	Low		Low	
		Texture/rock fragments	0.10		
296278					
Benson	60	Low		Low	
		Texture/rock fragments	0.10		
Rock outcrop	20	Not rated		Not rated	
296279					
Benson	60	Low		Low	
Rock outcrop	25	Not rated		Not rated	
296280					
Braceville	90	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
296281					
Braceville	90	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
296283					
Buchanan	90	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
296288					
Chippewa	48	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Norwich	48	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296289					
Chippewa	47	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Norwich	47	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296295					
Udorthents, cut and fill	90	Not rated		Not rated	
296297					
Dekalb	100	Moderate		Low	
		Texture/rock fragments	0.50		
296298					
Dekalb	100	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
296303					
Hazleton	100	Moderate		Low	
		Texture/rock fragments	0.50		
296304					
Holly	100	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296311					
Lackawanna	40	Low		Low	
Bath	30	Low		Low	
296312					
Lackawanna	80	Low		Low	
		Texture/rock fragments	0.10		
296313					
Lackawanna	80	Low		Low	
		Texture/rock fragments	0.10		
296315					
Lackawanna	80	Low		Low	
		Texture/rock fragments	0.10		
296316					
Lackawanna	80	Low		Low	
		Texture/rock fragments	0.10		
296317					
Laidig	100	Moderate		Low	
		Texture/rock fragments	0.50		
296326					
Lordstown	85	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296327					
Lordstown	85	Low		Low	
		Texture/rock fragments	0.10		
296328					
Lordstown	40	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Oquaga	35	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
296329					
Mardin	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296330					
Mardin	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296331					
Mardin	85	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
296332					
Mardin	87	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
296335					
Meckesville	100	Low		Low	
		Texture/rock fragments	0.10		
296337					
Meckesville	100	Low		Low	
		Texture/rock fragments	0.10		
296338					
Morris	80	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296339					
Morris	75	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
296340					
Morris	80	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296341					
Freetown, mucky peat	100	Low		High	
				Wetness	1.00
				Soil reaction	0.50
296342					
Paupack, mucky peat (shallow)	100	Low		High	
				Wetness	1.00
				Soil reaction	0.50
296343					
Oquaga	50	Moderate		Low	
		Texture/rock fragments	0.50		
Lackawanna	35	Low		Low	
		Texture/rock fragments	0.10		
296344					
Oquaga	55	Moderate		Low	
		Texture/rock fragments	0.50		
Lackawanna	30	Low		Low	
		Texture/rock fragments	0.10		
296346					
Oquaga	50	Moderate		Low	
		Texture/rock fragments	0.50		
Lackawanna	35	Moderate		Low	
		Texture/rock fragments	0.50		
296347					
Oquaga	60	Moderate		Low	
		Texture/rock fragments	0.50		
Lackawanna	30	Moderate		Low	
		Texture/rock fragments	0.50		
296348					
Philo	85	Low		Low	
		Texture/rock fragments	0.10		
296349					
Pope	90	Low		Low	
		Texture/rock fragments	0.10		
296350					
Pope	90	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296351					
Rexford, somewhat poorly drained	40	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Rexford, poorly drained	35	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296355					
Sheffield	100	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296363					
Dystrochrepts, very stony	85	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
296369					
Wayland	100	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296376					
Wellsboro	80	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296379					
Wellsboro	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
296385					
Wyoming	85	Low		Low	
		Texture/rock fragments	0.10		
296386					
Wyoming	85	Low		Low	
		Texture/rock fragments	0.10		
296387					
Wyoming	85	Low		Low	
		Texture/rock fragments	0.10		
296388					
Wyoming	85	Low		Low	
		Texture/rock fragments	0.10		
296389					
Wyoming	100	Moderate		Low	
		Texture/slope/ rock fragments	0.50		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	High		High	
		Texture/surface layer thickness/rock fragments	1.00	Wetness	1.00
Shohola	42	Moderate		High	
		Texture/surface layer thickness/rock fragments	0.50	Wetness	1.00
				Soil reaction	0.50
297186					
Edgemere	75	High		High	
		Texture/surface layer thickness/rock fragments	1.00	Wetness	1.00
297188					
Manlius	40	Moderate		Low	
		Texture/rock fragments	0.50		
Arnot	35	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Arnot	35	High		Low	
		Texture/slope/ surface layer thickness/rock fragments	1.00		
Rock outcrop	15	Not rated		Not rated	
297190					
Braceville	82	Low		Low	
		Texture/rock fragments	0.10		
297191					
Wyalusing	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
297192					
Pope	95	Low		Low	
		Texture/rock fragments	0.10		
297193					
Paupack	90	Low		High	
				Wetness	1.00
				Soil reaction	0.50
297196					
Freetown	94	Low		High	
				Wetness	1.00
				Soil reaction	0.50
297197					
Manlius	90	Moderate		Low	
		Texture/rock fragments	0.50		
297198					
Manlius	86	Moderate		Low	
		Texture/rock fragments	0.50		
297201					
Oquaga	75	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
297203					
Delaware	93	Low		Low	
		Texture/rock fragments	0.10		
297204					
Delaware	82	Low		Low	
		Texture/rock fragments	0.10		
297205					
Delaware	80	Low		Low	
		Texture/rock fragments	0.10		
297209					
Philo	85	Low		Low	
		Texture/rock fragments	0.10		
297210					
Barbour	85	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
297216 Wurtsboro	92	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297217 Wurtsboro	88	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297227 Arnot	88	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297228 Arnot	85	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297229 Wyoming	90	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297230 Wyoming	90	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297231 Wyoming	90	Moderate: Texture/surface layer thickness/rock fragments	0.50	Low	
297236 Suncook	91	Moderate: Texture/rock fragments	0.50	Low	
297237 Mardin	85	Low: Texture/rock fragments	0.10	High: Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
297238					
Mardin	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
297239					
Mardin	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
297240					
Mardin	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
297241					
Unadilla	90	Low		Low	
		Texture/rock fragments	0.10		
297242					
Shohola	62	Moderate		High	
		Texture/surface layer thickness/rock fragments	0.50	Wetness	1.00
				Soil reaction	0.50
Edgemere	29	High		High	
		Texture/surface layer thickness/rock fragments	1.00	Wetness	1.00
297243					
Shohola	62	Moderate		High	
		Texture/surface layer thickness/rock fragments	0.50	Wetness	1.00
				Soil reaction	0.50
Edgemere	29	High		High	
		Texture/surface layer thickness/rock fragments	1.00	Wetness	1.00
297244					
Lordstown	40	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
Swartswood	35	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
297247					
Chenango----------	86	Low		Low	
		Texture/rock fragments	0.10		
297248					
Chenango----------	85	Low		Low	
		Texture/rock fragments	0.10		
297249					
Chenango----------	90	Low		Low	
		Texture/rock fragments	0.10		
297253					
Craigsville---------	50	Moderate		Low	
		Texture/rock fragments	0.50		
Wyoming----------	40	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
297254					
Pits, shale---------	40	Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony----	90	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
298050					
Wurtsboro, extremely stony----	60	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
Swartswood, extremely stony----	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298051					
Wurtsboro, extremely stony----	60	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
298051 Swartswood, extremely stony	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298075 Colonie	80	High		Low	
		Texture/surface layer thickness/rock fragments	1.00		
298188 Lackawanna, extremely stony	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
298189 Lackawanna, extremely stony	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
298221 Swartswood, extremely stony	90	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298222 Swartswood, extremely stony	90	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298223 Swartswood, extremely stony	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
298255 Delaware, rarely flooded	80	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298256 Delaware, rarely flooded	80	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298257 Wallpack	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298258 Wallpack	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298259 Wallpack, extremely stony	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298260 Wallpack, extremely stony	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298261 Wallpack	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298262 Wallpack, extremely stony	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
298265 Venango, extremely stony	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
298266 Venango, extremely stony	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
298409 Swartswood, extremely stony	90	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298411 Swartswood, extremely stony	90	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
298413 Swartswood, extremely stony	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
318498 Hazen, very stony	60	Low		Low	
		Texture/rock fragments	0.10		
Hoosic, very stony	35	Low		Low	
		Texture/rock fragments	0.10		
318533 Hazen, very stony	50	Low		Low	
		Texture/rock fragments	0.10		
Hoosic, very stony	40	Low		Low	
		Texture/rock fragments	0.10		
319783 Catden	85	Low		High	
				Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
319784					
Fredon, very stony--	50	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Halsey, very stony--	40	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
543222					
Andover, extremely stony----------	55	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Buchanan, extremely stony----------	40	Low		Low	
		Texture/rock fragments	0.10		
543243					
Berks----------	65	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50
Weikert----------	25	Low		Moderate	
				Available water	0.50
543246					
Buchanan----------	75	Low		Low	
		Texture/rock fragments	0.10		
543247					
Buchanan, extremely stony----------	80	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
543257					
Chippewa----------	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
543258					
Chippewa----------	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
543259					
Chippewa, extremely stony----------	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
543271					
Delaware	90	Low		Low	
		Texture/rock fragments	0.10		
543276					
Fluvaquents	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
543292					
Hazleton, extremely stony	90	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50
543293					
Hazleton, extremely stony	90	Low		Moderate	
				Available water	0.50
543299					
Laidig, extremely stony	90	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
543300					
Laidig, extremely stony	90	Moderate		Moderate	
		Texture/surface layer thickness/rock fragments	0.50	Available water	0.50
543304					
Laidig	50	High		Moderate	
		Texture/slope/ surface layer thickness/rock fragments	1.00	Available water	0.50
Rubble land	40	Low		Not rated	
543318					
Rubble land	75	Low		Moderate	
				Soil reaction	0.50
543327					
Swartswood	90	Low		Low	
		Texture/rock fragments	0.10		
543328					
Swartswood	90	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
543330					
Swartswood, extremely stony	50	Low		Low	
		Texture/rock fragments	0.10		
Wurtsboro, extremely stony	30	Low		Low	
		Texture/rock fragments	0.10		
543331					
Swartswood, extremely stony	50	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50
Wurtsboro, extremely stony	30	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50
543359					
Volusia	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
543360					
Volusia, extremely stony	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
543374					
Wurtsboro	90	Low		Low	
		Texture/rock fragments	0.10		
543375					
Wurtsboro	90	Low		Low	
		Texture/rock fragments	0.10		
612280					
Scio	80	Low		Low	
		Texture/rock fragments	0.10		
612666					
Colonie	80	High		Low	
		Texture/surface layer thickness/rock fragments	1.00		
612668					
Hoosic, very stony	60	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
612668					
Hazen, very stony---	30	Low		Low	
		Texture/rock fragments	0.10		
612724					
Lordstown, very rocky----------	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Wallpack, very rocky	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
612732					
Atherton, very poorly drained-----	60	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
Atherton, poorly drained----------	30	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
612738					
Fluvaquents, occasionally flooded----------	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
612753					
Wallpack, aeolian mantle, very stony-	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
612756					
Wallpack, aeolian mantle, very stony-	85	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
612757 Wallpack, aeolian mantle, very stony-	85	Low Texture/surface layer thickness/rock fragments	0.10	Low	
612767 Wellsboro, extremely stony----	85	Low Texture/rock fragments	0.10	Low	
612768 Wellsboro, extremely stony----	85	Low Texture/rock fragments	0.10	Low	
613393 Alden, extremely stony----------	90	Low Texture/rock fragments	0.10	High Wetness	1.00
613447 Unadilla----------	85	Low Texture/rock fragments	0.10	Low	
613448 Unadilla----------	85	Low Texture/rock fragments	0.10	Low	
614075 Wurtsboro, extremely stony----	80	Low Texture/surface layer thickness/rock fragments	0.10	High Wetness	1.00
Swartswood, extremely stony----	20	Low Texture/surface layer thickness/rock fragments	0.10	Low	
620179 Arnot, very rocky---	55	Low Texture/surface layer thickness/rock fragments	0.10	Low	

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
620179					
Lordstown, very rocky	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
620180					
Arnot	45	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Lordstown	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Rock outcrop	15	Not rated		Not rated	
620181					
Arnot	60	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
Lordstown	25	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
Rock outcrop	15	Not rated		Not rated	
623089					
Chippewa, extremely stony	80	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
623109					
Farmington	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Rock outcrop	40	Not rated		Not rated	

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
624811					
Galway, very rocky--	80	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
624813					
Lackawanna, extremely stony----	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
624816					
Lordstown, very rocky----------	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Wallpack, very rocky	35	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
624822					
Lordstown----------	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Wallpack----------	35	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
624823					
Lordstown----------	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Wallpack----------	35	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
624824					
Lordstown----------	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
624824					
Wallpack	35	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
624826					
Manlius, very rocky	60	Moderate		Low	
		Texture/slope/surface layer thickness/rock fragments	0.50		
Nassau, very rocky	25	Moderate		Low	
		Texture/slope/surface layer thickness/rock fragments	0.50		
624827					
Nassau, very rocky	55	Low		Low	
		Texture/rock fragments	0.10		
Manlius, very rocky	44	Low		Low	
		Texture/rock fragments	0.10		
624828					
Nassau, very rocky	55	Low		Low	
		Texture/rock fragments	0.10		
Manlius, very rocky	44	Low		Low	
		Texture/rock fragments	0.10		
624829					
Nassau, very rocky	55	Low		Low	
		Texture/rock fragments	0.10		
Manlius, very rocky	44	Low		Low	
		Texture/rock fragments	0.10		
624832					
Nassau	50	Moderate		Low	
		Texture/slope/surface layer thickness/rock fragments	0.50		
Rock outcrop	45	Not rated		Not rated	

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
624841					
Oquaga	60	Moderate Texture/slope/ surface layer thickness/rock fragments	0.50	Low	
Rock outcrop	25	Not rated		Not rated	
624845					
Rock outcrop	45	Not rated		Not rated	
Farmington	35	Low Texture/surface layer thickness/rock fragments	0.10	Low	
Galway	20	Low Texture/surface layer thickness/rock fragments	0.10	Low	
624846					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Moderate Texture/slope/ surface layer thickness/rock fragments	0.50	Low	
Rubble land	20	Not rated		Not rated	
626816					
Udifluvents, occasionally flooded	90	Moderate Texture/surface layer thickness/rock fragments	0.50	Low	
635458					
Oquaga, very rocky	55	Low Texture/surface layer thickness/rock fragments	0.10	Low	
Lackawanna, very rocky	30	Low Texture/surface layer thickness/rock fragments	0.10	Moderate Soil reaction	0.50

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
635459					
Oquaga, very rocky--	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Lackawanna, very rocky----------	35	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
740953					
Delaware, rarely flooded----------	80	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
740968					
Nassau, very rocky--	55	Low		Low	
		Texture/rock fragments	0.10		
Manlius, very rocky-	44	Low		Low	
		Texture/rock fragments	0.10		
740969					
Nassau, very rocky--	55	Low		Low	
		Texture/rock fragments	0.10		
Manlius, very rocky-	44	Low		Low	
		Texture/rock fragments	0.10		
740971					
Oquaga, very rocky--	55	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Lackawanna, very rocky----------	30	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
740972					
Oquaga, very rocky--	50	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
740972					
Lackawanna, very rocky	35	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
740974					
Oquaga	60	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
Rock outcrop	25	Not rated		Not rated	
740975					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
Rubble land	20	Not rated		Not rated	
740987					
Scio	80	Low		Low	
		Texture/rock fragments	0.10		
740988					
Udifluvents, occasionally flooded	90	Moderate		Low	
		Texture/surface layer thickness/rock fragments	0.50		
740991					
Unadilla	85	Low		Low	
		Texture/rock fragments	0.10		
740992					
Unadilla	85	Low		Low	
		Texture/rock fragments	0.10		
740995					
Wellsboro, extremely stony	85	Low		Low	
		Texture/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
740996					
Wellsboro, extremely stony	85	Low		Low	
		Texture/rock fragments	0.10		
741149					
Lackawanna, extremely stony	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
741150					
Lackawanna, extremely stony	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50
801114					
Oquaga	75	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Rock outcrop	15	Not rated		Not rated	
810906					
Oquaga	75	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Rock outcrop	15	Not rated		Not rated	
1147465					
Alden, extremely stony	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
1147467					
Arnot, very rocky	55	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
Lordstown, very rocky	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
1147468					
Arnot	45	Low Texture/surface layer thickness/rock fragments	0.10	Low	
Lordstown	40	Low Texture/surface layer thickness/rock fragments	0.10	Low	
Rock outcrop	15	Not rated		Not rated	
1147469					
Arnot	60	Moderate Texture/slope/surface layer thickness/rock fragments	0.50	Low	
Lordstown	25	Moderate Texture/slope/surface layer thickness/rock fragments	0.50	Low	
Rock outcrop	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained	60	Low Texture/surface layer thickness/rock fragments	0.10	High Wetness	1.00
Atherton, poorly drained	30	Low Texture/rock fragments	0.10	High Wetness	1.00
1147471					
Catden	85	Low		High Wetness	1.00
1147474					
Chippewa, extremely stony	80	Low Texture/surface layer thickness/rock fragments	0.10	High Wetness	1.00
1147475					
Colonie	80	High Texture/surface layer thickness/rock fragments	1.00	Low	

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
1147478					
Delaware, rarely flooded	80	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
1147482					
Fredon, very stony	50	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
Halsey, very stony	40	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
1147485					
Hazen, very stony	60	Low		Low	
		Texture/rock fragments	0.10		
Hoosic, very stony	35	Low		Low	
		Texture/rock fragments	0.10		
1147490					
Hoosic, very stony	60	Low		Low	
		Texture/rock fragments	0.10		
Hazen, very stony	30	Low		Low	
		Texture/rock fragments	0.10		
1147491					
Hoosic, very stony	50	Low		Low	
		Texture/slope/ rock fragments	0.10		
Otisville, very stony	40	Moderate		Low	
		Texture/slope/ surface layer thickness/rock fragments	0.50		
1147492					
Lackawanna, extremely stony	85	Low		Moderate	
		Texture/surface layer thickness/rock fragments	0.10	Soil reaction	0.50

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
1147500					
Wurtsboro, extremely stony	90	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
1147501					
Wurtsboro, extremely stony	60	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
Swartswood, extremely stony	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
1147502					
Wurtsboro, extremely stony	60	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00
Swartswood, extremely stony	40	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
1147527					
Udorthents	60	Low		Low	
		Texture/rock fragments	0.10		
Urban land	40	Not rated		Not rated	
1147532					
Udorthents	100	Low		Low	
		Texture/rock fragments	0.10		
1147533					
Wurtsboro, extremely stony	80	Low		High	
		Texture/surface layer thickness/rock fragments	0.10	Wetness	1.00

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
1147533 Swartswood, extremely stony	20	Low		Low	
		Texture/surface layer thickness/rock fragments	0.10		
1948749 Arnot	90	Low		Low	
		Texture/rock fragments	0.10		
1948750 Arnot	90	Low		Low	
		Texture/rock fragments	0.10		
1948751 Arnot	90	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50
1948774 Conotton	90	Moderate		Low	
		Texture/rock fragments	0.50		
1948775 Conotton	95	Moderate		Low	
		Texture/rock fragments	0.50		
1948776 Conotton	95	Moderate		Moderate	
		Texture/rock fragments	0.50	Available water	0.50
1948777 Conotton	95	Moderate		Moderate	
		Texture/rock fragments	0.50	Available water	0.50
1948797 Manlius	90	Low		Low	
		Texture/rock fragments	0.10		
1948802 Manlius	90	Low		Low	
		Texture/rock fragments	0.10		
1948818 Manlius	90	Low		Moderate	
		Texture/rock fragments	0.10	Available water	0.50

Table 6d.--Land Management, Part IV (Site Restoration)--Continued

Map unit symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
1948832					
Penargyl	90	Low		Low	
		Texture/rock fragments	0.10		
1948846					
Phelps	90	Low		Low	
		Texture/rock fragments	0.10		
1948855					
Udorthents, loamy	95	Moderate		Low	
		Texture/rock fragments	0.50		
1948989					
Urban land	65	Not rated		Not rated	
Delaware	25	Low		Low	
		Texture/rock fragments	0.10		

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
290836					
Hoosic, very stony--	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
Otisville, very stony----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Gravel	0.84
				Large stones	0.19
296265					
Alden----------	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Slow water movement	0.51	Slow water movement	0.51
		Dusty	0.03	Dusty	0.03
296269					
Fluvents, (alluvial land)----------	70	Very limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.75
		Depth to saturated zone	0.98	Flooding	0.40
296271					
Alvira----------	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Large stones	0.53	Large stones	0.53
		Dusty	0.01	Dusty	0.01
Watson----------	35	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.98	Slow water movement	0.96
		Slow water movement	0.96	Depth to saturated zone	0.75
		Large stones	0.53	Large stones	0.53
		Dusty	0.01	Dusty	0.01
296272					
Bath----------	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.28	Gravel	0.24
		Gravel	0.24	Depth to saturated zone	0.14
		Dusty	0.03	Dusty	0.03

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296273					
Bath	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Depth to saturated zone	0.28	Gravel	0.24
		Gravel	0.24	Depth to saturated zone	0.14
		Dusty	0.03	Dusty	0.03
296274					
Bath	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.28	Gravel	0.24
		Gravel	0.24	Depth to saturated zone	0.14
		Dusty	0.03	Dusty	0.03
296275					
Bath	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.28	Depth to saturated zone	0.14
		Gravel	0.11	Gravel	0.11
		Dusty	0.03	Dusty	0.03
296276					
Bath	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.28	Depth to saturated zone	0.14
		Gravel	0.11	Gravel	0.11
		Dusty	0.03	Dusty	0.03
296277					
Benson	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.05	Dusty	0.05
296278					
Benson	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.05	Dusty	0.05
Rock outcrop	20	Not rated		Not rated	
296279					
Benson	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.05	Dusty	0.05
Rock outcrop	25	Not rated		Not rated	
296280					
Braceville	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.07	Gravel	0.04
		Gravel	0.04	Depth to saturated zone	0.03
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296281					
Braceville	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.07	Gravel	0.04
		Gravel	0.04	Depth to saturated zone	0.03
		Dusty	0.01	Dusty	0.01
296283					
Buchanan	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03
		Dusty	0.03	Dusty	0.03
296288					
Chippewa	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
Norwich	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
296289					
Chippewa	47	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
Norwich	47	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.01	Dusty	0.01
296295					
Udorthents, cut and fill	90	Not rated		Not rated	
296297					
Dekalb	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
296298					
Dekalb	100	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
296303					
Hazleton	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296304					
Holly	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40
		Dusty	0.04	Dusty	0.04
296311					
Lackawanna	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
Bath	30	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to saturated zone	0.28	Depth to saturated zone	0.14
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
296312					
Lackawanna	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.24	Large stones	0.14
		Large stones	0.14	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296313					
Lackawanna	80	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Depth to saturated zone	0.24	Large stones	0.14
		Large stones	0.14	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296315					
Lackawanna	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296316					
Lackawanna	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296317					
Laidig	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.06	Dusty	0.06

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296326					
Lordstown	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.02	Dusty	0.02
296327					
Lordstown	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Dusty	0.02	Dusty	0.02
296328					
Lordstown	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Oquaga	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
296329					
Mardin	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Gravel	0.24	Gravel	0.24
		Dusty	0.03	Dusty	0.03
296330					
Mardin	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63
		Gravel	0.24	Gravel	0.24
		Dusty	0.03	Dusty	0.03
296331					
Mardin	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Large stones	0.53	Large stones	0.53
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
296332					
Mardin	87	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	0.94
		Large stones	0.53	Large stones	0.53
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
296335					
Meckesville	100	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.16	Gravel	0.16
		Dusty	0.03	Dusty	0.03

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296337					
Meckesville	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.53	Large stones	0.53
		Dusty	0.03	Dusty	0.03
296338					
Morris	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.99	Slow water movement	0.99
		Gravel	0.29	Gravel	0.29
		Dusty	0.02	Dusty	0.02
296339					
Morris	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
296340					
Morris	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slope	0.16	Slope	0.16
		Dusty	0.02	Dusty	0.02
296341					
Freetown, mucky peat	100	Not rated		Not rated	
296342					
Paupack, mucky peat (shallow)	100	Not rated		Not rated	
296343					
Oquaga	50	Somewhat limited		Somewhat limited	
		Gravel	0.62	Gravel	0.62
		Dusty	0.02	Dusty	0.02
Lackawanna	35	Somewhat limited		Somewhat limited	
		Gravel	0.62	Gravel	0.62
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296344					
Oquaga	55	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.62	Gravel	0.62
		Dusty	0.02	Dusty	0.02
Lackawanna	30	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.62	Gravel	0.62
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296346					
Oquaga	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
Lackawanna	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296347					
Oquaga	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
Lackawanna	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.24	Depth to saturated zone	0.12
		Dusty	0.01	Dusty	0.01
296348					
Philo	85	Very limited		Somewhat limited	
		Flooding	1.00	Flooding	0.40
		Depth to saturated zone	0.07	Depth to saturated zone	0.03
		Dusty	0.02	Dusty	0.02
296349					
Pope	90	Very limited		Somewhat limited	
		Flooding	1.00	Dusty	0.01
		Dusty	0.01		
296350					
Pope	90	Very limited		Somewhat limited	
		Flooding	1.00	Dusty	0.01
		Dusty	0.01		
296351					
Rexford, somewhat poorly drained	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.96	Slow water movement	0.96
		Dusty	0.01	Dusty	0.01
Rexford, poorly drained	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.96	Slow water movement	0.96
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296355					
Sheffield	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Slow water movement	0.21	Slow water movement	0.21
		Dusty	0.04	Dusty	0.04
296363					
Dystrochrepts, very stony	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.53	Large stones	0.53
		Gravel	0.07	Gravel	0.07
		Dusty	0.02	Dusty	0.02
296369					
Wayland	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Slow water movement	0.96
		Slow water movement	0.96	Flooding	0.40
		Dusty	0.06	Dusty	0.06
296376					
Wellsboro	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Large stones	0.14	Large stones	0.14
		Dusty	0.01	Dusty	0.01
296379					
Wellsboro	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Slope	1.00	Depth to saturated zone	0.94
		Dusty	0.01	Dusty	0.01
296385					
Wyoming	85	Somewhat limited		Somewhat limited	
		Gravel	0.76	Gravel	0.76
296386					
Wyoming	85	Somewhat limited		Somewhat limited	
		Gravel	0.76	Gravel	0.76
296387					
Wyoming	85	Somewhat limited		Somewhat limited	
		Gravel	0.76	Gravel	0.76
		Slope	0.63	Slope	0.63
296388					
Wyoming	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.76	Gravel	0.76

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
296389					
Wyoming	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.76	Gravel	0.76
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	Not rated		Very limited	
				Large stones	1.00
				Ponding	1.00
				Depth to saturated zone	1.00
				Dusty	0.01
Shohola	42	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slope	0.04	Slope	0.04
		Dusty	0.01	Dusty	0.01
297186					
Edgemere	75	Not rated		Very limited	
				Large stones	1.00
				Ponding	1.00
				Depth to saturated zone	1.00
				Dusty	0.01
297188					
Manlius	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.90	Gravel	0.90
		Dusty	0.02	Dusty	0.02
Arnot	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.90	Gravel	0.90
		Dusty	0.02	Dusty	0.02
Arnot	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	15	Not rated		Not rated	

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
297190					
Braceville	82	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	0.48
297191					
Wyalusing	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40
297192					
Pope	95	Very limited		Somewhat limited	
		Flooding	1.00	Flooding	0.40
297193					
Paupack	90	Not rated		Not rated	
297196					
Freetown	94	Not rated		Not rated	
297197					
Manlius	90	Somewhat limited		Somewhat limited	
		Large stones	0.53	Large stones	0.53
		Gravel	0.19	Gravel	0.19
		Dusty	0.02	Dusty	0.02
297198					
Manlius	86	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.53	Large stones	0.53
		Gravel	0.19	Gravel	0.19
		Dusty	0.02	Dusty	0.02
297201					
Oquaga	75	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.45	Gravel	0.45
		Dusty	0.02	Dusty	0.02
297203					
Delaware	93	Very limited		Not limited	
		Flooding	1.00		
297204					
Delaware	82	Very limited		Not limited	
		Flooding	1.00		
297205					
Delaware	80	Very limited		Somewhat limited	
		Flooding	1.00	Slope	0.96
		Slope	0.96		
297209					
Philo	85	Very limited		Somewhat limited	
		Flooding	1.00	Flooding	0.40
		Depth to saturated zone	0.07	Depth to saturated zone	0.03
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
297210					
Barbour	85	Very limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.01
		Too sandy	0.01		
297216					
Wurtsboro	92	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.68
297217					
Wurtsboro	88	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.68
		Slope	0.63	Slope	0.63
297227					
Arnot	88	Very limited		Very limited	
		Gravel	1.00	Gravel	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.04	Slope	0.04
		Dusty	0.01	Dusty	0.01
297228					
Arnot	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	1.00	Gravel	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
297229					
Wyoming	90	Somewhat limited		Somewhat limited	
		Large stones	0.08	Large stones	0.08
		Gravel	0.06	Gravel	0.06
297230					
Wyoming	90	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.08	Large stones	0.08
		Gravel	0.06	Gravel	0.06
297231					
Wyoming	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.08	Large stones	0.08
		Gravel	0.06	Gravel	0.06
297236					
Suncook	91	Very limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.59
		Too sandy	0.59		
297237					
Mardin	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Gravel	0.09	Gravel	0.09
		Dusty	0.03	Dusty	0.03

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
297238					
Mardin	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63
		Gravel	0.09	Gravel	0.09
		Dusty	0.03	Dusty	0.03
297239					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	0.94
		Dusty	0.02	Dusty	0.02
		Gravel	0.01	Gravel	0.01
297240					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
		Gravel	0.01	Gravel	0.01
297241					
Unadilla	90	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
297242					
Shohola	62	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.01	Dusty	0.01
Edgemere	29	Not rated		Very limited	
				Large stones	1.00
				Ponding	1.00
				Depth to saturated zone	1.00
297243					
Shohola	62	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
Edgemere	29	Not rated		Very limited	
				Large stones	1.00
				Ponding	1.00
				Depth to saturated zone	1.00
				Slope	0.63
297244					
Lordstown	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
297244					
Swartswood----------	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
297247					
Chenango----------	86	Somewhat limited		Somewhat limited	
		Gravel	0.12	Gravel	0.12
297248					
Chenango----------	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.12	Gravel	0.12
297249					
Chenango----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.12	Gravel	0.12
297253					
Craigsville---------	50	Very limited		Very limited	
		Flooding	1.00	Large stones	1.00
		Large stones	1.00	Dusty	0.01
		Dusty	0.01		
Wyoming----------	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Gravel	0.06	Gravel	0.06
297254					
Pits, shale---------	40	Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony----	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
298050					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
Swartswood, extremely stony----	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298051					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
		Slope	0.63	Slope	0.63

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
298051					
Swartswood, extremely stony	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
298075					
Colonie	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
298188					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
298189					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
298221					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298222					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
298223					
Swartswood, extremely stony	85	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
298255					
Delaware, rarely flooded	80	Very limited		Not limited	
		Flooding	1.00		
298256					
Delaware, rarely flooded	80	Very limited		Not limited	
		Flooding	1.00		
298257					
Wallpack	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
298258					
Wallpack	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
298259					
Wallpack, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.02	Dusty	0.02
298260					
Wallpack, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
298261					
Wallpack	85	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
298262					
Wallpack, extremely stony	85	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.02	Dusty	0.02
298265					
Venango, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
298266					
Venango, extremely stony	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
298409					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298411					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
298413					
Swartswood, extremely stony	85	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
318498					
Hazen, very stony	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
318498					
Hoosic, very stony--	35	Somewhat limited		Somewhat limited	
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
318533					
Hazen, very stony---	50	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hoosic, very stony--	40	Somewhat limited		Somewhat limited	
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
319783					
Catden----------	85	Not rated		Not rated	
319784					
Fredon, very stony--	50	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Large stones	0.19	Large stones	0.19
		Dusty	0.02	Dusty	0.02
Halsey, very stony--	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Large stones	0.19	Large stones	0.19
		Dusty	0.02	Dusty	0.02
543222					
Andover, extremely stony----------	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
Buchanan, extremely stony----------	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.81	Depth to saturated zone	0.48
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
543243					
Berks----------	65	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.46	Gravel	0.46
		Dusty	0.04	Dusty	0.04
Weikert----------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel	0.92	Gravel	0.92
		Dusty	0.04	Dusty	0.04

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
543246					
Buchanan	75	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.81	Gravel	0.54
		Gravel	0.54	Depth to saturated zone	0.48
		Dusty	0.03	Dusty	0.03
543247					
Buchanan, extremely stony	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.81	Gravel	0.54
		Gravel	0.54	Depth to saturated zone	0.48
		Dusty	0.03	Dusty	0.03
543257					
Chippewa	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
543258					
Chippewa	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
543259					
Chippewa, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
543271					
Delaware	90	Very limited		Not limited	
		Flooding	1.00		
543276					
Fluvaquents	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	0.43
		Slow water movement	0.43	Flooding	0.40
		Dusty	0.03	Dusty	0.03
543292					
Hazleton, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Gravel	0.01	Gravel	0.01
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
543293					
Hazleton, extremely stony	90	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.01	Gravel	0.01
		Dusty	0.02	Dusty	0.02
543299					
Laidig, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Gravel	0.16	Gravel	0.16
		Dusty	0.06	Dusty	0.06
543300					
Laidig, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Gravel	0.16	Gravel	0.16
		Dusty	0.06	Dusty	0.06
543304					
Laidig	50	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.16	Gravel	0.16
		Dusty	0.06	Dusty	0.06
Rubble land	40	Not rated		Not rated	
543318					
Rubble land	75	Not rated		Not rated	
543327					
Swartswood	90	Somewhat limited		Somewhat limited	
		Gravel	0.24	Gravel	0.24
		Dusty	0.01	Dusty	0.01
543328					
Swartswood	90	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.24	Gravel	0.24
		Dusty	0.01	Dusty	0.01
543330					
Swartswood, extremely stony	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Gravel	0.01	Gravel	0.01
		Dusty	0.01	Dusty	0.01
Wurtsboro, extremely stony	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
543331					
Swartswood, extremely stony	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Gravel	0.01	Gravel	0.01
		Dusty	0.01	Dusty	0.01
Wurtsboro, extremely stony	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.01	Dusty	0.01
543359					
Volusia	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
		Gravel	0.01	Gravel	0.01
543360					
Volusia, extremely stony	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.03	Dusty	0.03
543374					
Wurtsboro	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Gravel	0.04	Gravel	0.04
		Dusty	0.01	Dusty	0.01
543375					
Wurtsboro	90	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Gravel	0.04	Gravel	0.04
		Dusty	0.01	Dusty	0.01
612280					
Scio	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	0.43
		Dusty	0.02	Dusty	0.02
612666					
Colonie	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
612668					
Hoosic, very stony	60	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.19	Gravel	0.61
				Large stones	0.19

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
612668					
Hazen, very stony---	30	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.19	Large stones	0.19
612724					
Lordstown, very rocky----------	50	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Wallpack, very rocky	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.02	Dusty	0.02
612732					
Atherton, very poorly drained-----	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
Atherton, poorly drained----------	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.01	Dusty	0.01
612738					
Fluvaquents, occasionally flooded----------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Dusty	0.01
		Dusty	0.01		
612753					
Wallpack, aeolian mantle, very stony-	85	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.19	Large stones	0.19
612756					
Wallpack, aeolian mantle, very stony-	85	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
612757					
Wallpack, aeolian mantle, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Large stones	0.19

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
612767					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.02	Dusty	0.02
612768					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.02	Dusty	0.02
613393					
Alden, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slow water movement	0.26	Slow water movement	0.26
		Dusty	0.02	Dusty	0.02
613447					
Unadilla	85	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
613448					
Unadilla	85	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
614075					
Wurtsboro, extremely stony	80	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
Swartswood, extremely stony	20	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
620179					
Arnot, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown, very rocky	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
620180					
Arnot	45	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	
620181					
Arnot	60	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown	25	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	
623089					
Chippewa, extremely stony	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
623109					
Farmington	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Rock outcrop	40	Not rated		Not rated	
624811					
Galway, very rocky	80	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
624813					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
624816					
Lordstown, very rocky	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
Wallpack, very rocky	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
624822					
Lordstown	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Wallpack	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Dusty	0.02	Dusty	0.02
624823					
Lordstown	50	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
Wallpack	35	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
624824					
Lordstown	50	Somewhat limited		Somewhat limited	
		Dusty	0.01	Dusty	0.01
Wallpack	35	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
624826					
Manlius, very rocky	60	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.02	Gravel	0.02
				Dusty	0.02
Nassau, very rocky	25	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
624827					
Nassau, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Manlius, very rocky	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Gravel	0.02	Gravel	0.02
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
624828					
Nassau, very rocky--	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
Manlius, very rocky-	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Gravel	0.02	Gravel	0.02
		Dusty	0.02	Dusty	0.02
624829					
Nassau, very rocky--	55	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Manlius, very rocky-	44	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.02	Gravel	0.02
		Dusty	0.02	Dusty	0.02
624832					
Nassau----------	50	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Rock outcrop--------	45	Not rated		Not rated	
624841					
Oquaga----------	60	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop--------	25	Not rated		Not rated	
624845					
Rock outcrop--------	45	Not rated		Not rated	
Farmington----------	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Galway----------	20	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
624846					
Rock outcrop--------	40	Not rated		Not rated	

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
624846					
Arnot	30	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Rubble land	20	Not rated		Not rated	
626816					
Udifluvents, occasionally flooded	90	Very limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.76
		Too sandy	0.76		
635458					
Oquaga, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
Lackawanna, very rocky	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
635459					
Oquaga, very rocky	50	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Lackawanna, very rocky	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
740953					
Delaware, rarely flooded	80	Very limited		Not limited	
		Flooding	1.00		
740968					
Nassau, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.02	Dusty	0.02
Manlius, very rocky	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Gravel	0.02	Gravel	0.02
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
740969					
Nassau, very rocky--	55	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.02	Dusty	0.02
Manlius, very rocky-	44	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Gravel	0.02	Gravel	0.02
		Dusty	0.02	Dusty	0.02
740971					
Oquaga, very rocky--	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
Lackawanna, very rocky----------	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
740972					
Oquaga, very rocky--	50	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Lackawanna, very rocky----------	35	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
740974					
Oquaga----------	60	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop--------	25	Not rated		Not rated	
740975					
Rock outcrop--------	40	Not rated		Not rated	
Arnot----------	30	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Rubble land---------	20	Not rated		Not rated	
740987					
Scio----------	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	0.43
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
740988					
Udifluvents, occasionally flooded	90	Very limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.76
		Too sandy	0.76		
740991					
Unadilla	85	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
740992					
Unadilla	85	Somewhat limited		Somewhat limited	
		Dusty	0.02	Dusty	0.02
740995					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.02	Dusty	0.02
740996					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Depth to saturated zone	0.39	Depth to saturated zone	0.19
		Dusty	0.02	Dusty	0.02
741149					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
		Dusty	0.01	Dusty	0.01
741150					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
801114					
Oquaga	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	
810906					
Oquaga	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
1147465					
Alden, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Slow water movement	0.26	Slow water movement	0.26
		Dusty	0.02	Dusty	0.02
1147467					
Arnot, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown, very rocky	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01
1147468					
Arnot	45	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown	40	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	
1147469					
Arnot	60	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.01	Dusty	0.01
Lordstown	25	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Dusty	0.01	Dusty	0.01
Rock outcrop	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
1147470					
Atherton, poorly drained	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Dusty	0.01	Dusty	0.01
1147471					
Catden	85	Not rated		Not rated	
1147474					
Chippewa, extremely stony	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Large stones	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	1.00	Depth to saturated zone	1.00
		Dusty	0.02	Dusty	0.02
1147475					
Colonie	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
1147478					
Delaware, rarely flooded	80	Very limited		Not limited	
		Flooding	1.00		
1147482					
Fredon, very stony	50	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Large stones	0.19	Large stones	0.19
		Dusty	0.02	Dusty	0.02
Halsey, very stony	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Large stones	0.19	Large stones	0.19
		Dusty	0.02	Dusty	0.02
1147485					
Hazen, very stony	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hoosic, very stony	35	Somewhat limited		Somewhat limited	
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
1147490					
Hoosic, very stony	60	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
Hazen, very stony	30	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Large stones	0.19	Large stones	0.19

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
1147491					
Hoosic, very stony--	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Gravel	0.61
				Large stones	0.19
Otisville, very stony----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Gravel	0.84
				Large stones	0.19
1147492					
Lackawanna, extremely stony----	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Dusty	0.01	Dusty	0.01
1147500					
Wurtsboro, extremely stony----	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
1147501					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
Swartswood, extremely stony----	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
1147502					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
		Slope	0.63	Slope	0.63
Swartswood, extremely stony----	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63
1147527					
Udorthents----------	60	Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96
Urban land----------	40	Not rated		Not rated	
1147532					
Udorthents----------	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
1147533					
Wurtsboro, extremely stony	80	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	0.75
Swartswood, extremely stony	20	Very limited		Very limited	
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Slope	1.00
1948749					
Arnot	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
1948750					
Arnot	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
1948751					
Arnot	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel	0.08	Gravel	0.08
		Dusty	0.02	Dusty	0.02
1948774					
Conotton	90	Somewhat limited		Somewhat limited	
		Gravel	0.41	Gravel	0.41
		Dusty	0.04	Dusty	0.04
1948775					
Conotton	95	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.41	Gravel	0.41
		Dusty	0.04	Dusty	0.04
1948776					
Conotton	95	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.41	Gravel	0.41
		Dusty	0.04	Dusty	0.04
1948777					
Conotton	95	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.41	Gravel	0.41
		Dusty	0.04	Dusty	0.04
1948797					
Manlius	90	Somewhat limited		Somewhat limited	
		Gravel	0.15	Gravel	0.15
		Dusty	0.03	Dusty	0.03

Table 7a.--Recreational Development, Part I (Camp and Picnic Areas)--Continued

Map unit symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value
1948802					
Manlius	90	Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63
		Gravel	0.15	Gravel	0.15
		Dusty	0.03	Dusty	0.03
1948818					
Manlius	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Gravel	0.15	Gravel	0.15
		Dusty	0.03	Dusty	0.03
1948832					
Penargyl	90	Somewhat limited		Somewhat limited	
		Dusty	0.04	Dusty	0.04
		Gravel	0.01	Gravel	0.01
1948846					
Phelps	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	0.43
		Dusty	0.02	Dusty	0.02
		Gravel	0.01	Gravel	0.01
1948855					
Udorthents, loamy	95	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	0.48
		Dusty	0.03	Dusty	0.03
1948989					
Urban land	65	Not rated		Not rated	
Delaware	25	Very limited		Somewhat limited	
		Flooding	1.00	Dusty	0.01
		Dusty	0.01		

Table 7b.--Recreational Development, Part II (Trail Management)

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
290836					
Hoosic, very stony--	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Large stones	0.19
Otisville, very stony----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Large stones	0.19
296265					
Alden----------	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
296269					
Fluvents, (alluvial land)----------	70	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
		Flooding	0.40	Flooding	0.40
296271					
Alvira----------	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Large stones	0.53	Large stones	0.53
Watson----------	35	Somewhat limited		Somewhat limited	
		Large stones	0.53	Large stones	0.53
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
296272					
Bath----------	85	Not limited		Not limited	
296273					
Bath----------	85	Not limited		Not limited	
296274					
Bath----------	85	Somewhat limited		Not limited	
		Slope	0.50		
296275					
Bath----------	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296276					
Bath----------	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
296277					
Benson	55	Not limited		Not limited	
296278					
Benson	60	Somewhat limited		Not limited	
		Slope	0.08		
Rock outcrop	20	Not rated		Not rated	
296279					
Benson	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
Rock outcrop	25	Not rated		Not rated	
296280					
Braceville	90	Not limited		Not limited	
296281					
Braceville	90	Not limited		Not limited	
296283					
Buchanan	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296288					
Chippewa	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Norwich	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296289					
Chippewa	47	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Norwich	47	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296295					
Udorthents, cut and fill	90	Not rated		Not rated	
296297					
Dekalb	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
296298					
Dekalb	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
296303					
Hazleton	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
296304					
Holly	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40
296311					
Lackawanna	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Bath	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
296312					
Lackawanna	80	Somewhat limited		Somewhat limited	
		Large stones	0.14	Large stones	0.14
296313					
Lackawanna	80	Somewhat limited		Somewhat limited	
		Large stones	0.14	Large stones	0.14
296315					
Lackawanna	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296316					
Lackawanna	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
296317					
Laidig	100	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296326					
Lordstown	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296327					
Lordstown	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
296328					
Lordstown	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Oquaga	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
296329					
Mardin	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
296330					
Mardin	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
296331					
Mardin	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Large stones	0.53	Large stones	0.53
296332					
Mardin	87	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Large stones	0.53	Large stones	0.53
		Slope	0.08		
296335					
Meckesville	100	Not limited		Not limited	
296337					
Meckesville	100	Somewhat limited		Somewhat limited	
		Large stones	0.53	Large stones	0.53
		Slope	0.08		
296338					
Morris	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296339					
Morris	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296340					
Morris	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296341					
Freetown, mucky peat	100	Not rated		Not rated	
296342					
Paupack, mucky peat (shallow)	100	Not rated		Not rated	
296343					
Oquaga	50	Not limited		Not limited	
Lackawanna	35	Not limited		Not limited	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
296344					
Oquaga	55	Not limited		Not limited	
Lackawanna	30	Not limited		Not limited	
296346					
Oquaga	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Lackawanna	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
296347					
Oquaga	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
Lackawanna	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
296348					
Philo	85	Somewhat limited		Somewhat limited	
		Flooding	0.40	Flooding	0.40
296349					
Pope	90	Not limited		Not limited	
296350					
Pope	90	Not limited		Not limited	
296351					
Rexford, somewhat poorly drained	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Rexford, poorly drained	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
296355					
Sheffield	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
296363					
Dystrochrepts, very stony	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.53	Large stones	0.53
296369					
Wayland	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Flooding	0.40	Flooding	0.40

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
296376					
Wellsboro	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Large stones	0.14	Large stones	0.14
296379					
Wellsboro	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
		Slope	0.08		
296385					
Wyoming	85	Not limited		Not limited	
296386					
Wyoming	85	Not limited		Not limited	
296387					
Wyoming	85	Not limited		Not limited	
296388					
Wyoming	85	Somewhat limited		Not limited	
		Slope	0.50		
296389					
Wyoming	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	Not rated		Not rated	
Shohola	42	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
297186					
Edgemere	75	Not rated		Not rated	
297188					
Manlius	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.92		
Arnot	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.92		
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
297189					
Arnot	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	15	Not rated		Not rated	
297190					
Braceville	82	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11
297191					
Wyalusing	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40
297192					
Pope	95	Somewhat limited		Somewhat limited	
		Flooding	0.40	Flooding	0.40
297193					
Paupack	90	Not rated		Not rated	
297196					
Freetown	94	Not rated		Not rated	
297197					
Manlius	90	Somewhat limited		Somewhat limited	
		Large stones	0.53	Large stones	0.53
297198					
Manlius	86	Somewhat limited		Somewhat limited	
		Large stones	0.53	Large stones	0.53
297201					
Oquaga	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.92		
297203					
Delaware	93	Not limited		Not limited	
297204					
Delaware	82	Not limited		Not limited	
297205					
Delaware	80	Not limited		Not limited	
297209					
Philo	85	Somewhat limited		Somewhat limited	
		Flooding	0.40	Flooding	0.40
297210					
Barbour	85	Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
297216					
Wurtsboro	92	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.32	Depth to saturated zone	0.32
297217					
Wurtsboro	88	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.32	Depth to saturated zone	0.32
297227					
Arnot	88	Not limited		Not limited	
297228					
Arnot	85	Very limited		Not limited	
		Slope	1.00		
297229					
Wyoming	90	Somewhat limited		Somewhat limited	
		Large stones	0.08	Large stones	0.08
297230					
Wyoming	90	Somewhat limited		Somewhat limited	
		Large stones	0.08	Large stones	0.08
297231					
Wyoming	90	Somewhat limited		Somewhat limited	
		Slope	0.92	Large stones	0.08
		Large stones	0.08		
297236					
Suncook	91	Somewhat limited		Somewhat limited	
		Too sandy	0.59	Too sandy	0.59
297237					
Mardin	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
297238					
Mardin	85	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
297239					
Mardin	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
297240					
Mardin	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.86	Depth to saturated zone	0.86
297241					
Unadilla	90	Not limited		Not limited	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
297242					
Shohola	62	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Edgemere	29	Not rated		Not rated	
297243					
Shohola	62	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Edgemere	29	Not rated		Not rated	
297244					
Lordstown	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Swartswood	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
297247					
Chenango	86	Not limited		Not limited	
297248					
Chenango	85	Not limited		Not limited	
297249					
Chenango	90	Somewhat limited		Not limited	
		Slope	0.50		
297253					
Craigsville	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Wyoming	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
297254					
Pits, shale	40	Not rated		Not rated	
Pits, gravel	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
298050					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
298050					
Swartswood, extremely stony	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298051					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
Swartswood, extremely stony	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298075					
Colonie	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
298188					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
298189					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298221					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298222					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298223					
Swartswood, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
298255					
Delaware, rarely flooded	80	Not limited		Not limited	
298256					
Delaware, rarely flooded	80	Not limited		Not limited	
298257					
Wallpack	85	Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
298258					
Wallpack	85	Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00
		Slope	0.50		
298259					
Wallpack, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298260					
Wallpack, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298261					
Wallpack	85	Not limited		Not limited	
298262					
Wallpack, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
298265					
Venango, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
298266					
Venango, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Water erosion	1.00	Water erosion	1.00
298409					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298411					
Swartswood, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
298413					
Swartswood, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
318498					
Hazen, very stony	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hoosic, very stony	35	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
318533					
Hazen, very stony---	50	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hoosic, very stony--	40	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
319783					
Catden----------	85	Not rated		Not rated	
319784					
Fredon, very stony--	50	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.92	Depth to saturated zone	0.92
		Large stones	0.19	Large stones	0.19
Halsey, very stony--	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	0.19	Large stones	0.19
543222					
Andover, extremely stony----------	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
Buchanan, extremely stony----------	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.11	Depth to saturated zone	0.11
543243					
Berks----------	65	Very limited		Very limited	
		Slope	1.00	Slope	1.00
Weikert----------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
543246					
Buchanan----------	75	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11
543247					
Buchanan, extremely stony----------	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.11	Depth to saturated zone	0.11
543257					
Chippewa----------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
543258					
Chippewa	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
543259					
Chippewa, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
543271					
Delaware	90	Not limited		Not limited	
543276					
Fluvaquents	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40
543292					
Hazleton, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
543293					
Hazleton, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
543299					
Laidig, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
543300					
Laidig, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
543304					
Laidig	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rubble land	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
543318					
Rubble land	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
543327					
Swartswood	90	Not limited		Not limited	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
543328					
Swartswood----------	90	Not limited		Not limited	
543330					
Swartswood, extremely stony----	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Wurtsboro, extremely stony----	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
543331					
Swartswood, extremely stony----	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
Wurtsboro, extremely stony----	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	0.08		
543359					
Volusia----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
543360					
Volusia, extremely stony----------	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
543374					
Wurtsboro----------	90	Not limited		Not limited	
543375					
Wurtsboro----------	90	Not limited		Not limited	
612280					
Scio----------	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.08	Depth to saturated zone	0.08
612666					
Colonie----------	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
612668					
Hoosic, very stony--	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hazen, very stony---	30	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
612724					
Lordstown, very rocky	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Wallpack, very rocky	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
612732					
Atherton, very poorly drained	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
Atherton, poorly drained	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
612738					
Fluvaquents, occasionally flooded	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
612753					
Wallpack, aeolian mantle, very stony	85	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
612756					
Wallpack, aeolian mantle, very stony	85	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
612757					
Wallpack, aeolian mantle, very stony	85	Very limited		Somewhat limited	
		Slope	1.00	Large stones	0.19
		Large stones	0.19		
612767					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Water erosion	1.00	Water erosion	1.00
612768					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
613393					
Alden, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
613447					
Unadilla	85	Not limited		Not limited	
613448					
Unadilla	85	Not limited		Not limited	
614075					
Wurtsboro, extremely stony	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Depth to saturated zone	0.44
		Depth to saturated zone	0.44		
Swartswood, extremely stony	20	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
620179					
Arnot, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Lordstown, very rocky	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
620180					
Arnot	45	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Lordstown	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Rock outcrop	15	Not rated		Not rated	
620181					
Arnot	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Lordstown	25	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	15	Not rated		Not rated	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
623089					
Chippewa, extremely stony	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
623109					
Farmington	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Rock outcrop	40	Not rated		Not rated	
624811					
Galway, very rocky	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
624813					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
624816					
Lordstown, very rocky	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Wallpack, very rocky	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
624822					
Lordstown	50	Somewhat limited		Not limited	
		Slope	0.50		
Wallpack	35	Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00
		Slope	0.50		
624823					
Lordstown	50	Not limited		Not limited	
Wallpack	35	Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00
624824					
Lordstown	50	Not limited		Not limited	
Wallpack	35	Not limited		Not limited	
624826					
Manlius, very rocky	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Nassau, very rocky	25	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
624827					
Nassau, very rocky--	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Manlius, very rocky-	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
624828					
Nassau, very rocky--	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Manlius, very rocky-	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
624829					
Nassau, very rocky--	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Manlius, very rocky-	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
624832					
Nassau----------	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop--------	45	Not rated		Not rated	
624841					
Oquaga----------	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop--------	25	Not rated		Not rated	
624845					
Rock outcrop--------	45	Not rated		Not rated	
Farmington----------	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Water erosion	1.00	Water erosion	1.00
		Slope	1.00		
Galway----------	20	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
624846					
Rock outcrop--------	40	Not rated		Not rated	
Arnot----------	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rubble land---------	20	Not rated		Not rated	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
626816					
Udifluvents, occasionally flooded	90	Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76
635458					
Oquaga, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Lackawanna, very rocky	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
635459					
Oquaga, very rocky	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Lackawanna, very rocky	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
740953					
Delaware, rarely flooded	80	Not limited		Not limited	
740968					
Nassau, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Manlius, very rocky	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
740969					
Nassau, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Manlius, very rocky	44	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
740971					
Oquaga, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Lackawanna, very rocky	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
740972					
Oquaga, very rocky	50	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Lackawanna, very rocky	35	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
740974					
Oquaga	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	25	Not rated		Not rated	
740975					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rubble land	20	Not rated		Not rated	
740987					
Scio	80	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.08	Depth to saturated zone	0.08
740988					
Udifluvents, occasionally flooded	90	Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76
740991					
Unadilla	85	Not limited		Not limited	
740992					
Unadilla	85	Not limited		Not limited	
740995					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
740996					
Wellsboro, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Water erosion	1.00	Water erosion	1.00
741149					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
741150					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
801114					
Oquaga	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Rock outcrop	15	Not rated		Not rated	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
810906					
Oquaga	75	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Rock outcrop	15	Not rated		Not rated	
1147465					
Alden, extremely stony	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
1147467					
Arnot, very rocky	55	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
Lordstown, very rocky	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
1147468					
Arnot	45	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Lordstown	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
Rock outcrop	15	Not rated		Not rated	
1147469					
Arnot	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Lordstown	25	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
Atherton, poorly drained	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
1147471					
Catden	85	Not rated		Not rated	

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
1147474					
Chippewa, extremely stony	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
1147475					
Colonie	80	Somewhat limited		Somewhat limited	
		Too sandy	0.19	Too sandy	0.19
1147478					
Delaware, rarely flooded	80	Not limited		Not limited	
1147482					
Fredon, very stony	50	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.92	Depth to saturated zone	0.92
		Large stones	0.19	Large stones	0.19
Halsey, very stony	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00
		Large stones	0.19	Large stones	0.19
1147485					
Hazen, very stony	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hoosic, very stony	35	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
1147490					
Hoosic, very stony	60	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
Hazen, very stony	30	Somewhat limited		Somewhat limited	
		Large stones	0.19	Large stones	0.19
1147491					
Hoosic, very stony	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Large stones	0.19
Otisville, very stony	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones	0.19	Large stones	0.19
1147492					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
1147500					
Wurtsboro, extremely stony----	90	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
1147501					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
Swartswood, extremely stony----	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
1147502					
Wurtsboro, extremely stony----	60	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Depth to saturated zone	0.44	Depth to saturated zone	0.44
Swartswood, extremely stony----	40	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
1147527					
Udorthents----------	60	Not limited		Not limited	
Urban land----------	40	Not rated		Not rated	
1147532					
Udorthents----------	100	Not limited		Not limited	
1147533					
Wurtsboro, extremely stony----	80	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00	Depth to saturated zone	0.44
		Depth to saturated zone	0.44		
Swartswood, extremely stony----	20	Very limited		Very limited	
		Large stones	1.00	Large stones	1.00
		Slope	1.00		
1948749					
Arnot----------	90	Not limited		Not limited	
1948750					
Arnot----------	90	Not limited		Not limited	
1948751					
Arnot----------	90	Somewhat limited		Not limited	
		Slope	0.50		

Table 7b.--Recreational Development, Part II (Trail Management)--Continued

Map unit symbol and soil name	Pct. of map unit	Foot traffic and equestrian trails: Rating class and limiting features	Value	Mountain bike and off-road vehicle trails: Rating class and limiting features	Value
1948774					
Conotton	90	Not limited		Not limited	
1948775					
Conotton	95	Not limited		Not limited	
1948776					
Conotton	95	Somewhat limited		Not limited	
		Slope	0.50		
1948777					
Conotton	95	Very limited		Very limited	
		Slope	1.00	Slope	1.00
1948797					
Manlius	90	Not limited		Not limited	
1948802					
Manlius	90	Not limited		Not limited	
1948818					
Manlius	90	Somewhat limited		Not limited	
		Slope	0.50		
1948832					
Penargyl	90	Not limited		Not limited	
1948846					
Phelps	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.08	Depth to saturated zone	0.08
1948855					
Udorthents, loamy	95	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11
1948989					
Urban land	65	Not rated		Not rated	
Delaware	25	Not limited		Not limited	

Table 8.--Dwellings and Small Commercial Buildings

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
290836							
Hoosic, very stony--	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Otisville, very stony----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
296265							
Alden----------	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296269							
Fluvents, (alluvial land)----------	70	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
296271							
Alvira----------	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
Watson----------	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.50
		Depth to thin cemented pan	0.50			Shrink-swell	0.50
296272							
Bath----------	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.28			Depth to saturated zone	0.28
296273							
Bath----------	85	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63	Depth to saturated zone	0.28
		Depth to saturated zone	0.28				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296274							
Bath	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.28
		Depth to saturated zone	0.28				
296275							
Bath	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.28			Depth to saturated zone	0.28
296276							
Bath	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	1.00	Depth to saturated zone	0.28
		Depth to saturated zone	0.28				
296277							
Benson	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.02	Large stones	0.02	Large stones	0.02
296278							
Benson	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
		Large stones	0.02	Large stones	0.02	Large stones	0.02
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.02	Large stones	0.02	Large stones	0.02
Rock outcrop	25	Not rated		Not rated		Not rated	
296280							
Braceville	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.07
		Depth to saturated zone	0.07				
296281							
Braceville	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.07			Depth to saturated zone	0.07

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296283							
Buchanan	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.12
		Depth to saturated zone	0.07			Depth to saturated zone	0.07
296288							
Chippewa	48	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
Norwich	48	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296289							
Chippewa	47	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
Norwich	47	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296295							
Udorthents, cut and fill	90	Not rated		Not rated		Not rated	
296297							
Dekalb	100	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Slope	1.00	Depth to hard bedrock	0.29
		Large stones	0.03	Large stones	0.03	Large stones	0.03
296298							
Dekalb	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Depth to hard bedrock	0.29
		Large stones	0.03	Large stones	0.03	Large stones	0.03
296303							
Hazleton	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	0.07	Large stones	0.07	Large stones	0.07
				Depth to hard bedrock	0.01		

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296304							
Holly	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296311							
Lackawanna	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
Bath	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.28
		Depth to saturated zone	0.28				
296312							
Lackawanna	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.24			Depth to saturated zone	0.24
296313							
Lackawanna	80	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
296315							
Lackawanna	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.24			Depth to saturated zone	0.24
296316							
Lackawanna	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	1.00	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
296317							
Laidig	100	Somewhat limited		Very limited		Not limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00		

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296326							
Lordstown	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Slope	0.50
		Large stones	0.10	Large stones	0.10	Depth to hard bedrock	0.46
						Large stones	0.10
296327							
Lordstown	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Slope	1.00	Depth to hard bedrock	0.46
		Large stones	0.10	Large stones	0.10		
296328							
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
Oquaga	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
296329							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
296330							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296331							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
296332							
Mardin	87	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296335							
Meckesville	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Depth to saturated zone	0.98	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63		

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296337							
Meckesville	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.98		
296338							
Morris	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
296339							
Morris	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296340							
Morris	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50	Slope	0.16	Slope	1.00
		Slope	0.16				
296341							
Freetown, mucky peat	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296342							
Paupack, mucky peat (shallow)	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296343							
Oquaga	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Slope	0.50
						Depth to hard bedrock	0.46
Lackawanna	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.24			Depth to saturated zone	0.24
296344							
Oquaga	55	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Slope	0.63	Depth to hard bedrock	0.46

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296344							
Lackawanna	30	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
296346							
Oquaga	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
Lackawanna	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
296347							
Oquaga	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Slope	1.00	Depth to hard bedrock	0.46
Lackawanna	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	1.00	Depth to saturated zone	0.24
		Depth to saturated zone	0.24				
296348							
Philo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	1.00	Depth to saturated zone	0.07
296349							
Pope	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.15		
296350							
Pope	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.15		
296351							
Rexford, somewhat poorly drained	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296351							
Rexford, poorly drained	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296355							
Sheffield	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296363							
Dystrochrepts, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	1.00		
296369							
Wayland	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
296376							
Wellsboro	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
296379							
Wellsboro	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
296385							
Wyoming	85	Not limited		Not limited		Not limited	
296386							
Wyoming	85	Not limited		Not limited		Somewhat limited	
						Slope	0.50
296387							
Wyoming	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
296388							
Wyoming	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
296389							
Wyoming	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.50
Shohola	42	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50	Slope	0.04	Slope	1.00
		Slope	0.04				
297186							
Edgemere	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297188							
Manlius	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
Arnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.10	Large stones	0.10	Large stones	0.10
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46
Arnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.10	Large stones	0.10	Large stones	0.10
Rock outcrop	15	Not rated		Not rated		Not rated	
297190							
Braceville	82	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
297191							
Wyalusing	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
297192							
Pope	95	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
297193							
Paupack	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
297196							
Freetown	94	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
297197							
Manlius	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Slope	0.50
						Depth to hard bedrock	0.46
297198							
Manlius	86	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Slope	0.63	Depth to hard bedrock	0.46
297201							
Oquaga	75	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Depth to hard bedrock	0.29
		Large stones	0.02	Large stones	0.02	Large stones	0.02
297203							
Delaware	93	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
297204							
Delaware	82	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	0.50
297205							
Delaware	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Slope	1.00
		Slope	0.96	Slope	0.96	Flooding	1.00
297209							
Philo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	1.00	Depth to saturated zone	0.07

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
297210							
Barbour	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
297216							
Wurtsboro	92	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.95	Depth to saturated zone	1.00	Depth to saturated zone	0.95
		Depth to thin cemented pan	0.50				
297217							
Wurtsboro	88	Somewhat limited		Very limited		Very limited	
		Depth to saturated zone	0.95	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	0.95
		Depth to thin cemented pan	0.50				
297227							
Arnot	88	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
297228							
Arnot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
297229							
Wyoming	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones	0.26	Large stones	0.26	Large stones	0.26
						Slope	0.12
297230							
Wyoming	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
297231							
Wyoming	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	0.53	Large stones	0.53	Large stones	0.53
297236							
Suncook	91	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
297237							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
297238							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297239							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297240							
Mardin	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297241							
Unadilla	90	Not limited		Not limited		Not limited	
297242							
Shohola	62	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
Edgemere	29	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297243							
Shohola	62	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
Edgemere	29	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
297244							
Lordstown	40	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Depth to hard bedrock	0.46

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
297244							
Swartswood----------	35	Somewhat limited		Very limited		Not limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00		
297247							
Chenango----------	86	Not limited		Not limited		Not limited	
297248							
Chenango----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
297249							
Chenango----------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
297253							
Craigsville---------	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Large stones	0.99	Large stones	0.99	Large stones	0.99
Wyoming----------	40	Not limited		Not limited		Not limited	
297254							
Pits, shale---------	40	Not rated		Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony----	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
298050							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
Swartswood, extremely stony----	40	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
298051							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Very limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
298051							
Swartswood, extremely stony----	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
298075							
Colonie----------	80	Not limited		Not limited		Somewhat limited	
						Slope	0.50
298188							
Lackawanna, extremely stony----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
298189							
Lackawanna, extremely stony----	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
298221							
Swartswood, extremely stony----	90	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
298222							
Swartswood, extremely stony----	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
298223							
Swartswood, extremely stony----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
298255							
Delaware, rarely flooded----------	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	0.50
298256							
Delaware, rarely flooded----------	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
298257							
Wallpack----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
298258							
Wallpack----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
298259							
Wallpack, extremely stony----------	85	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
298260							
Wallpack, extremely stony----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
298261							
Wallpack----------	85	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
298262							
Wallpack, extremely stony----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
298265							
Venango, extremely stony----------	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
298266							
Venango, extremely stony----------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
298409							
Swartswood, extremely stony----	90	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
298411							
Swartswood, extremely stony----	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
298413							
Swartswood, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
318498							
Hazen, very stony	60	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Hoosic, very stony	35	Not limited		Not limited		Somewhat limited	
						Slope	0.50
318533							
Hazen, very stony	50	Not limited		Not limited		Not limited	
Hoosic, very stony	40	Not limited		Not limited		Not limited	
319783							
Catden	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	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	Organic matter content	1.00
319784							
Fredon, very stony	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Halsey, very stony	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
543222							
Andover, extremely stony	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Buchanan, extremely stony	40	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Depth to thin cemented pan	0.50				
543243							
Berks	65	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.20	Depth to hard bedrock	1.00	Depth to hard bedrock	0.20
Weikert	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
543246							
Buchanan	75	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Depth to thin cemented pan	0.50			Slope	0.50
543247							
Buchanan, extremely stony	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Depth to thin cemented pan	0.50				
543257							
Chippewa	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
543258							
Chippewa	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50			Slope	0.12
543259							
Chippewa, extremely stony	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to thin cemented pan	0.50				
543271							
Delaware	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
543276							
Fluvaquents	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
543292							
Hazleton, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	0.10	Large stones	0.10	Large stones	0.10
				Depth to hard bedrock	0.08		
543293							
Hazleton, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	0.10	Large stones	0.10	Large stones	0.10

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
543299							
Laidig, extremely stony	90	Somewhat limited		Somewhat limited		Not limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.90		
543300							
Laidig, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.90		
543304							
Laidig	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.90		
Rubble land	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00	Large stones	1.00	Large stones	1.00
543318							
Rubble land	75	Very limited		Very limited		Very limited	
		Large stones	1.00	Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
543327							
Swartswood	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.98	Slope	0.50
543328							
Swartswood	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Depth to saturated zone	0.98	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63		
543330							
Swartswood, extremely stony	50	Somewhat limited		Somewhat limited		Not limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.98		
Wurtsboro, extremely stony	30	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
543331							
Swartswood, extremely stony	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Depth to saturated zone	0.98		

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
543331 Wurtsboro, extremely stony	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	1.00	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
543359 Volusia	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
						Slope	0.12
543360 Volusia, extremely stony	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
543374 Wurtsboro	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Slope	0.50
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
543375 Wurtsboro	90	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
612280 Scio	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	1.00	Depth to saturated zone	0.77
612666 Colonie	80	Not limited		Not limited		Not limited	
612668 Hoosic, very stony	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Hazen, very stony	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
612724 Lordstown, very rocky	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
612724							
Wallpack, very rocky	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
612732							
Atherton, very poorly drained	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Atherton, poorly drained	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
612738							
Fluvaquents, occasionally flooded	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
612753							
Wallpack, aeolian mantle, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
612756							
Wallpack, aeolian mantle, very stony	85	Not limited		Not limited		Not limited	
612757							
Wallpack, aeolian mantle, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
612767							
Wellsboro, extremely stony	85	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	1.00
		Depth to thin cemented pan	0.50	Slope	0.63	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
612768							
Wellsboro, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to thin cemented pan	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
613393							
Alden, extremely stony	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
613447							
Unadilla	85	Not limited		Not limited		Not limited	
613448							
Unadilla	85	Not limited		Not limited		Somewhat limited	
						Slope	0.50
614075							
Wurtsboro, extremely stony	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
Swartswood, extremely stony	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
620179							
Arnot, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	1.00
Lordstown, very rocky	40	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.06
620180							
Arnot	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Rock outcrop	15	Not rated		Not rated		Not rated	
620181							
Arnot	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
620181							
Lordstown	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Rock outcrop	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
623109							
Farmington	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	1.00
Rock outcrop	40	Not rated		Not rated		Not rated	
624811							
Galway, very rocky	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Depth to hard bedrock	1.00	Depth to hard bedrock	0.90
624813							
Lackawanna, extremely stony	85	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
624816							
Lordstown, very rocky	50	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Slope	0.63	Depth to hard bedrock	0.06
Wallpack, very rocky	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
624822							
Lordstown	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Wallpack	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
624823							
Lordstown	50	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Slope	0.63	Depth to hard bedrock	0.06
Wallpack	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
624824							
Lordstown	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Wallpack	35	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
624826							
Manlius, very rocky	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.71	Depth to hard bedrock	1.00	Depth to hard bedrock	0.71
		Large stones	0.42	Large stones	0.42	Large stones	0.42
Nassau, very rocky	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.39	Large stones	0.39	Large stones	0.39
624827							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.15	Large stones	0.15	Large stones	0.15
Manlius, very rocky	44	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.54	Depth to hard bedrock	1.00	Depth to hard bedrock	0.54
		Large stones	0.33	Large stones	0.33	Large stones	0.33
624828							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to hard bedrock	1.00
		Large stones	0.15	Large stones	0.15	Large stones	0.15
Manlius, very rocky	44	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Slope	0.63	Depth to hard bedrock	0.54
		Large stones	0.33	Large stones	0.33	Large stones	0.33

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
624829							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.15	Large stones	0.15	Large stones	0.15
Manlius, very rocky-	44	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Depth to hard bedrock	1.00	Depth to hard bedrock	0.54
		Large stones	0.33	Large stones	0.33	Large stones	0.33
624832							
Nassau----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.39	Large stones	0.39	Large stones	0.39
Rock outcrop--------	45	Not rated		Not rated		Not rated	
624841							
Oquaga----------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Depth to hard bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Rock outcrop--------	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop--------	45	Not rated		Not rated		Not rated	
Farmington----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Galway----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Depth to hard bedrock	1.00	Depth to hard bedrock	0.90
624846							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Rubble land---------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00	Large stones	1.00	Large stones	1.00

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
626816							
Udifluvents, occasionally flooded	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.87		
635458							
Oquaga, very rocky	55	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.84
		Slope	0.63	Slope	0.63		
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Lackawanna, very rocky	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
635459							
Oquaga, very rocky	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Depth to hard bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Lackawanna, very rocky	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
740953							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
740968							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	1.00
		Slope	0.63	Slope	0.63		
		Large stones	0.15	Large stones	0.15	Large stones	0.15
Manlius, very rocky	44	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.54			Depth to hard bedrock	0.54
				Slope	0.63		
		Large stones	0.33	Large stones	0.33	Large stones	0.33
740969							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.15	Large stones	0.15	Large stones	0.15

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
740969							
Manlius, very rocky-	44	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Depth to hard bedrock	1.00	Depth to hard bedrock	0.54
		Large stones	0.33	Large stones	0.33	Large stones	0.33
740971							
Oquaga, very rocky--	55	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to hard bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Lackawanna, very rocky----------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
740972							
Oquaga, very rocky--	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Depth to hard bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Lackawanna, very rocky----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				
740974							
Oquaga----------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Depth to hard bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.01
Rock outcrop--------	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Rubble land---------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	1.00	Large stones	1.00	Large stones	1.00
740987							
Scio----------	80	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	1.00	Depth to saturated zone	0.77

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
740988 Udifluvents, occasionally flooded	90	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.87	Very limited Flooding	1.00
740991 Unadilla	85	Not limited		Not limited		Not limited	
740992 Unadilla	85	Not limited		Not limited		Somewhat limited Slope	0.50
740995 Wellsboro, extremely stony	85	Somewhat limited Depth to thin cemented pan Depth to saturated zone	0.50 0.39	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.39
740996 Wellsboro, extremely stony	85	Somewhat limited Slope Depth to thin cemented pan Depth to saturated zone	0.63 0.50 0.39	Very limited Depth to saturated zone Slope	1.00 0.63	Very limited Slope Depth to saturated zone	1.00 0.39
741149 Lackawanna, extremely stony	85	Somewhat limited Slope Depth to thin cemented pan	0.63 0.50	Somewhat limited Slope	0.63	Very limited Slope	1.00
741150 Lackawanna, extremely stony	85	Very limited Slope Depth to thin cemented pan	1.00 0.50	Very limited Slope	1.00	Very limited Slope	1.00
801114 Oquaga	75	Somewhat limited Depth to hard bedrock Large stones	0.84 0.01	Very limited Depth to hard bedrock Large stones	1.00 0.01	Very limited Slope Depth to hard bedrock Large stones	1.00 0.84 0.01
Rock outcrop	15	Not rated		Not rated		Not rated	
810906 Oquaga	75	Somewhat limited Depth to hard bedrock Large stones	0.84 0.01	Very limited Depth to hard bedrock Large stones	1.00 0.01	Very limited Slope Depth to hard bedrock Large stones	1.00 0.84 0.01

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
810906							
Rock outcrop--------	15	Not rated		Not rated		Not rated	
1147465							
Alden, extremely stony----------	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
1147467							
Arnot, very rocky---	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	1.00
Lordstown, very rocky----------	40	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.06
1147468							
Arnot----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Lordstown----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Rock outcrop--------	15	Not rated		Not rated		Not rated	
1147469							
Arnot----------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Lordstown----------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Depth to hard bedrock	0.06
Rock outcrop--------	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained-----	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Atherton, poorly drained----------	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
1147471							
Catden	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	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	Organic matter content	1.00
1147474							
Chippewa, extremely stony	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
1147475							
Colonie	80	Not limited		Not limited		Not limited	
1147478							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	0.50
1147482							
Fredon, very stony	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Halsey, very stony	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
1147485							
Hazen, very stony	60	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Hoosic, very stony	35	Not limited		Not limited		Somewhat limited	
						Slope	0.50
1147490							
Hoosic, very stony	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Hazen, very stony	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
1147491							
Hoosic, very stony	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Otisville, very stony	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
1147492							
Lackawanna, extremely stony	85	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
1147500							
Wurtsboro, extremely stony	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
1147501							
Wurtsboro, extremely stony	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
Swartswood, extremely stony	40	Somewhat limited		Not limited		Not limited	
		Depth to thin cemented pan	0.50				
1147502							
Wurtsboro, extremely stony	60	Somewhat limited		Very limited		Very limited	
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
Swartswood, extremely stony	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Depth to thin cemented pan	0.50				
1147527							
Udorthents	60	Not limited		Not limited		Not limited	
Urban land	40	Not rated		Not rated		Not rated	
1147532							
Udorthents	100	Not limited		Not limited		Not limited	
1147533							
Wurtsboro, extremely stony	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
		Depth to thin cemented pan	0.50				
Swartswood, extremely stony	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to thin cemented pan	0.50				

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
1948749							
Arnot	90	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	0.50
1948750							
Arnot	90	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Depth to hard bedrock	1.00
1948751							
Arnot	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
1948774							
Conotton	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
1948775							
Conotton	95	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
1948776							
Conotton	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
1948777							
Conotton	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
1948797							
Manlius	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Slope	0.50
						Depth to hard bedrock	0.29
1948802							
Manlius	90	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Slope	0.63	Depth to hard bedrock	0.29
1948818							
Manlius	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Depth to hard bedrock	0.29
1948832							
Penargyl	90	Not limited		Not limited		Somewhat limited	
						Slope	0.50
1948846							
Phelps	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.77	Depth to saturated zone	1.00	Depth to saturated zone	0.77
						Slope	0.12

Table 8.--Dwellings and Small Commercial Buildings--Continued

Map unit symbol and soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
1948855							
Udorthents, loamy	95	Somewhat limited Depth to saturated zone	0.81	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.81
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
290836							
Hoosic, very stony--	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.10
Otisville, very stony----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.95
296265							
Alden----------	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00		
296269							
Fluvents, (alluvial land)----------	70	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	0.75	Unstable excavation walls	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Flooding	0.80	Droughty	0.02
296271							
Alvira----------	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	0.26
Watson----------	35	Somewhat limited		Very limited		Somewhat limited	
		Low strength	0.78	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Depth to saturated zone	0.75	Unstable excavation walls	1.00	Large stones	0.16
		Shrink-swell	0.50				
		Frost action	0.50				
296272							
Bath----------	85	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.24
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Large stones	0.08

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296273							
Bath	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Gravel	0.24
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Large stones	0.08
296274							
Bath	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.24
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Large stones	0.08
296275							
Bath	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	0.54
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Gravel	0.11
296276							
Bath	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	0.54
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Gravel	0.11
296277							
Benson	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.88
		Large stones	0.02	Large stones	0.02	Large stones	0.68
296278							
Benson	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.88
		Large stones	0.02	Large stones	0.02	Large stones	0.68
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.88
		Large stones	0.02	Large stones	0.02	Large stones	0.68
Rock outcrop	25	Not rated		Not rated		Not rated	

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296280							
Braceville----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.04
		Depth to saturated zone	0.03	Unstable excavation walls	1.00	Depth to saturated zone	0.03
						Droughty	0.03
296281							
Braceville----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.04
		Depth to saturated zone	0.03	Unstable excavation walls	1.00	Depth to saturated zone	0.03
						Droughty	0.03
296283							
Buchanan----------	90	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.03	Unstable excavation walls	1.00	Depth to saturated zone	0.03
296288							
Chippewa----------	48	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Droughty	0.43
				Dense layer	0.50		
Norwich----------	48	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.24
				Unstable excavation walls	0.10		
296289							
Chippewa----------	47	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	0.88
				Dense layer	0.50	Droughty	0.65
						Gravel	0.01
Norwich----------	47	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Large stones	1.00
				Unstable excavation walls	0.10	Droughty	0.36
296295							
Udorthents, cut and fill----------	90	Not rated		Not rated		Not rated	

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296297							
Dekalb	100	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Large stones	1.00
		Depth to hard bedrock	0.29	Slope	1.00	Slope	1.00
		Large stones	0.03	Unstable excavation walls	0.10	Droughty	0.60
				Large stones	0.03	Depth to bedrock	0.29
296298							
Dekalb	100	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.29	Slope	1.00	Large stones	1.00
		Large stones	0.03	Unstable excavation walls	0.10	Droughty	0.60
				Large stones	0.03	Depth to bedrock	0.29
296303							
Hazleton	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Large stones	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Slope	1.00
		Large stones	0.07	Large stones	0.07		
				Depth to hard bedrock	0.01		
296304							
Holly	100	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80		
296311							
Lackawanna	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
Bath	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.14	Unstable excavation walls	0.10	Depth to saturated zone	0.14
						Gravel	0.01
296312							
Lackawanna	80	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296313							
Lackawanna	80	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Depth to saturated zone	1.00	Large stones	1.00
		Frost action	0.50	Slope	0.63	Slope	0.63
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
296315							
Lackawanna	80	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
296316							
Lackawanna	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
296317							
Laidig	100	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
				Unstable excavation walls	1.00	Droughty	0.01
296326							
Lordstown	85	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Large stones	1.00
		Depth to hard bedrock	0.46	Large stones	0.10	Depth to bedrock	0.46
		Large stones	0.10	Unstable excavation walls	0.10		
296327							
Lordstown	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Large stones	0.10	Depth to bedrock	0.46
		Large stones	0.10	Unstable excavation walls	0.10		
296328							
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	1.00
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Depth to bedrock	0.46
						Droughty	0.01
Oquaga	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	1.00
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Droughty	0.70
						Depth to bedrock	0.46
						Gravel	0.08

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296329							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.27
						Gravel	0.24
						Large stones	0.08
296330							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63	Slope	0.63
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.27
						Gravel	0.24
						Large stones	0.08
296331							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Frost action	0.50	Unstable excavation walls	0.10	Large stones	0.46
						Droughty	0.39
						Gravel	0.01
296332							
Mardin	87	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Depth to saturated zone	0.94	Slope	1.00	Depth to saturated zone	0.94
		Frost action	0.50	Unstable excavation walls	0.10	Large stones	0.46
						Droughty	0.39
						Gravel	0.01
296335							
Meckesville	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	0.98	Slope	0.63
		Frost action	0.50	Slope	0.63	Gravel	0.16
				Unstable excavation walls	0.10	Large stones	0.03
296337							
Meckesville	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to saturated zone	0.98	Large stones	0.26
				Unstable excavation walls	0.10		
296338							
Morris	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.34
				Unstable excavation walls	0.10	Gravel	0.29
						Large stones	0.03

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296339							
Morris	75	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
				Dense layer	0.50		
296340							
Morris	80	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
		Slope	0.16	Dense layer	0.50	Slope	0.16
				Slope	0.16		
296341							
Freetown, mucky peat	100	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Frost action	1.00				
296342							
Paupack, mucky peat (shallow)	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Unstable excavation walls	0.10		
		Frost action	1.00				
296343							
Oquaga	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Droughty	0.70
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Gravel	0.62
						Depth to bedrock	0.46
						Large stones	0.20
Lackawanna	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.62
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
						Large stones	0.03
296344							
Oquaga	55	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Droughty	0.70
		Frost action	0.50	Slope	0.63	Slope	0.63
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Gravel	0.62
						Depth to bedrock	0.46
						Large stones	0.20
Lackawanna	30	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Gravel	0.62
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
						Large stones	0.03

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296346							
Oquaga	50	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Large stones	1.00
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Droughty	0.70
						Depth to bedrock	0.46
						Gravel	0.08
Lackawanna	35	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
296347							
Oquaga	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.46	Unstable excavation walls	0.10	Droughty	0.70
						Depth to bedrock	0.46
						Gravel	0.08
Lackawanna	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.12	Unstable excavation walls	0.10	Depth to saturated zone	0.12
296348							
Philo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Depth to saturated zone	0.03
		Depth to saturated zone	0.03	Flooding	0.80		
296349							
Pope	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Flooding	0.60
		Frost action	0.50	Flooding	0.60		
				Depth to saturated zone	0.15		
296350							
Pope	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
		Flooding	0.40	Depth to saturated zone	0.15		
296351							
Rexford, somewhat poorly drained	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10	Droughty	0.34

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296351 Rexford, poorly drained	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10	Droughty	0.34
296355 Sheffield	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
296363 Dystrochrepts, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	0.32
				Unstable excavation walls	0.10	Gravel	0.07
296369 Wayland	100	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80		
		Low strength	1.00				
296376 Wellsboro	80	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.94	Unstable excavation walls	0.10	Depth to saturated zone	0.94
296379 Wellsboro	85	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.94	Unstable excavation walls	0.10	Depth to saturated zone	0.94
296385 Wyoming	85	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.81
						Gravel	0.76
						Large stones	0.03
296386 Wyoming	85	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.81
						Gravel	0.76
						Large stones	0.03

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
296387							
Wyoming	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Droughty	0.81
						Gravel	0.76
				Slope	0.63	Slope	0.63
						Large stones	0.03
296388							
Wyoming	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.81
						Gravel	0.76
						Large stones	0.03
296389							
Wyoming	100	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.78
						Gravel	0.76
						Large stones	0.03
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
				Dense layer	0.50		
Shohola	42	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Large stones	1.00
		Slope	0.04	Unstable excavation walls	0.10	Droughty	0.08
				Slope	0.04	Slope	0.04
297186							
Edgemere	75	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
				Dense layer	0.50		
297188							
Manlius	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
						Gravel	0.90
		Frost action	0.50	Slope	1.00	Droughty	0.69
		Depth to hard bedrock	0.46	Dense layer	0.50	Large stones	0.61
				Unstable excavation walls	0.10	Depth to bedrock	0.46

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297188							
Arnot	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Large stones	0.10	Large stones	1.00
		Large stones	0.10	Unstable excavation walls	0.10	Droughty	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Gravel	0.90
		Depth to hard bedrock	0.46	Dense layer	0.50	Droughty	0.69
				Unstable excavation walls	0.10	Large stones	0.61
						Depth to bedrock	0.46
Arnot	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Large stones	0.10	Large stones	1.00
		Large stones	0.10	Unstable excavation walls	0.10	Droughty	1.00
Rock outcrop	15	Not rated		Not rated		Not rated	
297190							
Braceville	82	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Depth to saturated zone	0.48	Unstable excavation walls	1.00		
297191							
Wyalusing	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80		
297192							
Pope	95	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Frost action	0.50	Unstable excavation walls	0.10		
297193							
Paupack	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Unstable excavation walls	0.10		
		Frost action	1.00				

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297196							
Freetown	94	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone			
		Frost action	1.00				
297197							
Manlius	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Large stones	0.54
		Depth to hard bedrock	0.46	Dense layer	0.50	Droughty	0.51
				Unstable excavation walls	0.10	Depth to bedrock	0.46
						Gravel	0.19
297198							
Manlius	86	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Large stones	0.54
		Depth to hard bedrock	0.46	Dense layer	0.50	Droughty	0.51
				Unstable excavation walls	0.10	Depth to bedrock	0.46
						Gravel	0.19
297201							
Oquaga	75	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Droughty	0.77
		Depth to hard bedrock	0.29	Unstable excavation walls	0.10	Large stones	0.54
		Large stones	0.02	Large stones	0.02	Gravel	0.45
						Depth to bedrock	0.29
297203							
Delaware	93	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
297204							
Delaware	82	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
297205							
Delaware	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
297209							
Philo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Depth to saturated zone	0.03
		Depth to saturated zone	0.03	Flooding	0.80		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297210							
Barbour	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Flooding	0.60
		Frost action	0.50	Flooding	0.60		
				Depth to saturated zone	0.35		
297216							
Wurtsboro	92	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.68	Depth to saturated zone	1.00	Depth to saturated zone	0.68
		Frost action	0.50	Unstable excavation walls	1.00	Large stones	0.61
297217							
Wurtsboro	88	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.68	Depth to saturated zone	1.00	Depth to saturated zone	0.68
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Large stones	0.61
297227							
Arnot	88	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	1.00
		Slope	0.04	Slope	0.04	Gravel	1.00
						Large stones	0.54
						Slope	0.04
297228							
Arnot	85	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	1.00
						Gravel	1.00
						Large stones	0.54
297229							
Wyoming	90	Somewhat limited		Very limited		Very limited	
		Large stones	0.26	Unstable excavation walls	1.00	Large stones	1.00
				Large stones	0.26	Droughty	0.57
						Gravel	0.06
297230							
Wyoming	90	Somewhat limited		Very limited		Very limited	
		Slope	0.63	Unstable excavation walls	1.00	Large stones	1.00
				Slope	0.63	Slope	0.63
						Droughty	0.57
						Gravel	0.06
297231							
Wyoming	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones	0.53	Unstable excavation walls	1.00	Large stones	1.00
				Large stones	0.53	Droughty	0.57
						Gravel	0.06

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297236							
Suncook	91	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Droughty	0.69
				Flooding	0.60	Flooding	0.60
297237							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.33
						Large stones	0.20
						Gravel	0.09
297238							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63	Slope	0.63
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	0.33
						Large stones	0.20
						Gravel	0.09
297239							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Frost action	0.50	Unstable excavation walls	0.10	Large stones	0.84
						Droughty	0.33
						Gravel	0.01
297240							
Mardin	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.94	Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slope	0.63	Slope	0.63	Large stones	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Slope	0.63
						Droughty	0.33
						Gravel	0.01
297241							
Unadilla	90	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Unstable excavation walls	0.10		
297242							
Shohola	62	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
						Droughty	0.08
				Dense layer	0.50		
Edgemere	29	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297243							
Shohola	62	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63	Slope	0.63
				Dense layer	0.50	Droughty	0.08
Edgemere	29	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	1.00
		Slope	0.63	Slope	0.63	Slope	0.63
				Dense layer	0.50		
297244							
Lordstown	40	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Large stones	1.00
		Depth to hard bedrock	0.46	Unstable excavation walls	1.00	Depth to bedrock	0.46
						Droughty	0.01
Swartswood	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	0.84
				Unstable excavation walls	1.00	Droughty	0.02
297247							
Chenango	86	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.12
						Droughty	0.07
297248							
Chenango	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Gravel	0.12
						Droughty	0.07
297249							
Chenango	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.12
						Droughty	0.07
297253							
Craigsville	50	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Large stones	0.99
		Large stones	0.99	Large stones	0.99	Flooding	0.60
		Frost action	0.50	Flooding	0.60	Droughty	0.01
Wyoming	40	Not limited		Very limited		Very limited	
				Unstable excavation walls	1.00	Large stones	1.00
						Droughty	0.57
						Gravel	0.06

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
297254							
Pits, shale---------	40	Not rated		Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony----	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298050							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
Swartswood, extremely stony----	40	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298051							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
Swartswood, extremely stony----	40	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
298075							
Colonie----------	80	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.47
298188							
Lackawanna, extremely stony----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
298189 Lackawanna, extremely stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Large stones	0.88
		Frost action	0.50	Dense layer	0.50	Slope	0.63
				Unstable excavation walls	0.10		
298221 Swartswood, extremely stony	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298222 Swartswood, extremely stony	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
298223 Swartswood, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298255 Delaware, rarely flooded	80	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
298256 Delaware, rarely flooded	80	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
298257 Wallpack	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
298258 Wallpack	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
298259 Wallpack, extremely stony	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298260 Wallpack, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
298261 Wallpack	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298262 Wallpack, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298265 Venango, extremely stony	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00		
		Low strength	1.00	Dense layer	0.50		
298266 Venango, extremely stony	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Slope	0.63
		Low strength	1.00	Slope	0.63		
		Slope	0.63	Dense layer	0.50		
298409 Swartswood, extremely stony	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
298411 Swartswood, extremely stony	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
298413							
Swartswood, extremely stony----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
318498							
Hazen, very stony---	60	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Droughty	0.01
Hoosic, very stony--	35	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.10
318533							
Hazen, very stony---	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Droughty	0.01
Hoosic, very stony--	40	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.10
319783							
Catden----------	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Frost action	1.00	Organic matter content	1.00		
319784							
Fredon, very stony--	50	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Depth to saturated zone	0.96	Unstable excavation walls	1.00		
Halsey, very stony--	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00		
543222							
Andover, extremely stony----------	55	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00	Large stones	0.54
						Droughty	0.01
Buchanan, extremely stony----------	40	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	1.00
		Depth to saturated zone	0.48	Unstable excavation walls	1.00	Depth to saturated zone	0.48
						Gravel	0.01

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
543243							
Berks	65	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.20			Droughty	0.79
				Slope	1.00	Gravel	0.46
				Unstable excavation walls	0.10	Depth to bedrock	0.20
						Large stones	0.20
Weikert	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	1.00
						Gravel	0.92
543246							
Buchanan	75	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.54
		Depth to saturated zone	0.48	Unstable excavation walls	1.00	Depth to saturated zone	0.48
543247							
Buchanan, extremely stony	80	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Gravel	0.54
		Depth to saturated zone	0.48	Unstable excavation walls	1.00	Depth to saturated zone	0.48
543257							
Chippewa	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.30
				Unstable excavation walls	0.10		
543258							
Chippewa	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.30
				Unstable excavation walls	0.10		
543259							
Chippewa, extremely stony	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Large stones	0.92
				Unstable excavation walls	0.10	Droughty	0.65
543271							
Delaware	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
		Flooding	0.40				

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
543276							
Fluvaquents	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Flooding	1.00	Unstable excavation walls	0.10		
				Too clayey	0.01		
543292							
Hazleton, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Large stones	1.00
		Frost action	0.50	Large stones	0.10	Slope	1.00
		Large stones	0.10	Unstable excavation walls	0.10	Gravel	0.01
				Depth to hard bedrock	0.08		
543293							
Hazleton, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Large stones	0.10	Large stones	1.00
		Large stones	0.10	Unstable excavation walls	0.10	Gravel	0.01
543299							
Laidig, extremely stony	90	Somewhat limited		Very limited		Very limited	
		Frost action	0.50	Unstable excavation walls	1.00	Large stones	1.00
				Depth to saturated zone	0.90	Gravel	0.16
543300							
Laidig, extremely stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Unstable excavation walls	1.00	Large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
				Depth to saturated zone	0.90	Gravel	0.16
543304							
Laidig	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Large stones	1.00
				Depth to saturated zone	0.90	Gravel	0.16
Rubble land	40	Very limited		Very limited		Not rated	
		Large stones	1.00	Large stones	1.00		
		Slope	1.00	Slope	1.00		
				Dense layer	0.50		
543318							
Rubble land	75	Very limited		Very limited		Very limited	
		Large stones	1.00	Large stones	1.00	Large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Dense layer	0.50	Droughty	1.00

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
543327							
Swartswood----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.24
				Depth to saturated zone	0.98	Large stones	0.08
						Droughty	0.01
543328							
Swartswood----------	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Depth to saturated zone	0.98	Gravel	0.24
				Slope	0.63	Large stones	0.08
						Droughty	0.01
543330							
Swartswood, extremely stony----	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Large stones	0.54
				Depth to saturated zone	0.98	Gravel	0.01
						Droughty	0.01
Wurtsboro, extremely stony----	30	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Large stones	0.92
		Depth to saturated zone	0.19	Unstable excavation walls	1.00	Depth to saturated zone	0.19
543331							
Swartswood, extremely stony----	50	Very limited		Very limited		Very limited	
		Slope	1.00	Unstable excavation walls	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	0.54
				Depth to saturated zone	0.98	Gravel	0.01
						Droughty	0.01
Wurtsboro, extremely stony----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Large stones	0.92
		Depth to saturated zone	0.19	Slope	1.00	Depth to saturated zone	0.19
543359							
Volusia----------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.92
				Unstable excavation walls	0.10	Gravel	0.01

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
543360 Volusia, extremely stony	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Large stones	1.00
				Unstable excavation walls	0.10	Droughty	0.85
543374 Wurtsboro	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Unstable excavation walls	1.00	Gravel	0.04
543375 Wurtsboro	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	0.63
		Frost action	0.50	Unstable excavation walls	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Slope	0.63	Gravel	0.04
612280 Scio	80	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.43
		Depth to saturated zone	0.43	Unstable excavation walls	0.10		
612666 Colonie	80	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.47
612668 Hoosic, very stony	60	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
				Slope	0.63	Droughty	0.10
Hazen, very stony	30	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Droughty	0.01
612724 Lordstown, very rocky	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Wallpack, very rocky	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
612732							
Atherton, very poorly drained	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
Atherton, poorly drained	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
612738							
Fluvaquents, occasionally flooded	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Unstable excavation walls	0.10		
612753							
Wallpack, aeolian mantle, very stony	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
612756							
Wallpack, aeolian mantle, very stony	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
612757							
Wallpack, aeolian mantle, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
612767							
Wellsboro, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Dense layer	0.50	Large stones	0.16
				Unstable excavation walls	0.10		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
612768 Wellsboro, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Dense layer	0.50	Large stones	0.16
				Unstable excavation walls	0.10		
613393 Alden, extremely stony	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
613447 Unadilla	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Unstable excavation walls	0.10		
613448 Unadilla	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Unstable excavation walls	0.10		
614075 Wurtsboro, extremely stony	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
Swartswood, extremely stony	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
620179 Arnot, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Lordstown, very rocky	40	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
620180							
Arnot	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
620181							
Arnot	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Lordstown	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.49
		Low strength	1.00	Unstable excavation walls	0.10		
623109							
Farmington	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	1.00	Unstable excavation walls	0.50	Droughty	0.97
Rock outcrop	40	Not rated		Not rated		Not rated	
624811							
Galway, very rocky	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	1.00	Depth to bedrock	0.90
		Frost action	0.50	Unstable excavation walls	1.00	Droughty	0.01

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
624813							
Lackawanna, extremely stony----	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		
624816							
Lordstown, very rocky----------	50	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	0.63
		Frost action	0.50			Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
				Slope	0.63		
Wallpack, very rocky	35	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50				
				Slope	0.63		
				Dense layer	0.50		
624822							
Lordstown----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50			Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Slope	1.00		
				Unstable excavation walls	1.00		
Wallpack----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
624823							
Lordstown----------	50	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	0.63
		Frost action	0.50			Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
				Slope	0.63		
Wallpack----------	35	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50				
				Slope	0.63		
				Dense layer	0.50		
624824							
Lordstown----------	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Wallpack----------	35	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
624826							
Manlius, very rocky-	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.71	Slope	1.00	Large stones	0.99
		Frost action	0.50	Large stones	0.42	Depth to bedrock	0.71
		Large stones	0.42	Unstable excavation walls	0.10	Droughty	0.70
Nassau, very rocky--	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	1.00
		Large stones	0.39	Large stones	0.39	Large stones	0.92
624827							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Large stones	0.15	Droughty	1.00
		Large stones	0.15	Unstable excavation walls	0.10	Large stones	0.92
Manlius, very rocky-	44	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.54	Depth to hard bedrock	1.00	Large stones	0.99
		Frost action	0.50	Large stones	0.33	Droughty	0.56
		Large stones	0.33	Unstable excavation walls	0.10	Depth to bedrock	0.54
						Gravel	0.02
624828							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63	Droughty	1.00
		Frost action	0.50	Large stones	0.15	Large stones	0.92
		Large stones	0.15	Unstable excavation walls	0.10	Slope	0.63
Manlius, very rocky-	44	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Large stones	0.99
		Depth to hard bedrock	0.54	Slope	0.63	Slope	0.63
		Frost action	0.50	Large stones	0.33	Droughty	0.56
		Large stones	0.33	Unstable excavation walls	0.10	Depth to bedrock	0.54
						Gravel	0.02
624829							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Large stones	0.15	Droughty	1.00
		Large stones	0.15	Unstable excavation walls	0.10	Large stones	0.92

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
624829							
Manlius, very rocky-	44	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Slope	1.00	Large stones	0.99
		Frost action	0.50	Large stones	0.33	Droughty	0.56
		Large stones	0.33	Unstable excavation walls	0.10	Depth to bedrock	0.54
						Gravel	0.02
624832							
Nassau	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	1.00
		Large stones	0.39	Large stones	0.39	Large stones	0.92
Rock outcrop	45	Not rated		Not rated		Not rated	
624841							
Oquaga	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Slope	1.00	Droughty	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Depth to bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Rock outcrop	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop	45	Not rated		Not rated		Not rated	
Farmington	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	1.00	Unstable excavation walls	0.50	Droughty	0.97
Galway	20	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	1.00	Depth to bedrock	0.90
		Frost action	0.50	Unstable excavation walls	1.00	Droughty	0.01
624846							
Rock outcrop	40	Not rated		Not rated		Not rated	
Arnot	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Rubble land	20	Very limited		Very limited		Not rated	
		Large stones	1.00	Large stones	1.00		
		Slope	1.00	Slope	1.00		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
626816							
Udifluvents, occasionally flooded	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Droughty	0.96
						Flooding	0.60
				Depth to saturated zone	0.87		
				Flooding	0.60		
635458							
Oquaga, very rocky	55	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Droughty	0.84
						Depth to bedrock	0.84
		Slope	0.63	Slope	0.63	Slope	0.63
		Frost action	0.50	Unstable excavation walls	0.10	Large stones	0.20
		Large stones	0.01				
				Large stones	0.01		
Lackawanna, very rocky	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Large stones	0.88
		Frost action	0.50	Dense layer	0.50	Slope	0.63
				Unstable excavation walls	0.10		
635459							
Oquaga, very rocky	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.84			Droughty	0.84
				Slope	1.00	Depth to bedrock	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Large stones	0.20
		Large stones	0.01				
				Large stones	0.01		
Lackawanna, very rocky	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		
740953							
Delaware, rarely flooded	80	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
740968							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	0.63	Slope	0.63	Large stones	0.92
		Frost action	0.50	Large stones	0.15	Slope	0.63
		Large stones	0.15	Unstable excavation walls	0.10		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
740968							
Manlius, very rocky-	44	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Large stones	0.99
		Depth to hard bedrock	0.54	Slope	0.63	Slope	0.63
		Frost action	0.50	Large stones	0.33	Droughty	0.56
		Large stones	0.33	Unstable excavation walls	0.10	Depth to bedrock	0.54
						Gravel	0.02
740969							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Large stones	0.15	Droughty	1.00
		Large stones	0.15	Unstable excavation walls	0.10	Large stones	0.92
Manlius, very rocky-	44	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.54	Slope	1.00	Large stones	0.99
		Frost action	0.50	Large stones	0.33	Droughty	0.56
		Large stones	0.33	Unstable excavation walls	0.10	Depth to bedrock	0.54
						Gravel	0.02
740971							
Oquaga, very rocky--	55	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Droughty	0.84
		Slope	0.63	Slope	0.63	Depth to bedrock	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Slope	0.63
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Lackawanna, very rocky----------	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Large stones	0.88
		Frost action	0.50	Dense layer	0.50	Slope	0.63
				Unstable excavation walls	0.10		
740972							
Oquaga, very rocky--	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Slope	1.00	Droughty	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Depth to bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Lackawanna, very rocky----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
740974							
Oquaga	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Slope	1.00	Droughty	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Depth to bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Rock outcrop	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop	40	Not rated		Not rated		Not rated	
Arnot	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Rubble land	20	Very limited		Very limited		Not rated	
		Large stones	1.00	Large stones	1.00		
		Slope	1.00	Slope	1.00		
740987							
Scio	80	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.43
		Depth to saturated zone	0.43	Unstable excavation walls	0.10		
740988							
Udifluvents, occasionally flooded	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Unstable excavation walls	1.00	Droughty	0.96
				Depth to saturated zone	0.87	Flooding	0.60
				Flooding	0.60		
740991							
Unadilla	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Unstable excavation walls	0.10		
740992							
Unadilla	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Unstable excavation walls	0.10		
740995							
Wellsboro, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Dense layer	0.50	Large stones	0.16
				Unstable excavation walls	0.10		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
740996 Wellsboro, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to saturated zone	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Dense layer	0.50	Large stones	0.16
				Unstable excavation walls	0.10		
741149 Lackawanna, extremely stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Large stones	0.88
		Frost action	0.50	Dense layer	0.50	Slope	0.63
				Unstable excavation walls	0.10		
741150 Lackawanna, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		
801114 Oquaga	75	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Droughty	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Depth to bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Rock outcrop	15	Not rated		Not rated		Not rated	
810906 Oquaga	75	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.84	Depth to hard bedrock	1.00	Droughty	0.84
		Frost action	0.50	Unstable excavation walls	0.10	Depth to bedrock	0.84
		Large stones	0.01	Large stones	0.01	Large stones	0.20
Rock outcrop	15	Not rated		Not rated		Not rated	
1147464 Alden, extremely stony	90	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
1147467 Arnot, very rocky	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
1147467							
Lordstown, very rocky	40	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
1147468							
Arnot	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
1147469							
Arnot	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.50	Droughty	0.99
Lordstown	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.06
		Depth to hard bedrock	0.06	Unstable excavation walls	1.00		
Rock outcrop	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained	60	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				
Atherton, poorly drained	30	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	0.10		
		Low strength	1.00				

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
1147471							
Catden	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Frost action	1.00	Organic matter content	1.00		
1147474							
Chippewa, extremely stony	80	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Dense layer	0.50	Droughty	0.49
		Low strength	1.00	Unstable excavation walls	0.10		
1147474							
Colonie	80	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.47
1147478							
Delaware, rarely flooded	80	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Unstable excavation walls	0.10		
		Flooding	0.40				
1147482							
Fredon, very stony	50	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Depth to saturated zone	0.96	Unstable excavation walls	1.00		
Halsey, very stony	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Unstable excavation walls	1.00		
1147484							
Hazen, very stony	60	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Droughty	0.01
Hoosic, very stony	35	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.10
1147490							
Hoosic, very stony	60	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
				Slope	0.63	Droughty	0.10
Hazen, very stony	30	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Droughty	0.01

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
1147491							
Hoosic, very stony--	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.10
Otisville, very stony----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Unstable excavation walls	1.00	Droughty	0.95
1147492							
Lackawanna, extremely stony----	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Dense layer	0.50	Large stones	0.88
				Unstable excavation walls	0.10		
1147500							
Wurtsboro, extremely stony----	90	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
1147501							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
Swartswood, extremely stony----	40	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
1147502							
Wurtsboro, extremely stony----	60	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		
Swartswood, extremely stony----	40	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
				Dense layer	0.50		

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
1147527							
Udorthents----------	60	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.01
Urban land----------	40	Not rated		Not rated		Not rated	
1147532							
Udorthents----------	100	Not limited		Very limited		Somewhat limited	
				Unstable excavation walls	1.00	Droughty	0.01
1147533							
Wurtsboro, extremely stony----	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to saturated zone	0.75	Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
Swartswood, extremely stony----	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00		
				Dense layer	0.50		
1948749							
Arnot----------	90	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	1.00
						Gravel	0.08
						Large stones	0.03
1948750							
Arnot----------	90	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63	Droughty	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Slope	0.63
						Gravel	0.08
						Large stones	0.03
1948751							
Arnot----------	90	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	0.10	Droughty	1.00
						Gravel	0.08
						Large stones	0.03
1948774							
Conotton----------	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.41
						Droughty	0.11
1948774							
Conotton----------	95	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Unstable excavation walls	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Gravel	0.41
						Droughty	0.11

Table 9.--Roads and Streets, Shallow Excavations, and Landscaping--Continued

Map unit symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Landscaping: Rating class and limiting features	Value
1948776							
Conotton	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.41
						Droughty	0.11
1948777							
Conotton	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Unstable excavation walls	1.00	Gravel	0.41
						Droughty	0.11
1948797							
Manlius	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Large stones	0.32
		Depth to hard bedrock	0.29	Dense layer	0.50	Droughty	0.31
				Unstable excavation walls	0.10	Depth to bedrock	0.29
						Gravel	0.15
1948802							
Manlius	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Depth to hard bedrock	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63	Large stones	0.32
		Depth to hard bedrock	0.29	Dense layer	0.50	Droughty	0.31
				Unstable excavation walls	0.10	Depth to bedrock	0.29
						Gravel	0.15
1948818							
Manlius	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Large stones	0.32
		Depth to hard bedrock	0.29	Dense layer	0.50	Droughty	0.31
				Unstable excavation walls	0.10	Depth to bedrock	0.29
						Gravel	0.15
1948832							
Penargyl	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Unstable excavation walls	0.10	Gravel	0.01
1948846							
Phelps	90	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.43
		Depth to saturated zone	0.43	Unstable excavation walls	1.00	Large stones	0.08
						Gravel	0.01
1948854							
Udorthents, loamy	95	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Depth to saturated zone	0.48	Unstable excavation walls	1.00		
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Unstable excavation walls	1.00		
		Flooding	0.40				

Table 10.--Sewage Disposal

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
290836					
Hoosic, very stony--	50	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
Otisville, very stony----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
296265					
Alden----------	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
296269					
Fluvents, (alluvial land)----------	70	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	1.00
296271					
Alvira----------	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
Watson----------	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
296272					
Bath----------	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
				Depth to saturated zone	0.68
		Slow water movement	1.00		
				Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296273					
Bath	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.68
		Slope	0.63	Seepage	0.53
296274					
Bath	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.68
		Slope	1.00	Seepage	0.53
296275					
Bath	90	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Depth to saturated zone	0.68
				Seepage	0.53
296276					
Bath	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.68
		Slope	1.00	Seepage	0.53
296277					
Benson	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Large stones	0.02	Seepage	0.53
				Large stones	0.48
				Slope	0.32
296278					
Benson	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones	0.02	Seepage	0.53
				Large stones	0.48
Rock outcrop	20	Not rated		Not rated	
296279					
Benson	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones	0.02	Seepage	0.53
				Large stones	0.48
Rock outcrop	25	Not rated		Not rated	

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296280					
Braceville	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	0.44
		Seepage, bottom layer	1.00		
296281					
Braceville	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Slope	0.92
		Seepage, bottom layer	1.00	Depth to saturated zone	0.44
296283					
Buchanan	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.68
				Seepage	0.53
296288					
Chippewa	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.08
Norwich	48	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.08
296289					
Chippewa	47	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
Norwich	47	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
296295					
Udorthents, cut and fill	90	Not rated		Not rated	

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296297					
Dekalb	100	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	1.00	Large stones	0.61
		Large stones	0.03		
296298					
Dekalb	100	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Large stones	0.61
		Large stones	0.03		
296303					
Hazleton	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Large stones	0.86
		Depth to bedrock	0.34	Depth to hard bedrock	0.01
		Large stones	0.07		
296304					
Holly	100	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.46		
296311					
Lackawanna	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.64
		Slope	1.00	Seepage	0.53
				Large stones	0.01
Bath	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.68
		Slope	1.00	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296312					
Lackawanna----------	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Depth to saturated zone	0.64
				Seepage	0.53
				Large stones	0.01
296313					
Lackawanna----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.64
		Slope	0.63	Seepage	0.53
				Large stones	0.01
296315					
Lackawanna----------	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Depth to saturated zone	0.64
				Seepage	0.53
				Large stones	0.01
296316					
Lackawanna----------	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.64
		Slope	1.00	Seepage	0.53
				Large stones	0.01
296317					
Laidig----------	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Slope	0.32
				Depth to saturated zone	0.19
296326					
Lordstown----------	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Large stones	0.96
		Large stones	0.10	Slope	0.92
				Seepage	0.53
296327					
Lordstown----------	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Large stones	0.96
		Large stones	0.10	Seepage	0.53
296328					
Lordstown----------	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296328					
Oquaga	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
				Large stones	0.10
296329					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
296330					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	0.53
296331					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
296332					
Mardin	87	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	0.53
296335					
Meckesville	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	0.53
296337					
Meckesville	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	0.53
296338					
Morris	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296339					
Morris	75	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Large stones	0.46
				Slope	0.32
296340					
Morris	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	1.00
		Slope	0.16	Seepage	0.53
				Large stones	0.46
296341					
Freetown, mucky peat	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
				Seepage	1.00
296342					
Paupack, mucky peat (shallow)	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slow water movement	0.72	Seepage	1.00
296343					
Oquaga	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Slope	0.92
				Seepage	0.53
Lackawanna	35	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Depth to saturated zone	0.64
				Seepage	0.53
296344					
Oquaga	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Lackawanna	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.64
		Slope	0.63	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296346					
Oquaga	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
				Large stones	0.10
Lackawanna	35	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.64
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
				Large stones	0.01
296347					
Oquaga	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
				Large stones	0.10
Lackawanna	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.64
		Slope	1.00	Seepage	0.53
				Large stones	0.01
296348					
Philo	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46		
296349					
Pope	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.40		
296350					
Pope	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
		Depth to saturated zone	0.40		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296351					
Rexford, somewhat poorly drained	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
Rexford, poorly drained	35	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		
296355					
Sheffield	100	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
296363					
Dystrochrepts, very stony	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Large stones	0.04
296369					
Wayland	100	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
296376					
Wellsboro	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
296379					
Wellsboro	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
296385					
Wyoming	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
296386					
Wyoming	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.92
296387					
Wyoming	85	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
296388					
Wyoming	85	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
296389					
Wyoming	100	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Slope	0.92
				Seepage	0.53
Shohola	42	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	1.00
		Slope	0.04	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297186					
Edgemere	75	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Seepage	0.53
				Large stones	0.48
297188					
Manlius	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Arnot	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones	0.10	Large stones	0.83
				Seepage	0.53
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
Arnot	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones	0.10	Large stones	0.83
				Seepage	0.53
Rock outcrop	15	Not rated		Not rated	
297190					
Braceville	82	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Slow water movement	1.00	Depth to saturated zone	0.94
		Seepage, bottom layer	1.00		
297191					
Wyalusing	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297192					
Pope	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
297193					
Paupack	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Subsidence	1.00	Depth to saturated zone	1.00
		Slow water movement	0.72	Seepage	1.00
297196					
Freetown	94	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
				Seepage	1.00
297197					
Manlius	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Slope	0.92
				Seepage	0.53
297198					
Manlius	86	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
297201					
Oquaga	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
		Large stones	0.02	Large stones	0.06
297203					
Delaware	93	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
297204					
Delaware	82	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Slope	0.92
				Flooding	0.40

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297205					
Delaware	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.96	Seepage	1.00
		Flooding	0.40	Flooding	0.40
297209					
Philo	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46		
297210					
Barbour	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Depth to saturated zone	0.84	Depth to saturated zone	0.17
297216					
Wurtsboro	92	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.99
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
297217					
Wurtsboro	88	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.99
		Slope	0.63	Seepage	0.53
297227					
Arnot	88	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.04	Slope	1.00
				Seepage	0.53
297228					
Arnot	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.53
297229					
Wyoming	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Large stones	0.84
		Large stones	0.26	Slope	0.68

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297230					
Wyoming	90	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
297231					
Wyoming	90	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Large stones	1.00
		Large stones	0.53		
297236					
Suncook	91	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.08
297237					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
297238					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	0.53
297239					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
				Large stones	0.08
297240					
Mardin	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	0.53
				Large stones	0.08
297241					
Unadilla	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297242					
Shohola	62	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
Edgemere	29	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Seepage	0.53
				Slope	0.32
297243					
Shohola	62	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	0.53
Edgemere	29	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Depth to saturated zone	1.00
				Seepage	0.53
297244					
Lordstown	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
Swartswood	35	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Seepage	0.53
		Slow water movement	1.00	Slope	0.32
				Depth to saturated zone	0.19
297247					
Chenango	86	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
297248					
Chenango	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
297249					
Chenango	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
297253					
Craigsville	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Large stones	1.00
		Filtering capacity	1.00	Slope	0.08
		Large stones	0.99		
Wyoming	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.32
		Seepage, bottom layer	1.00		
297254					
Pits, shale	40	Not rated		Not rated	
Pits, gravel	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
298050					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
Swartswood, extremely stony	40	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
298051					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
				Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Slope	0.63		
Swartswood, extremely stony	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	1.00
		Slope	0.63		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
298075					
Colonie	80	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.92
298188					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50
298189					
Lackawanna, extremely stony	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
298221					
Swartswood, extremely stony	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
298222					
Swartswood, extremely stony	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
298223					
Swartswood, extremely stony	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
298255					
Delaware, rarely flooded	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Slope	0.92
				Flooding	0.40
298256					
Delaware, rarely flooded	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
298257					
Wallpack	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
298258					
Wallpack	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50
298259					
Wallpack, extremely stony	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
298260					
Wallpack, extremely stony	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.50
		Slope	0.63		
298261					
Wallpack	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
298262					
Wallpack, extremely stony	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.50
		Slope	1.00		
298265					
Venango, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
298266					
Venango, extremely stony	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
				Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
		Slope	0.63		
298409					
Swartswood, extremely stony	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
298411					
Swartswood, extremely stony	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	1.00

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
298413					
Swartswood, extremely stony----	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	1.00
318498					
Hazen, very stony---	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.92
Hoosic, very stony--	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.92
318533					
Hazen, very stony---	50	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
Hoosic, very stony--	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
319783					
Catden----------	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
				Seepage	0.50
319784					
Fredon, very stony--	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		
Halsey, very stony--	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
543222					
Andover, extremely stony	55	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
Buchanan, extremely stony	40	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
543243					
Berks	65	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Weikert	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
543246					
Buchanan	75	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slow water movement	1.00	Slope	0.92
				Seepage	0.53
543247					
Buchanan, extremely stony	80	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
543257					
Chippewa	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Seepage	0.53
543258					
Chippewa	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Slope	0.68
				Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
543259 Chippewa, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
				Seepage	0.53
				Slope	0.32
543271 Delaware	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
543276 Fluvaquents	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
543292 Hazleton, extremely stony	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Filtering capacity	1.00		
				Large stones	0.98
		Slope	1.00	Depth to hard bedrock	0.08
		Depth to bedrock	0.50		
		Large stones	0.10		
543293 Hazleton, extremely stony	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Large stones	0.98
		Depth to bedrock	0.24		
		Large stones	0.10		
543299 Laidig, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
543300 Laidig, extremely stony	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
				Depth to saturated zone	1.00
		Slow water movement	1.00		
				Seepage	1.00
		Slope	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
543304					
Laidig	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	1.00
Rubble land	40	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
		Depth to bedrock	0.24		
543318					
Rubble land	75	Very limited		Very limited	
		Filtering capacity	1.00	Large stones	1.00
		Large stones	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	1.00		
		Depth to bedrock	0.20		
543327					
Swartswood	90	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Seepage	0.53
				Depth to saturated zone	0.02
543328					
Swartswood	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
		Slope	0.63	Depth to saturated zone	0.02
543330					
Swartswood, extremely stony	50	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Seepage	0.53
		Slow water movement	1.00	Slope	0.32
				Depth to saturated zone	0.02
Wurtsboro, extremely stony	30	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
543331					
Swartswood, extremely stony	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.53
		Slope	1.00	Depth to saturated zone	0.02
Wurtsboro, extremely stony	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.75
		Slope	1.00	Seepage	0.53
543359					
Volusia	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.68
				Seepage	0.53
543360					
Volusia, extremely stony	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
				Slope	0.32
543374					
Wurtsboro	90	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Slope	0.92
		Slow water movement	1.00	Depth to saturated zone	0.75
				Seepage	0.53
543375					
Wurtsboro	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.75
		Slope	0.63	Seepage	0.53
612280					
Scio	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.47	Seepage	0.53
612666					
Colonie	80	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
612668					
Hoosic, very stony--	60	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
Hazen, very stony---	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.63		
612724					
Lordstown, very rocky----------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Wallpack, very rocky	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50
612732					
Atherton, very poorly drained-----	60	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72		
Atherton, poorly drained----------	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
				Seepage	0.50
612738					
Fluvaquents, occasionally flooded----------	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
612753 Wallpack, aeolian mantle, very stony-	85	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
612756 Wallpack, aeolian mantle, very stony-	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
612757 Wallpack, aeolian mantle, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
612767 Wellsboro, extremely stony----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.75
		Slope	0.63	Seepage	0.50
612768 Wellsboro, extremely stony----	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
613393 Alden, extremely stony----------	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
613447 Unadilla----------	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.47		
613448 Unadilla----------	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.92
		Slow water movement	0.47		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
614075					
Wurtsboro, extremely stony	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	1.00
Swartswood, extremely stony	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
620179					
Arnot, very rocky	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	1.00
				Seepage	0.50
Lordstown, very rocky	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
620180					
Arnot	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Lordstown	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Rock outcrop	15	Not rated		Not rated	
620181					
Arnot	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Lordstown	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Rock outcrop	15	Not rated		Not rated	

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
623089					
Chippewa, extremely stony	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
623109					
Farmington	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	1.00
				Seepage	0.50
Rock outcrop	40	Not rated		Not rated	
624811					
Galway, very rocky	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
624813					
Lackawanna, extremely stony	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
624816					
Lordstown, very rocky	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63		
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
Wallpack, very rocky	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.50
		Slope	0.63		
624822					
Lordstown	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
Wallpack	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.50
		Slope	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
624823					
Lordstown	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Wallpack	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
624824					
Lordstown	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
Wallpack	35	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
624826					
Manlius, very rocky	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Large stones	1.00
		Large stones	0.42	Seepage	1.00
Nassau, very rocky	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Large stones	1.00
		Large stones	0.39	Seepage	1.00
624827					
Nassau, very rocky	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.15	Large stones	0.91
				Slope	0.32
Manlius, very rocky	44	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.33	Large stones	0.98
				Slope	0.32
624828					
Nassau, very rocky	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Large stones	0.15	Large stones	0.91

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
624828					
Manlius, very rocky-	44	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Large stones	0.33	Large stones	0.98
624829					
Nassau, very rocky--	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.15	Large stones	0.91
Manlius, very rocky-	44	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.33	Large stones	0.98
624832					
Nassau----------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Large stones	1.00
		Large stones	0.39	Seepage	1.00
Rock outcrop--------	45	Not rated		Not rated	
624841					
Oquaga----------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Rock outcrop--------	25	Not rated		Not rated	
624845					
Rock outcrop--------	45	Not rated		Not rated	
Farmington----------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Galway----------	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
624846					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Rubble land	20	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
626816					
Udifluvents, occasionally flooded	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
635458					
Oquaga, very rocky	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Lackawanna, very rocky	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
635459					
Oquaga, very rocky	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Lackawanna, very rocky	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50
740953					
Delaware, rarely flooded	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
740968					
Nassau, very rocky--	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Large stones	0.91
		Large stones	0.15		
Manlius, very rocky-	44	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Large stones	0.33	Large stones	0.98
740969					
Nassau, very rocky--	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.15	Large stones	0.91
Manlius, very rocky-	44	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones	0.33	Large stones	0.98
740971					
Oquaga, very rocky--	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Lackawanna, very rocky----------	30	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
740972					
Oquaga, very rocky--	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Lackawanna, very rocky----------	35	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
740974					
Oquaga	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
		Large stones	0.01	Large stones	0.10
Rock outcrop	25	Not rated		Not rated	
740975					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Rubble land	20	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Large stones	1.00
		Large stones	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
740987					
Scio	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.47	Seepage	0.53
740988					
Udifluvents, occasionally flooded	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
740991					
Unadilla	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.47		
740992					
Unadilla	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.92
		Slow water movement	0.47		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
740995					
Wellsboro, extremely stony----	85	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.75
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
740996					
Wellsboro, extremely stony----	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	0.75
		Slope	0.63	Seepage	0.50
741149					
Lackawanna, extremely stony----	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	0.50
741150					
Lackawanna, extremely stony----	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	0.50
801114					
Oquaga----------	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.50	Slope	1.00
		Large stones	0.01	Seepage	0.50
				Large stones	0.10
Rock outcrop--------	15	Not rated		Not rated	
810906					
Oquaga----------	75	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.50	Slope	1.00
		Large stones	0.01	Seepage	0.50
				Large stones	0.10
Rock outcrop--------	15	Not rated		Not rated	
1147465					
Alden, extremely stony----------	90	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1147467					
Arnot, very rocky	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	1.00
				Seepage	0.50
Lordstown, very rocky	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
1147468					
Arnot	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Lordstown	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Rock outcrop	15	Not rated		Not rated	
1147469					
Arnot	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Lordstown	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
Rock outcrop	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained	60	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.72		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1147470					
Atherton, poorly drained	30	Very limited		Very limited	
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
				Seepage	0.50
1147471					
Catden	85	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Slow water movement	0.50	Depth to saturated zone	1.00
				Seepage	0.50
1147474					
Chippewa, extremely stony	80	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.50
1147475					
Colonie	80	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
1147478					
Delaware, rarely flooded	80	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Slope	0.92
				Flooding	0.40
1147482					
Fredon, very stony	50	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		
Halsey, very stony	40	Very limited		Very limited	
		Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00		

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1147485					
Hazen, very stony---	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.92
Hoosic, very stony--	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.92
1147490					
Hoosic, very stony--	60	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
Hazen, very stony---	30	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.63		
1147491					
Hoosic, very stony--	50	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
Otisville, very stony----------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
1147492					
Lackawanna, extremely stony----	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Seepage	0.50
				Slope	0.32
1147500					
Wurtsboro, extremely stony----	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1147501					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
Swartswood, extremely stony	40	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
				Slope	0.32
1147502					
Wurtsboro, extremely stony	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	0.63	Seepage	1.00
Swartswood, extremely stony	40	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
1147527					
Udorthents	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
Urban land	40	Not rated		Not rated	
1147532					
Udorthents	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
1147533					
Wurtsboro, extremely stony	80	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Slope	1.00	Seepage	1.00
Swartswood, extremely stony	20	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
1948749					
Arnot	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	0.92
				Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1948750					
Arnot	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
				Seepage	0.53
1948751					
Arnot	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.53
1948774					
Conotton	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Slope	0.92
1948775					
Conotton	95	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slope	0.63		
1948776					
Conotton	95	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
1948777					
Conotton	95	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Seepage, bottom layer	1.00		
1948797					
Manlius	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slow water movement	0.46	Slope	0.92
				Seepage	0.53
1948802					
Manlius	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
		Slow water movement	0.46	Seepage	0.53

Table 10.--Sewage Disposal--Continued

Map unit symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1948818					
Manlius	90	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Slow water movement	0.46	Seepage	0.53
1948832					
Penargyl	90	Very limited		Somewhat limited	
		Seepage, bottom layer	1.00	Slope	0.92
		Slow water movement	0.46	Seepage	0.53
1948846					
Phelps	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Slope	0.68
1948855					
Udorthents, loamy	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.32
1948989					
Urban land	65	Not rated		Not rated	
Delaware	25	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
				Slope	0.32

Table 11.--Source of Gravel and Sand

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Gravel source		Sand source	
		Rating class	Value	Rating class	Value
290836					
Hoosic, very stony--	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
Otisville, very stony----------	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00		
296265					
Alden----------	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296269					
Fluvents, (alluvial land)----------	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.04
296271					
Alvira----------	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Watson----------	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296272					
Bath----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296273					
Bath----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296274					
Bath----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296275					
Bath----------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
296276					
Bath	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296277					
Benson	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296278					
Benson	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	20	Not rated		Not rated	
296279					
Benson	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	25	Not rated		Not rated	
296280					
Braceville	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296281					
Braceville	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296283					
Buchanan	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296288					
Chippewa	48	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Norwich	48	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296289					
Chippewa	47	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Norwich	47	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296295					
Udorthents, cut and fill	90	Not rated		Not rated	

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
296297					
Dekalb	100	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.00	Thickest layer	0.04
296298					
Dekalb	100	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.03
		Bottom layer	0.00	Thickest layer	0.04
296303					
Hazleton	100	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.06
		Thickest layer	0.00	Thickest layer	0.06
296304					
Holly	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.64
296311					
Lackawanna	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bath	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296312					
Lackawanna	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296313					
Lackawanna	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296315					
Lackawanna	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296316					
Lackawanna	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296317					
Laidig	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296326					
Lordstown	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Value	Sand source: Rating class	Value
296327					
Lordstown	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296328					
Lordstown	40	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Oquaga	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296329					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296330					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296331					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296332					
Mardin	87	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296335					
Meckesville	100	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296337					
Meckesville	100	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296338					
Morris	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296339					
Morris	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296340					
Morris	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296341					
Freetown, mucky peat	100	Not rated		Not rated	

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
296342					
Paupack, mucky peat (shallow)	100	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.02
296343					
Oquaga	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Lackawanna	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296344					
Oquaga	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Lackawanna	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296346					
Oquaga	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Lackawanna	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296347					
Oquaga	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Lackawanna	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296348					
Philo	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
296349					
Pope	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
296350					
Pope	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
296351					
Rexford, somewhat poorly drained	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.04
Rexford, poorly drained	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.04
296355					
Sheffield	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296363					
Dystrochrepts, very stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296369					
Wayland	100	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296376					
Wellsboro	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296379					
Wellsboro	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
296385					
Wyoming	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.06	Bottom layer	0.15
296386					
Wyoming	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.06	Bottom layer	0.15
296387					
Wyoming	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.06	Bottom layer	0.15
296388					
Wyoming	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.06	Bottom layer	0.15
296389					
Wyoming	100	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.06	Thickest layer	0.03

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
296390					
Water	100	Not rated		Not rated	
297185					
Edgemere	42	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Shohola	42	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297186					
Edgemere	75	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
297188					
Manlius	40	Fair		Poor	
		Thickest layer	0.19	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
Arnot	35	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
297189					
Manlius	40	Fair		Poor	
		Thickest layer	0.19	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
Arnot	35	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
297190					
Braceville	82	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.08
297191					
Wyalusing	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
297192					
Pope	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.04
297193					
Paupack	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.02
297196					
Freetown	94	Not rated		Not rated	

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Value	Sand source: Rating class	Value
297197					
Manlius	90	Fair		Poor	
		Thickest layer	0.19	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
297198					
Manlius	86	Fair		Poor	
		Thickest layer	0.19	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
297201					
Oquaga	75	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
297203					
Delaware	93	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297204					
Delaware	82	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297205					
Delaware	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297209					
Philo	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.01
297210					
Barbour	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.02
		Bottom layer	0.00	Bottom layer	0.69
297216					
Wurtsboro	92	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.01
297217					
Wurtsboro	88	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297227					
Arnot	88	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
297228					
Arnot	85	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
297229					
Wyoming	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297230					
Wyoming	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297231					
Wyoming	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297236					
Suncook	91	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.89
297237					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297238					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297239					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297240					
Mardin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297241					
Unadilla	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
297242					
Shohola	62	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Edgemere	29	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.04
297243					
Shohola	62	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Edgemere	29	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.04

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
297244					
Lordstown	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.02
Swartswood	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.01
		Thickest layer	0.00	Thickest layer	0.01
297247					
Chenango	86	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.10
297248					
Chenango	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.10
297249					
Chenango	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.10
297253					
Craigsville	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wyoming	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.13
297254					
Pits, shale	40	Not rated		Not rated	
Pits, gravel	40	Not rated		Not rated	
298049					
Wurtsboro, extremely stony	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
298050					
Wurtsboro, extremely stony	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
Swartswood, extremely stony	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298051					
Wurtsboro, extremely stony	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
298051					
Swartswood, extremely stony----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298075					
Colonie----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.36
		Thickest layer	0.00	Bottom layer	0.81
298188					
Lackawanna, extremely stony----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298189					
Lackawanna, extremely stony----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298221					
Swartswood, extremely stony----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298222					
Swartswood, extremely stony----	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298223					
Swartswood, extremely stony----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298255					
Delaware, rarely flooded----------	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298256					
Delaware, rarely flooded----------	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298257					
Wallpack----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
298258					
Wallpack	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298259					
Wallpack, extremely stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
298260					
Wallpack, extremely stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
298261					
Wallpack	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298262					
Wallpack, extremely stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
298265					
Venango, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298266					
Venango, extremely stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
298409					
Swartswood, extremely stony	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298411					
Swartswood, extremely stony	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
298413					
Swartswood, extremely stony	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
318498					
Hazen, very stony---	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.26
		Bottom layer	0.12	Bottom layer	0.60
Hoosic, very stony--	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
318533					
Hazen, very stony---	50	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.26
		Bottom layer	0.12	Bottom layer	0.60
Hoosic, very stony--	40	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
319783					
Catden----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
319784					
Fredon, very stony--	50	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
Halsey, very stony--	40	Fair		Good	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.07		
543222					
Andover, extremely stony----------	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Buchanan, extremely stony----------	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543243					
Berks----------	65	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Weikert----------	25	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
543246					
Buchanan----------	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
543247					
Buchanan, extremely stony	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543257					
Chippewa	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543258					
Chippewa	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543259					
Chippewa, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543271					
Delaware	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.02
543276					
Fluvaquents	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543292					
Hazleton, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543293					
Hazleton, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543299					
Laidig, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543300					
Laidig, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543304					
Laidig	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
543304					
Rubble land	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543318					
Rubble land	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543327					
Swartswood	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
543328					
Swartswood	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
543330					
Swartswood, extremely stony	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Wurtsboro, extremely stony	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543331					
Swartswood, extremely stony	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Wurtsboro, extremely stony	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543359					
Volusia	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
543360					
Volusia, extremely stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
543374					
Wurtsboro	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
543375					
Wurtsboro	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
612280					
Scio	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
612666					
Colonie	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.36
		Thickest layer	0.00	Bottom layer	0.81
612668					
Hoosic, very stony	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
Hazen, very stony	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.26
		Bottom layer	0.12	Bottom layer	0.60
612724					
Lordstown, very rocky	50	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Wallpack, very rocky	40	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
612732					
Atherton, very poorly drained	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Atherton, poorly drained	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
612738					
Fluvaquents, occasionally flooded	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
612753					
Wallpack, aeolian mantle, very stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
612756					
Wallpack, aeolian mantle, very stony	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Value	Sand source: Rating class	Value
612757					
Wallpack, aeolian mantle, very stony-	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Organic matter content	0.00	Thickest layer	0.00
		Bottom layer	0.00	Organic matter content	0.00
612767					
Wellsboro, extremely stony----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
612768					
Wellsboro, extremely stony----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
613393					
Alden, extremely stony----------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
613447					
Unadilla----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
613448					
Unadilla----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
614075					
Wurtsboro, extremely stony----	80	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
Swartswood, extremely stony----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
620179					
Arnot, very rocky---	55	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Lordstown, very rocky----------	40	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
620180					
Arnot----------	45	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
620180					
Lordstown	40	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
620181					
Arnot	60	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Lordstown	25	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
623089					
Chippewa, extremely stony	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
623109					
Farmington	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop	40	Not rated		Not rated	
624811					
Galway, very rocky	80	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624813					
Lackawanna, extremely stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
624816					
Lordstown, very rocky	50	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Wallpack, very rocky	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624822					
Lordstown	50	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Wallpack	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
624823					
Lordstown	50	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Wallpack	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
624824					
Lordstown	50	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Wallpack	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
624826					
Manlius, very rocky-	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nassau, very rocky--	25	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624827					
Nassau, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Manlius, very rocky-	44	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624828					
Nassau, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Manlius, very rocky-	44	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624829					
Nassau, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Manlius, very rocky-	44	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624832					
Nassau	50	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	45	Not rated		Not rated	

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
624841					
Oquaga	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	25	Not rated		Not rated	
624845					
Rock outcrop	45	Not rated		Not rated	
Farmington	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Galway	20	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
624846					
Rock outcrop	40	Not rated		Not rated	
Arnot	30	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Rubble land	20	Not rated		Not rated	
626816					
Udifluvents, occasionally flooded	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
635458					
Oquaga, very rocky	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Lackawanna, very rocky	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
635459					
Oquaga, very rocky	50	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Lackawanna, very rocky	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
740953					
Delaware, rarely flooded	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
740968					
Nassau, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Manlius, very rocky-	44	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
740969					
Nassau, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Manlius, very rocky-	44	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
740971					
Oquaga, very rocky--	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Lackawanna, very rocky----------	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
740972					
Oquaga, very rocky--	50	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Lackawanna, very rocky----------	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
740974					
Oquaga----------	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop--------	25	Not rated		Not rated	
740975					
Rock outcrop--------	40	Not rated		Not rated	
Arnot----------	30	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Rubble land---------	20	Not rated		Not rated	
740987					
Scio----------	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source		Sand source	
		Rating class	Value	Rating class	Value
740988					
Udifluvents, occasionally flooded	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
740991					
Unadilla	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
740992					
Unadilla	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
740995					
Wellsboro, extremely stony	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
740996					
Wellsboro, extremely stony	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
741149					
Lackawanna, extremely stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
741150					
Lackawanna, extremely stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
801114					
Oquaga	75	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
810906					
Oquaga	75	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop	15	Not rated		Not rated	
1147465					
Alden, extremely stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
1147467					
Arnot, very rocky---	55	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Lordstown, very rocky----------	40	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
1147468					
Arnot----------	45	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Lordstown----------	40	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Rock outcrop--------	15	Not rated		Not rated	
1147469					
Arnot----------	60	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.62	Thickest layer	0.00
Lordstown----------	25	Fair		Poor	
		Thickest layer	0.07	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
Rock outcrop--------	15	Not rated		Not rated	
1147470					
Atherton, very poorly drained-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Atherton, poorly drained----------	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1147471					
Catden----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1147474					
Chippewa, extremely stony----------	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1147475					
Colonie----------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.36
		Thickest layer	0.00	Bottom layer	0.81

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
1147478					
Delaware, rarely flooded	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1147482					
Fredon, very stony	50	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
Halsey, very stony	40	Fair		Good	
		Thickest layer	0.00	Thickest layer	0.07
		Bottom layer	0.07		
1147485					
Hazen, very stony	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.26
		Bottom layer	0.12	Bottom layer	0.60
Hoosic, very stony	35	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
1147490					
Hoosic, very stony	60	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
Hazen, very stony	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.26
		Bottom layer	0.12	Bottom layer	0.60
1147491					
Hoosic, very stony	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.01
		Bottom layer	0.00	Bottom layer	0.20
Otisville, very stony	40	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.19
		Thickest layer	0.00		
1147492					
Lackawanna, extremely stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1147500					
Wurtsboro, extremely stony	90	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
1147501					
Wurtsboro, extremely stony	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source: Rating class	Gravel source: Value	Sand source: Rating class	Sand source: Value
1147501					
Swartswood, extremely stony	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
1147502					
Wurtsboro, extremely stony	60	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
Swartswood, extremely stony	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
1147527					
Udorthents	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
Urban land	40	Not rated		Not rated	
1147532					
Udorthents	100	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
1147533					
Wurtsboro, extremely stony	80	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.05
		Bottom layer	0.00	Thickest layer	0.05
Swartswood, extremely stony	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
1948749					
Arnot	90	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
1948750					
Arnot	90	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
1948751					
Arnot	90	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
1948774					
Conotton	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.13

Table 11.--Source of Gravel and Sand--Continued

Map unit symbol and soil name	Pct. of map unit	Gravel source		Sand source	
		Rating class	Value	Rating class	Value
1948775					
Conotton	95	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.13
1948776					
Conotton	95	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.13
1948777					
Conotton	95	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.13
1948797					
Manlius	90	Fair		Poor	
		Thickest layer	0.16	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
1948802					
Manlius	90	Fair		Poor	
		Thickest layer	0.16	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
1948818					
Manlius	90	Fair		Poor	
		Thickest layer	0.16	Bottom layer	0.00
		Bottom layer	0.31	Thickest layer	0.00
1948832					
Penargyl	90	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.38	Thickest layer	0.00
1948846					
Phelps	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.38	Bottom layer	0.58
1948855					
Udorthents, loamy	95	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
1948989					
Urban land	65	Not rated		Not rated	
Delaware	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.02

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
290836							
Hoosic, very stony--	50	Fair		Poor		Poor	
		Low content of organic matter	0.03	Slope	0.00	Slope	0.00
				Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58				
Otisville, very stony----------	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00			Too sandy	0.00
		Low content of organic matter	0.03			Rock fragments	0.00
296265							
Alden----------	100	Fair		Poor		Poor	
		Too acid	0.97	Wetness	0.00	Wetness	0.00
		Water erosion	0.99			Hard to reclaim (rock fragments)	0.92
		Low content of organic matter	0.99			Rock fragments	0.97
296269							
Fluvents, (alluvial land)----------	70	Fair		Fair		Fair	
		Low content of organic matter	0.05	Wetness	0.14	Wetness	0.14
						Rock fragments	0.50
		Too acid	0.68				
		Water erosion	0.90				
296271							
Alvira----------	55	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
						Rock fragments	0.00
		Too acid	0.50			Too acid	0.59
Watson----------	35	Fair		Fair		Fair	
		Low content of organic matter	0.04	Wetness	0.14	Wetness	0.14
				Shrink-swell	0.87	Rock fragments	0.50
		Too acid	0.50			Too acid	0.88
296272							
Bath----------	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Droughty	0.86			Wetness	0.60
296273							
Bath----------	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Droughty	0.86			Slope	0.37

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296274							
Bath	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Slope	0.50	Slope	0.00
		Too acid	0.54	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Droughty	0.86			Rock fragments	0.00
296275							
Bath	90	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Droughty	0.95			Wetness	0.60
296276							
Bath	90	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54	Slope	0.92	Rock fragments	0.00
		Droughty	0.95			Slope	0.00
296277							
Benson	55	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Cobbles	0.29	Rock fragments	0.00
		Low content of organic matter	0.05				
296278							
Benson	60	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Cobbles	0.29	Rock fragments	0.00
		Low content of organic matter	0.05	Slope	0.92	Slope	0.00
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.05	Cobbles	0.29	Rock fragments	0.00
Rock outcrop	25	Not rated		Not rated		Not rated	
296280							
Braceville	90	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.76	Rock fragments	0.12
		Too acid	0.54			Wetness	0.76
		Droughty	0.90			Hard to reclaim (rock fragments)	0.80
296281							
Braceville	90	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.76	Rock fragments	0.12
		Too acid	0.54			Wetness	0.76
		Droughty	0.90			Hard to reclaim (rock fragments)	0.80

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296283							
Buchanan	90	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.76	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.08
						Too acid	0.59
296288							
Chippewa	48	Fair		Poor		Poor	
		Droughty	0.18	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32			Rock fragments	0.00
		Too acid	0.68			Hard to reclaim (rock fragments)	0.50
Norwich	48	Fair		Poor		Poor	
		Low content of organic matter	0.32	Wetness	0.00	Wetness	0.00
		Droughty	0.34			Rock fragments	0.00
		Too acid	0.84			Hard to reclaim (rock fragments)	0.50
296289							
Chippewa	47	Fair		Poor		Poor	
		Droughty	0.10	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32			Rock fragments	0.00
		Too acid	0.68			Hard to reclaim (rock fragments)	0.24
Norwich	47	Fair		Poor		Poor	
		Droughty	0.26	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32	Cobbles	0.99	Rock fragments	0.00
		Too acid	0.84			Hard to reclaim (rock fragments)	0.50
296295							
Udorthents, cut and fill	90	Not rated		Not rated		Not rated	
296297							
Dekalb	100	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.53	Slope	0.00
		Low content of organic matter	0.50	Slope	0.92	Too acid	0.59
296298							
Dekalb	100	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.54	Cobbles	0.53	Too acid	0.59
296303							
Hazleton	100	Fair		Fair		Poor	
		Low content of organic matter	0.09	Cobbles	0.27	Hard to reclaim (rock fragments)	0.00
		Too acid	0.50	Slope	0.92		
		Cobbles	0.94	Depth to bedrock	0.99	Rock fragments	0.00
						Slope	0.00

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296304							
Holly	100	Fair		Poor		Poor	
		Low content of organic matter	0.50	Wetness	0.00	Wetness	0.00
		Too acid	0.97			Rock fragments	0.97
296311							
Lackawanna	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Wetness	0.62	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.32
Bath	30	Fair		Poor		Poor	
		Low content of organic matter	0.08	Slope	0.00	Slope	0.00
		Too acid	0.54	Wetness	0.60	Hard to reclaim (rock fragments)	0.00
		Droughty	0.95			Rock fragments	0.00
296312							
Lackawanna	80	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Wetness	0.62
296313							
Lackawanna	80	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Slope	0.37
296315							
Lackawanna	80	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Wetness	0.62
296316							
Lackawanna	80	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50	Slope	0.92	Slope	0.00
						Hard to reclaim (rock fragments)	0.32
296317							
Laidig	100	Poor		Fair		Poor	
		Low content of organic matter	0.00	Wetness	0.89	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
						Too acid	0.59
296326							
Lordstown	85	Fair		Poor		Poor	
		Stone content	0.08	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.27	Stones	0.08	Depth to bedrock	0.54
		Low content of organic matter	0.50	Cobbles	0.97		

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296327							
Lordstown	85	Fair		Poor		Poor	
		Stone content	0.08	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.27	Stones	0.08	Slope	0.00
		Low content of organic matter	0.50	Slope	0.92	Depth to bedrock	0.54
296328							
Lordstown	40	Fair		Poor		Poor	
		Droughty	0.18	Depth to bedrock	0.00	Slope	0.00
		Low content of organic matter	0.50	Slope	0.00	Rock fragments	0.00
		Too acid	0.54			Depth to bedrock	0.54
Oquaga	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.96	Depth to bedrock	0.54
296329							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.28			Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
296330							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.28			Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
296331							
Mardin	85	Fair		Fair		Poor	
		Droughty	0.20	Wetness	0.04	Rock fragments	0.00
		Too acid	0.32			Wetness	0.04
		Low content of organic matter	0.50			Hard to reclaim (rock fragments)	0.08
296332							
Mardin	87	Fair		Fair		Poor	
		Droughty	0.20	Wetness	0.04	Rock fragments	0.00
		Too acid	0.32	Slope	0.92	Slope	0.00
		Low content of organic matter	0.50			Wetness	0.04
296335							
Meckesville	100	Fair		Fair		Fair	
		Too acid	0.12	Wetness	0.99	Rock fragments	0.28
		Low content of organic matter	0.18			Slope	0.37
						Too acid	0.59
296337							
Meckesville	100	Fair		Fair		Poor	
		Too acid	0.12	Slope	0.92	Slope	0.00
		Low content of organic matter	0.12	Wetness	0.99	Rock fragments	0.28
						Too acid	0.59

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296338							
Morris	80	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
		Too acid	0.54			Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.50
296339							
Morris	75	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
		Too acid	0.54	Stones	0.96	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.50
296340							
Morris	80	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
		Too acid	0.54	Stones	0.96	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.50
296341							
Freetown, mucky peat	100	Fair		Poor		Not rated	
		Too acid	0.50	Wetness	0.00		
296342							
Paupack, mucky peat (shallow)	100	Fair		Poor		Not rated	
		Too acid	0.50	Wetness	0.00		
296343							
Oquaga	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.98	Depth to bedrock	0.54
		Low content of organic matter	0.50			Too acid	0.76
Lackawanna	35	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Wetness	0.62
296344							
Oquaga	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.98	Slope	0.37
		Low content of organic matter	0.50			Depth to bedrock	0.54
Lackawanna	30	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Slope	0.37

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296346							
Oquaga	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.96	Depth to bedrock	0.54
		Low content of organic matter	0.50			Too acid	0.76
Lackawanna	35	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.62	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
						Wetness	0.62
296347							
Oquaga	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.92	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.96	Depth to bedrock	0.54
Lackawanna	30	Fair		Fair		Poor	
		Low content of organic matter	0.02	Wetness	0.62	Rock fragments	0.00
				Slope	0.92	Slope	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
296348							
Philo	85	Fair		Fair		Fair	
		Too acid	0.54	Wetness	0.76	Wetness	0.76
		Water erosion	0.99			Hard to reclaim (rock fragments)	0.92
						Rock fragments	0.97
296349							
Pope	90	Fair		Good		Fair	
		Low content of organic matter	0.01			Too acid	0.59
		Too acid	0.50				
		Water erosion	0.99				
296350							
Pope	90	Fair		Good		Fair	
		Low content of organic matter	0.01			Too acid	0.59
		Too acid	0.50				
		Water erosion	0.99				
296351							
Rexford, somewhat poorly drained	40	Fair		Poor		Poor	
		Low content of organic matter	0.02	Wetness	0.00	Wetness	0.00
		Droughty	0.44			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.12
Rexford, poorly drained	35	Fair		Poor		Poor	
		Low content of organic matter	0.02	Wetness	0.00	Wetness	0.00
		Droughty	0.44			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.12

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296355							
Sheffield	100	Fair		Poor		Poor	
		Low content of organic matter	0.05	Wetness	0.00	Wetness	0.00
		Too acid	0.50	Low strength	0.22		
		Water erosion	0.99				
296363							
Dystrochrepts, very stony	85	Fair		Poor		Poor	
		Low content of organic matter	0.08	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.31	Slope	0.00	Hard to reclaim (rock fragments)	0.00
		Too acid	0.50	Cobbles	0.57	Rock fragments	0.00
296369							
Wayland	100	Fair		Poor		Poor	
		Low content of organic matter	0.46	Wetness	0.00	Wetness	0.00
		Water erosion	0.90	Low strength	0.00		
296376							
Wellsboro	80	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Too acid	0.32			Wetness	0.04
						Hard to reclaim (rock fragments)	0.82
296379							
Wellsboro	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Too acid	0.32	Slope	0.92	Slope	0.00
						Wetness	0.04
296385							
Wyoming	85	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.08			Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Too acid	0.76
296386							
Wyoming	85	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.08			Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Too acid	0.76
296387							
Wyoming	85	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.08			Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Slope	0.37
296388							
Wyoming	85	Fair		Fair		Poor	
		Droughty	0.01	Slope	0.50	Rock fragments	0.00
		Low content of organic matter	0.08			Slope	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.00

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
296389							
Wyoming	100	Fair		Poor		Poor	
		Droughty	0.02	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.05			Slope	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.00
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Stones	0.68	Hard to reclaim (rock fragments)	0.24
		Droughty	0.90			Rock fragments	0.28
Shohola	42	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.24
		Droughty	0.59			Rock fragments	0.28
297186							
Edgemere	75	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Stones	0.55	Hard to reclaim (rock fragments)	0.24
		Droughty	0.90			Rock fragments	0.28
297188							
Manlius	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.08	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.96	Depth to bedrock	0.54
Arnot	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Stone content	0.24	Stones	0.24	Slope	0.00
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.96	Depth to bedrock	0.54
Arnot	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Stone content	0.24	Stones	0.24	Slope	0.00
Rock outcrop	15	Not rated		Not rated		Not rated	

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
297190							
Braceville	82	Fair		Fair		Fair	
		Low content of organic matter	0.08	Wetness	0.29	Wetness	0.29
		Too acid	0.54			Too acid	0.98
297191							
Wyalusing	85	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
		Too acid	0.84	Cobbles	0.84	Hard to reclaim (rock fragments)	0.00
		Cobbles	0.99			Rock fragments	0.10
297192							
Pope	95	Fair		Good		Fair	
		Low content of organic matter	0.40			Too acid	0.59
		Too acid	0.50				
297193							
Paupack	90	Fair		Poor		Not rated	
		Too acid	0.50	Wetness	0.00		
297196							
Freetown	94	Fair		Poor		Not rated	
		Too acid	0.50	Wetness	0.00		
297197							
Manlius	90	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.97	Depth to bedrock	0.54
		Low content of organic matter	0.50			Too acid	0.76
297198							
Manlius	86	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.97	Slope	0.37
		Low content of organic matter	0.50			Depth to bedrock	0.54
297201							
Oquaga	75	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.08	Slope	0.00
		Depth to bedrock	0.71	Cobbles	0.76	Depth to bedrock	0.71
297203							
Delaware	93	Fair		Good		Good	
		Low content of organic matter	0.12				
		Too acid	0.97				
297204							
Delaware	82	Fair		Good		Good	
		Low content of organic matter	0.12				
		Too acid	0.97				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
297205							
Delaware	80	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.04
		Too acid	0.97				
297209							
Philo	85	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.76	Hard to reclaim (rock fragments)	0.68
		Too acid	0.54			Wetness	0.76
		Water erosion	0.99			Rock fragments	0.97
297210							
Barbour	85	Fair		Good		Fair	
		Low content of organic matter	0.02			Rock fragments	0.12
		Too acid	0.54			Hard to reclaim (rock fragments)	0.50
		Too sandy	0.98			Too acid	0.98
297216							
Wurtsboro	92	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.18	Rock fragments	0.03
		Too acid	0.50			Wetness	0.18
						Hard to reclaim (rock fragments)	0.50
297217							
Wurtsboro	88	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.18	Rock fragments	0.03
		Too acid	0.50			Wetness	0.18
						Slope	0.37
297227							
Arnot	88	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobbles	0.96	Depth to bedrock	0.00
		Too acid	0.50			Too acid	0.76
297228							
Arnot	85	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too acid	0.50	Cobbles	0.96	Slope	0.00
297229							
Wyoming	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobbles	0.01	Hard to reclaim (rock fragments)	0.00
		Droughty	0.20			Rock fragments	0.00
		Cobbles	0.27			Too acid	0.76
297230							
Wyoming	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobbles	0.84	Hard to reclaim (rock fragments)	0.00
		Droughty	0.20			Rock fragments	0.00
		Too acid	0.50			Slope	0.37

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
297231							
Wyoming	90	Fair		Poor		Poor	
		Low content of organic matter	0.12	Cobbles	0.00	Hard to reclaim (rock fragments)	0.00
		Cobbles	0.16	Slope	0.08	Rock fragments	0.00
		Droughty	0.20			Slope	0.00
297236							
Suncook	91	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Rock fragments	0.50
		Low content of organic matter	0.05				
297237							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.24			Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
297238							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.24			Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
297239							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.24	Stones	0.83	Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
297240							
Mardin	85	Fair		Fair		Poor	
		Low content of organic matter	0.08	Wetness	0.04	Rock fragments	0.00
		Droughty	0.24	Stones	0.83	Wetness	0.04
		Too acid	0.39			Hard to reclaim (rock fragments)	0.08
297241							
Unadilla	90	Fair		Good		Fair	
		Water erosion	0.06			Too acid	0.98
		Low content of organic matter	0.50				
		Too acid	0.54				
297242							
Shohola	62	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.24
		Droughty	0.59			Rock fragments	0.28
Edgemere	29	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Stones	0.68	Hard to reclaim (rock fragments)	0.24
		Droughty	0.90			Rock fragments	0.28

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
297243							
Shohola	62	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.24
		Droughty	0.59			Rock fragments	0.28
Edgemere	29	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.50	Stones	0.68	Hard to reclaim (rock fragments)	0.24
		Droughty	0.90			Rock fragments	0.28
297244							
Lordstown	40	Fair		Poor		Poor	
		Droughty	0.19	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.50			Depth to bedrock	0.54
		Too acid	0.54			Too acid	0.98
Swartswood	35	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.89	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.18
						Too acid	0.59
297247							
Chenango	86	Fair		Good		Poor	
		Low content of organic matter	0.50			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Droughty	0.57			Too acid	0.98
297248							
Chenango	85	Fair		Good		Poor	
		Low content of organic matter	0.50			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Droughty	0.57			Slope	0.37
297249							
Chenango	90	Fair		Fair		Poor	
		Low content of organic matter	0.50	Slope	0.50	Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Slope	0.00
		Droughty	0.57			Rock fragments	0.00
297253							
Craigsville	50	Poor		Poor		Poor	
		Cobbles	0.00	Cobbles	0.00	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.50			Too acid	0.88
Wyoming	40	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.20			Hard to reclaim (rock fragments)	0.00
		Too acid	0.50			Too acid	0.76

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
297254							
Pits, shale---------	40	Not rated		Not rated		Not rated	
Pits, gravel--------	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony----	90	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
						Rock fragments	0.76
		Too acid	0.50			Too acid	0.76
298050							
Wurtsboro, extremely stony----	60	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
						Rock fragments	0.76
		Too acid	0.50			Too acid	0.76
Swartswood, extremely stony----	40	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.80
		Too acid	0.50				
		Droughty	0.97			Too acid	0.88
298051							
Wurtsboro, extremely stony----	60	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
						Slope	0.37
		Too acid	0.50			Rock fragments	0.76
Swartswood, extremely stony----	40	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Slope	0.37
		Too acid	0.50			Hard to reclaim (rock fragments)	0.80
		Droughty	0.97				
298075							
Colonie----------	80	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Low content of organic matter	0.08				
298188							
Lackawanna, extremely stony----	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
298189 Lackawanna, extremely stony	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65			Slope	0.37
298221 Swartswood, extremely stony	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.80
		Droughty	0.97			Too acid	0.88
298222 Swartswood, extremely stony	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.50			Slope	0.37
		Droughty	0.97			Hard to reclaim (rock fragments)	0.80
298223 Swartswood, extremely stony	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.00
		Droughty	0.97			Hard to reclaim (rock fragments)	0.80
298255 Delaware, rarely flooded	80	Fair		Good		Fair	
		Low content of organic matter	0.03			Too acid	0.98
		Too acid	0.54				
298256 Delaware, rarely flooded	80	Fair		Good		Fair	
		Low content of organic matter	0.03			Too acid	0.98
		Too acid	0.54				
298257 Wallpack	85	Fair		Good		Poor	
		Low content of organic matter	0.02			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Water erosion	0.90			Slope	0.37
298258 Wallpack	85	Fair		Fair		Poor	
		Low content of organic matter	0.02	Slope	0.50	Slope	0.00
		Too acid	0.54			Hard to reclaim (rock fragments)	0.00
		Water erosion	0.90			Rock fragments	0.00

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
298259 Wallpack, extremely stony	85	Fair		Good		Fair	
		Low content of organic matter	0.02			Rock fragments	0.50
		Too acid	0.54				
298260 Wallpack, extremely stony	85	Fair		Good		Fair	
		Low content of organic matter	0.02			Slope	0.37
		Too acid	0.54			Rock fragments	0.50
298261 Wallpack	85	Fair		Good		Poor	
		Low content of organic matter	0.02			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Water erosion	0.90				
298262 Wallpack, extremely stony	85	Fair		Poor		Poor	
		Low content of organic matter	0.02	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.50
							0.50
298265 Venango, extremely stony	90	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
				Low strength	0.00	Too clayey	0.49
		Too acid	0.50			Rock fragments	0.50
		Water erosion	0.68				
298266 Venango, extremely stony	85	Fair		Poor		Poor	
		Low content of organic matter	0.08	Wetness	0.00	Wetness	0.00
				Low strength	0.00	Slope	0.37
		Too acid	0.50			Too clayey	0.49
		Too clayey	0.83				
298409 Swartswood, extremely stony	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.80
		Too acid	0.50				
		Droughty	0.97			Too acid	0.88
298411 Swartswood, extremely stony	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Slope	0.37
		Too acid	0.50			Hard to reclaim (rock fragments)	0.80
		Droughty	0.97				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
298413							
Swartswood, extremely stony----	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.00
		Droughty	0.97			Hard to reclaim (rock fragments)	0.80
318498							
Hazen, very stony---	60	Poor		Poor		Poor	
		Stone content	0.00	Stones	0.00	Hard to reclaim (rock fragments)	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.03			Rock fragments	0.92
Hoosic, very stony--	35	Fair		Fair		Poor	
		Low content of organic matter	0.03	Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Too acid	0.88
318533							
Hazen, very stony---	50	Poor		Poor		Poor	
		Stone content	0.00	Stones	0.00	Hard to reclaim (rock fragments)	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.03			Rock fragments	0.92
Hoosic, very stony--	40	Fair		Fair		Poor	
		Low content of organic matter	0.03	Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Too acid	0.88
319783							
Catden----------	85	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
						High content of organic matter	0.00
319784							
Fredon, very stony--	50	Fair		Fair		Poor	
		Too sandy	0.02	Wetness	0.02	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.03			Rock fragments	0.00
		Too acid	0.74			Wetness	0.02
Halsey, very stony--	40	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.12			Too sandy	0.00
		Too acid	0.46			Hard to reclaim (rock fragments)	0.00
543222							
Andover, extremely stony----------	55	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.32			Rock fragments	0.03
						Hard to reclaim (rock fragments)	0.68

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
543222							
Buchanan, extremely stony	40	Fair		Fair		Poor	
		Too acid	0.12	Wetness	0.29	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim (rock fragments)	0.08
						Wetness	0.29
543243							
Berks	65	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50			Depth to bedrock	0.79
Weikert	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too acid	0.54			Slope	0.00
543246							
Buchanan	75	Fair		Fair		Poor	
		Low content of organic matter	0.01	Wetness	0.29	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.12
						Wetness	0.29
543247							
Buchanan, extremely stony	80	Fair		Fair		Poor	
		Low content of organic matter	0.01	Wetness	0.29	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.12
						Wetness	0.29
543257							
Chippewa	90	Fair		Poor		Poor	
		Droughty	0.25	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32			Rock fragments	0.00
		Too acid	0.68			Hard to reclaim (rock fragments)	0.50
543258							
Chippewa	90	Fair		Poor		Poor	
		Droughty	0.25	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32			Rock fragments	0.00
		Too acid	0.68			Hard to reclaim (rock fragments)	0.50
543259							
Chippewa, extremely stony	90	Fair		Poor		Poor	
		Droughty	0.10	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.32			Rock fragments	0.00
		Too acid	0.68			Hard to reclaim (rock fragments)	0.24

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
543271							
Delaware	90	Fair		Good		Good	
		Low content of organic matter	0.12				
		Too acid	0.97				
543276							
Fluvaquents	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness	0.00	Wetness	0.00
		Too acid	0.61			Too clayey	0.00
						Rock fragments	0.88
543292							
Hazleton, extremely stony	90	Fair		Fair		Poor	
		Too acid	0.12	Cobbles	0.39	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.12	Depth to bedrock	0.92		
				Slope	0.92	Rock fragments	0.00
		Cobbles	0.96			Slope	0.00
543293							
Hazleton, extremely stony	90	Fair		Poor		Poor	
		Too acid	0.12	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Cobbles	0.39	Hard to reclaim (rock fragments)	0.00
		Cobbles	0.94			Rock fragments	0.00
543299							
Laidig, extremely stony	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.50
		Too acid	0.50				
		Droughty	0.99			Too acid	0.59
543300							
Laidig, extremely stony	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.92	Rock fragments	0.00
						Slope	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
		Droughty	0.99				
543304							
Laidig	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
						Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
		Droughty	0.99				
Rubble land	40	Not rated		Not rated		Not rated	
543318							
Rubble land	75	Poor		Poor		Poor	
		Stone content	0.00	Cobbles	0.00	Hard to reclaim (dense layer)	0.00
		Cobbles	0.00	Stones	0.00		
		Low content of organic matter	0.01	Slope	0.00	Hard to reclaim (rock fragments)	0.00
			0.01				
						Rock fragments	0.00

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
543327							
Swartswood----------	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.99	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.18
		Droughty	0.50			Too acid	0.59
543328							
Swartswood----------	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.99	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.18
		Droughty	0.50			Slope	0.37
543330							
Swartswood, extremely stony----	50	Fair		Fair		Poor	
		Too acid	0.50	Wetness	0.99	Rock fragments	0.00
		Droughty	0.50			Hard to reclaim (rock fragments)	0.18
		Low content of organic matter	0.50			Too acid	0.59
Wurtsboro, extremely stony----	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.53	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
						Wetness	0.53
543331							
Swartswood, extremely stony----	50	Fair		Fair		Poor	
		Too acid	0.50	Slope	0.92	Rock fragments	0.00
		Droughty	0.50	Wetness	0.99	Slope	0.00
		Low content of organic matter	0.50			Hard to reclaim (rock fragments)	0.18
Wurtsboro, extremely stony----	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.53	Rock fragments	0.00
				Slope	0.92	Slope	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
543359							
Volusia----------	85	Fair		Poor		Poor	
		Droughty	0.01	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.08			Hard to reclaim (rock fragments)	0.24
		Too acid	0.68			Rock fragments	0.28
543360							
Volusia, extremely stony----------	85	Fair		Poor		Poor	
		Droughty	0.03	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.08			Hard to reclaim (rock fragments)	0.24
		Too acid	0.68			Rock fragments	0.28

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
543374							
Wurtsboro	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.53	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.50
						Wetness	0.53
543375							
Wurtsboro	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.53	Rock fragments	0.00
		Too acid	0.50			Slope	0.37
						Hard to reclaim (rock fragments)	0.50
612280							
Scio	80	Fair		Fair		Fair	
		Low content of organic matter	0.08	Wetness	0.32	Wetness	0.32
		Water erosion	0.37				
		Too acid	0.74				
612666							
Colonie	80	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Low content of organic matter	0.08				
612668							
Hoosic, very stony	60	Fair		Fair		Poor	
		Low content of organic matter	0.03	Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Slope	0.37
Hazen, very stony	30	Poor		Poor		Poor	
		Stone content	0.00	Stones	0.00	Hard to reclaim (rock fragments)	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.03			Slope	0.37
612724							
Lordstown, very rocky	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.00	Rock fragments	0.00
		Droughty	0.59			Depth to bedrock	0.93
Wallpack, very rocky	40	Fair		Poor		Poor	
		Low content of organic matter	0.02	Slope	0.00	Slope	0.00
		Too acid	0.54			Rock fragments	0.50
612732							
Atherton, very poorly drained	60	Fair		Poor		Poor	
		Too acid	0.88	Wetness	0.00	Wetness	0.00
		Water erosion	0.99	Low strength	0.00		

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
612732 Atherton, poorly drained	30	Fair		Poor		Poor	
		Low content of organic matter	0.50	Wetness	0.00	Wetness	0.00
		Water erosion	0.68	Low strength	0.00		
		Too acid	0.97				
612738 Fluvaquents, occasionally flooded	90	Fair		Poor		Poor	
		Low content of organic matter	0.12	Wetness	0.00	Wetness	0.00
		Too acid	0.84				
		Water erosion	0.90				
612753 Wallpack, aeolian mantle, very stony	85	Fair		Good		Fair	
		Low content of organic matter	0.03			Slope	0.37
		Too acid	0.50			Rock fragments	0.76
						Hard to reclaim (rock fragments)	0.97
612756 Wallpack, aeolian mantle, very stony	85	Fair		Good		Fair	
		Low content of organic matter	0.03			Rock fragments	0.76
		Too acid	0.50			Hard to reclaim (rock fragments)	0.97
						Too acid	0.98
612757 Wallpack, aeolian mantle, very stony	85	Fair		Poor		Poor	
		Low content of organic matter	0.03	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.76
						Hard to reclaim (rock fragments)	0.97
612767 Wellsboro, extremely stony	85	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.53	Hard to reclaim (rock fragments)	0.12
		Too acid	0.50	Cobbles	0.92	Rock fragments	0.18
		Water erosion	0.99			Slope	0.37
612768 Wellsboro, extremely stony	85	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.53	Hard to reclaim (rock fragments)	0.12
		Too acid	0.50	Cobbles	0.92	Rock fragments	0.18
		Water erosion	0.99			Wetness	0.53

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
613393							
Alden, extremely stony	90	Fair		Poor		Poor	
		Low content of organic matter	0.02	Wetness	0.00	Wetness	0.00
		Too acid	0.32	Low strength	0.00	Too clayey	0.57
		Too clayey	0.83				
613447							
Unadilla	85	Fair		Good		Good	
		Water erosion	0.06				
		Low content of organic matter	0.08				
613448							
Unadilla	85	Fair		Good		Good	
		Water erosion	0.06				
		Low content of organic matter	0.08				
614075							
Wurtsboro, extremely stony	80	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50	Wetness	0.14	Wetness	0.14
						Rock fragments	0.76
Swartswood, extremely stony	20	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
						Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.80
		Droughty	0.97				
620179							
Arnot, very rocky	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Too acid	0.88
Lordstown, very rocky	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
						Depth to bedrock	0.93
		Too acid	0.50			Too acid	0.95
		Droughty	0.59				
620180							
Arnot	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
Lordstown	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
				Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.93
		Droughty	0.59				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
620180							
Rock outcrop--------	15	Not rated		Not rated		Not rated	
620181							
Arnot----------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
Lordstown----------	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
				Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.93
		Droughty	0.59				0
Rock outcrop--------	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony----------	80	Fair		Poor		Poor	
		Droughty	0.04	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.08				
		Too acid	0.50				
623109							
Farmington----------	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00				
		Water erosion	0.06				
Rock outcrop--------	40	Not rated		Not rated		Not rated	
624811							
Galway, very rocky--	80	Fair		Poor		Poor	
		Depth to bedrock	0.10	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.17	Slope	0.00	Rock fragments	0.04
		Low content of organic matter	0.50			Depth to bedrock	0.10
624813							
Lackawanna, extremely stony----	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
						Hard to reclaim (rock fragments)	0.32
		Too acid	0.50				
		Stone content	0.65			Too acid	0.98
624816							
Lordstown, very rocky----------	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
						Slope	0.37
		Too acid	0.50			Depth to bedrock	0.93
		Droughty	0.59				
Wallpack, very rocky	35	Fair		Good		Fair	
		Low content of organic matter	0.02			Slope	0.37
						Rock fragments	0.50
		Too acid	0.54				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
624822							
Lordstown	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.50	Rock fragments	0.00
		Droughty	0.59			Depth to bedrock	0.93
Wallpack	35	Fair		Fair		Poor	
		Low content of organic matter	0.02	Slope	0.50	Slope	0.00
		Too acid	0.54			Hard to reclaim (rock fragments)	0.00
		Water erosion	0.90			Rock fragments	0.00
624823							
Lordstown	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Slope	0.37
		Droughty	0.59			Depth to bedrock	0.93
Wallpack	35	Fair		Good		Poor	
		Low content of organic matter	0.02			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Water erosion	0.90			Slope	0.37
624824							
Lordstown	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.93
		Droughty	0.59			Too acid	0.95
Wallpack	35	Fair		Good		Poor	
		Low content of organic matter	0.02			Hard to reclaim (rock fragments)	0.00
		Too acid	0.54			Rock fragments	0.00
		Water erosion	0.90				
624826							
Manlius, very rocky	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.29	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Cobbles	0.00	Depth to bedrock	0.29
Nassau, very rocky	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.00	Rock fragments	0.00
624827							
Nassau, very rocky	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobbles	0.05	Rock fragments	0.00
		Cobbles	0.85				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
624827							
Manlius, very rocky-	44	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.46	Cobbles	0.00	Depth to bedrock	0.46
		Low content of organic matter	0.50				
624828							
Nassau, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobbles	0.05	Rock fragments	0.00
		Cobbles	0.85			Slope	0.37
Manlius, very rocky-	44	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.46	Cobbles	0.00	Slope	0.37
		Low content of organic matter	0.50			Depth to bedrock	0.46
624829							
Nassau, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Cobbles	0.85	Cobbles	0.05	Rock fragments	0.00
Manlius, very rocky-	44	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.46	Cobbles	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Slope	0.00	Depth to bedrock	0.46
624832							
Nassau----------	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.00	Rock fragments	0.00
Rock outcrop--------	45	Not rated		Not rated		Not rated	
624841							
Oquaga----------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.16	Slope	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.35	Depth to bedrock	0.16
Rock outcrop--------	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop--------	45	Not rated		Not rated		Not rated	
Farmington----------	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Water erosion	0.06				
Galway----------	20	Fair		Poor		Poor	
		Depth to bedrock	0.10	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.17	Slope	0.00	Rock fragments	0.04
		Low content of organic matter	0.50			Depth to bedrock	0.10

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
624846							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
Rubble land---------	20	Not rated		Poor		Not rated	
				Slope	0.00		
				Cobbles	0.00		
				Stones	0.00		
626816							
Udifluvents, occasionally flooded----------	90	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.04
		Droughty	0.02				
		Too sandy	0.04				
635458							
Oquaga, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.16	Cobbles	0.35	Depth to bedrock	0.16
		Too acid	0.50			Slope	0.37
Lackawanna, very rocky----------	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65			Slope	0.37
635459							
Oquaga, very rocky--	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.16	Slope	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.35	Depth to bedrock	0.16
Lackawanna, very rocky----------	35	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65				
740953							
Delaware, rarely flooded----------	80	Fair		Good		Fair	
		Low content of organic matter	0.03			Too acid	0.98
		Too acid	0.54				
740968							
Nassau, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobbles	0.05	Rock fragments	0.00
		Cobbles	0.85			Slope	0.37

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
740968							
Manlius, very rocky-	44	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.46	Cobbles	0.00	Slope	0.37
		Low content of organic matter	0.50			Depth to bedrock	0.46
740969							
Nassau, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Cobbles	0.85	Cobbles	0.05	Rock fragments	0.00
Manlius, very rocky-	44	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.46	Cobbles	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Slope	0.00	Depth to bedrock	0.46
740971							
Oquaga, very rocky--	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.16	Cobbles	0.35	Depth to bedrock	0.16
		Too acid	0.50			Slope	0.37
Lackawanna, very rocky----------	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65			Slope	0.37
740972							
Oquaga, very rocky--	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.16	Slope	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.35	Depth to bedrock	0.16
Lackawanna, very rocky----------	35	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65				
740974							
Oquaga----------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.16	Slope	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.35	Depth to bedrock	0.16
Rock outcrop--------	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
740975							
Rubble land	20	Not rated		Poor		Not rated	
				Slope	0.00		
				Cobbles	0.00		
				Stones	0.00		
740987							
Scio	80	Fair		Fair		Fair	
		Low content of organic matter	0.08	Wetness	0.32	Wetness	0.32
		Water erosion	0.37				
		Too acid	0.74				
740988							
Udifluvents, occasionally flooded	90	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.04
		Droughty	0.02				
		Too sandy	0.04				
740991							
Unadilla	85	Fair		Good		Good	
		Water erosion	0.06				
		Low content of organic matter	0.08				
740992							
Unadilla	85	Fair		Good		Good	
		Water erosion	0.06				
		Low content of organic matter	0.08				
740995							
Wellsboro, extremely stony	85	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.53	Hard to reclaim (rock fragments)	0.12
		Too acid	0.50	Cobbles	0.92	Rock fragments	0.18
		Water erosion	0.99			Wetness	0.53
740996							
Wellsboro, extremely stony	85	Fair		Fair		Fair	
		Low content of organic matter	0.02	Wetness	0.53	Hard to reclaim (rock fragments)	0.12
		Too acid	0.50	Cobbles	0.92	Rock fragments	0.18
		Water erosion	0.99			Slope	0.37
741149							
Lackawanna, extremely stony	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65			Slope	0.37

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
741150							
Lackawanna, extremely stony----	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65				
801114							
Oquaga----------	75	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.16	Cobbles	0.35	Depth to bedrock	0.16
		Too acid	0.50			Too acid	0.76
Rock outcrop--------	15	Not rated		Not rated		Not rated	
810906							
Oquaga----------	75	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.16	Cobbles	0.35	Depth to bedrock	0.16
		Too acid	0.50			Too acid	0.76
Rock outcrop--------	15	Not rated		Not rated		Not rated	
1147465							
Alden, extremely stony----------	90	Fair		Poor		Poor	
		Low content of organic matter	0.02	Wetness	0.00	Wetness	0.00
				Low strength	0.00	Too clayey	0.57
		Too acid	0.32				
		Too clayey	0.83				
1147467							
Arnot, very rocky---	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Too acid	0.88
Lordstown, very rocky----------	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.00
						Depth to bedrock	0.93
		Too acid	0.50			Too acid	0.95
		Droughty	0.59				
1147468							
Arnot----------	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
Lordstown----------	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
				Slope	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.93
		Droughty	0.59				
Rock outcrop--------	15	Not rated		Not rated		Not rated	

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
1147469							
Arnot	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
Lordstown	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
		Too acid	0.50	Slope	0.00	Rock fragments	0.00
		Droughty	0.59			Depth to bedrock	0.93
Rock outcrop	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained	60	Fair		Poor		Poor	
		Too acid	0.88	Wetness	0.00	Wetness	0.00
		Water erosion	0.99	Low strength	0.00		
Atherton, poorly drained	30	Fair		Poor		Poor	
		Low content of organic matter	0.50	Wetness	0.00	Wetness	0.00
		Water erosion	0.68	Low strength	0.00		
		Too acid	0.97				
1147471							
Catden	85	Fair		Poor		Poor	
		Too acid	0.50	Wetness	0.00	Wetness	0.00
						High content of organic matter	0.00
1147474							
Chippewa, extremely stony	80	Fair		Poor		Poor	
		Droughty	0.04	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.08				
		Too acid	0.50				
1147475							
Colonie	80	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Too acid	0.98
		Low content of organic matter	0.08				
1147478							
Delaware, rarely flooded	80	Fair		Good		Fair	
		Low content of organic matter	0.03			Too acid	0.98
		Too acid	0.54				

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
1147482							
Fredon, very stony--	50	Fair		Fair		Poor	
		Too sandy	0.02	Wetness	0.02	Hard to reclaim (rock fragments)	0.00
		Low content of organic matter	0.03			Rock fragments	0.00
		Too acid	0.74			Wetness	0.02
Halsey, very stony--	40	Poor		Poor		Poor	
		Too sandy	0.00	Wetness	0.00	Wetness	0.00
		Low content of organic matter	0.12			Too sandy	0.00
		Too acid	0.46			Hard to reclaim (rock fragments)	0.00
1147485							
Hazen, very stony---	60	Poor		Poor		Poor	
		Stone content	0.00	Stones	0.00	Hard to reclaim (rock fragments)	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.03			Rock fragments	0.92
Hoosic, very stony--	35	Fair		Fair		Poor	
		Low content of organic matter	0.03	Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Too acid	0.88
1147490							
Hoosic, very stony--	60	Fair		Fair		Poor	
		Low content of organic matter	0.03	Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58			Slope	0.37
Hazen, very stony---	30	Poor		Poor		Poor	
		Stone content	0.00	Stones	0.00	Hard to reclaim (rock fragments)	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.03			Slope	0.37
1147491							
Hoosic, very stony--	50	Fair		Poor		Poor	
		Low content of organic matter	0.03	Slope	0.00	Slope	0.00
				Cobbles	0.97	Rock fragments	0.00
		Too acid	0.32			Hard to reclaim (rock fragments)	0.00
		Droughty	0.58				
Otisville, very stony----------	40	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00			Too sandy	0.00
		Low content of organic matter	0.03			Rock fragments	0.00
1147492							
Lackawanna, extremely stony----	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Stones	0.78	Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.32
		Stone content	0.65			Too acid	0.98

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
1147500							
Wurtsboro, extremely stony	90	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
		Too acid	0.50			Rock fragments	0.76
						Too acid	0.76
1147501							
Wurtsboro, extremely stony	60	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
		Too acid	0.50			Rock fragments	0.76
						Too acid	0.76
Swartswood, extremely stony	40	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.50			Hard to reclaim (rock fragments)	0.80
		Droughty	0.97			Too acid	0.88
1147502							
Wurtsboro, extremely stony	60	Fair		Fair		Fair	
		Low content of organic matter	0.12	Wetness	0.14	Wetness	0.14
		Too acid	0.50			Slope	0.37
						Rock fragments	0.76
Swartswood, extremely stony	40	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too acid	0.50			Slope	0.37
		Droughty	0.97			Hard to reclaim (rock fragments)	0.80
1147527							
Udorthents	60	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.68				
		Low content of organic matter	0.88				
Urban land	40	Not rated		Not rated		Not rated	
1147532							
Udorthents	100	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too acid	0.68				
		Low content of organic matter	0.88				
1147533							
Wurtsboro, extremely stony	80	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Wetness	0.14	Wetness	0.14
		Too acid	0.50			Rock fragments	0.76

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
1147533 Swartswood, extremely stony	20	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.50			Rock fragments	0.00
		Droughty	0.97			Hard to reclaim (rock fragments)	0.80
1948749 Arnot	90	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Too acid	0.50			Too acid	0.76
1948750 Arnot	90	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Too acid	0.50			Slope	0.37
1948751 Arnot	90	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.50	Depth to bedrock	0.00
		Too acid	0.50			Slope	0.00
1948774 Conotton	90	Fair		Good		Poor	
		Too acid	0.68			Rock fragments	0.00
		Low content of organic matter	0.88			Hard to reclaim (rock fragments)	0.00
		Droughty	0.93				
1948775 Conotton	95	Fair		Good		Poor	
		Too acid	0.68			Rock fragments	0.00
		Low content of organic matter	0.88			Hard to reclaim (rock fragments)	0.00
		Droughty	0.93			Slope	0.37
1948776 Conotton	95	Fair		Fair		Poor	
		Too acid	0.68	Slope	0.50	Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.00
		Droughty	0.93			Hard to reclaim (rock fragments)	0.00
1948777 Conotton	95	Fair		Poor		Poor	
		Too acid	0.68	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.00
		Droughty	0.93			Hard to reclaim (rock fragments)	0.00
1948797 Manlius	90	Fair		Poor		Poor	
		Droughty	0.01	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.97	Depth to bedrock	0.71
		Low content of organic matter	0.50			Too acid	0.76

Table 12.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map unit symbol and soil name	Pct. of map unit	Source of reclamation material: Rating class and limiting features	Value	Roadfill source: Rating class and limiting features	Value	Topsoil source: Rating class and limiting features	Value
1948802							
Manlius	90	Fair		Poor		Poor	
		Droughty	0.01	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Cobbles	0.97	Slope	0.37
		Low content of organic matter	0.50			Depth to bedrock	0.71
1948818							
Manlius	90	Fair		Poor		Poor	
		Droughty	0.01	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Slope	0.50	Slope	0.00
		Low content of organic matter	0.50	Cobbles	0.97	Depth to bedrock	0.71
1948832							
Penargyl	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.28
		Too acid	0.68				
1948846							
Phelps	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Wetness	0.32	Hard to reclaim (rock fragments)	0.00
		Droughty	0.98			Wetness	0.32
		Water erosion	0.99			Rock fragments	0.90
1948855							
Udorthents, loamy	95	Fair		Fair		Fair	
		Too acid	0.88	Wetness	0.29	Wetness	0.29
		Water erosion	0.99			Rock fragments	0.97
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Fair		Good		Good	
		Low content of organic matter	0.12				
		Too acid	0.97				

Table 13.--Ponds and Embankments

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table]

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
290836							
Hoosic, very stony--	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
Otisville, very stony----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
296265							
Alden----------	100	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Ponding	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	1.00		
						Slow refill	0.28
				Piping	1.00		
296269							
Fluvents, (alluvial land)----------	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
				Piping	1.00		
296271							
Alvira----------	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
				Piping	1.00		
Watson----------	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
				Piping	0.98		
296272							
Bath----------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.68				
296273							
Bath----------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296274							
Bath----------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296275							
Bath----------	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.68				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296276							
Bath	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296277							
Benson	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.08	Piping	1.00		
				Large stones	0.02		
296278							
Benson	60	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Piping	1.00		
				Large stones	0.02		
Rock outcrop	20	Not rated		Not rated		Not rated	
296279							
Benson	60	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Piping	1.00		
				Large stones	0.02		
Rock outcrop	25	Not rated		Not rated		Not rated	
296280							
Braceville	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.95	Depth to water	1.00
296281							
Braceville	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.95	Depth to water	1.00
		Slope	0.68				
296283							
Buchanan	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.95	Unstable excavation walls	1.00
		Slope	0.32			Slow refill	1.00
						Depth to saturated zone	0.02
296288							
Chippewa	48	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Depth to water	1.00
				Piping	1.00		
Norwich	48	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Depth to water	1.00
296289							
Chippewa	47	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296289							
Norwich	47	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00
296295							
Udorthents, cut and fill	90	Not rated		Not rated		Not rated	
296297							
Dekalb	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.81	Depth to water	1.00
		Slope	1.00	Large stones	0.03		
		Depth to bedrock	0.81				
296298							
Dekalb	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.81	Depth to water	1.00
		Slope	1.00	Large stones	0.03		
		Depth to bedrock	0.81				
296303							
Hazleton	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones	0.07	Depth to water	1.00
		Slope	1.00				
296304							
Holly	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
				Piping	1.00		
296311							
Lackawanna	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
Bath	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296312							
Lackawanna	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.68				
296313							
Lackawanna	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296315							
Lackawanna	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.68				
296316							
Lackawanna	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296317							
Laidig	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.86	Depth to water	1.00
		Slope	0.08				
296326							
Lordstown	85	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.86	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.86		
		Slope	0.68	Large stones	0.10		
296327							
Lordstown	85	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.86	Thin layer	0.86		
		Seepage	0.72	Large stones	0.10		
296328							
Lordstown	40	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.86	Thin layer	0.86		
		Seepage	0.72				
Oquaga	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86				
		Seepage	0.72				
296329							
Mardin	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
296330							
Mardin	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
296331							
Mardin	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
296332							
Mardin	87	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
296335							
Meckesville	100	Very limited		Very limited		Somewhat limited	
		Slope	1.00	Piping	1.00	Slow refill	0.28
		Seepage	0.72	Depth to saturated zone	0.65	Depth to saturated zone	0.15
						Unstable excavation walls	0.10

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296337							
Meckesville	100	Very limited		Very limited		Somewhat limited	
		Slope	1.00	Piping	1.00	Slow refill	0.28
		Seepage	0.72	Depth to saturated zone	0.65	Depth to saturated zone	0.15
						Unstable excavation walls	0.10
296338							
Morris	80	Somewhat limited		Very limited		Very limited	
		Slope	0.68	Depth to saturated zone	1.00	Depth to water	1.00
296339							
Morris	75	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00
296340							
Morris	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
296341							
Freetown, mucky peat	100	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Unstable excavation walls	0.10
296342							
Paupack, mucky peat (shallow)	100	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	0.50
				Depth to saturated zone	1.00		
				Seepage	1.00		
296343							
Oquaga	50	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.86	Thin layer	0.86	Depth to water	1.00
		Seepage	0.72				
		Slope	0.68				
Lackawanna	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.68				
296344							
Oquaga	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86				
		Seepage	0.72				
Lackawanna	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296346							
Oquaga	50	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.86	Thin layer	0.86	Depth to water	1.00
		Seepage	0.72				
		Slope	0.08				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296346							
Lackawanna	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.99	Depth to water	1.00
		Slope	0.08				
296347							
Oquaga	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86				
		Seepage	0.72				
Lackawanna	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.99	Depth to water	1.00
		Seepage	0.72				
296348							
Philo	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	0.95	Depth to saturated zone	0.02
296349							
Pope	90	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
296350							
Pope	90	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
296351							
Rexford, somewhat poorly drained	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
Rexford, poorly drained	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
296355							
Sheffield	100	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Ponding	1.00	Slow refill	0.28
				Depth to saturated zone	1.00	Unstable excavation walls	0.10
				Piping	0.80		
296363							
Dystrochrepts, very stony	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.46	Depth to water	1.00
		Slope	1.00				
		Depth to bedrock	0.46				
296369							
Wayland	100	Not limited		Very limited		Very limited	
				Ponding	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	1.00	Slow refill	0.46
				Piping	1.00		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
296376							
Wellsboro	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
296379							
Wellsboro	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
296385							
Wyoming	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
296386							
Wyoming	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				
296387							
Wyoming	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
296388							
Wyoming	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
296389							
Wyoming	100	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
296390							
Water	100	Not rated		Not rated		Not rated	
297185							
Edgemere	42	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Ponding	1.00	Depth to water	1.00
		Slope	0.68	Depth to saturated zone	1.00		
Shohola	42	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
297186							
Edgemere	75	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Ponding	1.00	Depth to water	1.00
				Depth to saturated zone	1.00		
297188							
Manlius	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86	Seepage	0.07		
		Seepage	0.72				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
297188							
Arnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Large stones	0.10		
Rock outcrop	15	Not rated		Not rated		Not rated	
297189							
Manlius	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86	Seepage	0.07		
		Seepage	0.72				
Arnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Large stones	0.10		
Rock outcrop	15	Not rated		Not rated		Not rated	
297190							
Braceville	82	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
297191							
Wyalusing	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
				Seepage	0.13		
297192							
Pope	95	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
297193							
Paupack	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	0.50
				Depth to saturated zone	1.00		
				Seepage	1.00		
297196							
Freetown	94	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Unstable excavation walls	0.10
297197							
Manlius	90	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.86	Thin layer	0.86	Depth to water	1.00
		Seepage	0.72	Seepage	0.07		
		Slope	0.68				
297198							
Manlius	86	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.86	Seepage	0.07		
		Seepage	0.72				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
297201							
Oquaga	75	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.81	Depth to water	1.00
		Depth to bedrock	0.81	Large stones	0.02		
		Seepage	0.72				
297203							
Delaware	93	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
297204							
Delaware	82	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	0.68				
297205							
Delaware	80	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	1.00				
297209							
Philo	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	0.95	Depth to saturated zone	0.02
297210							
Barbour	85	Very limited		Not limited		Very limited	
		Seepage	1.00			Unstable excavation walls	1.00
						Depth to saturated zone	0.96
297216							
Wurtsboro	92	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
297217							
Wurtsboro	88	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
297227							
Arnot	88	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00				
297228							
Arnot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00				
297229							
Wyoming	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.32	Large stones	0.26		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
297230							
Wyoming	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
297231							
Wyoming	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00	Large stones	0.53		
297236							
Suncook	91	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
297237							
Mardin	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
297238							
Mardin	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
297239							
Mardin	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
297240							
Mardin	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
297241							
Unadilla	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
297242							
Shohola	62	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
Edgemere	29	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Ponding	1.00	Depth to water	1.00
		Slope	0.08	Depth to saturated zone	1.00		
297243							
Shohola	62	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
Edgemere	29	Very limited		Very limited		Very limited	
		Slope	1.00	Ponding	1.00	Depth to water	1.00
		Seepage	0.72	Depth to saturated zone	1.00		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
297244							
Lordstown	40	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.86	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.86		
		Slope	0.08				
Swartswood	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.86	Depth to water	1.00
		Slope	0.08				
297247							
Chenango	86	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.08				
297248							
Chenango	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
297249							
Chenango	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
297253							
Craigsville	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
				Large stones	0.99		
Wyoming	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.08				
297254							
Pits, shale	40	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
Pits, gravel	40	Not rated		Not rated		Not rated	
298049							
Wurtsboro, extremely stony	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
298050							
Wurtsboro, extremely stony	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
Swartswood, extremely stony	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.44	Depth to water	1.00
		Slope	0.08				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
298051							
Wurtsboro, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	1.00	Seepage	0.37		
Swartswood, extremely stony	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
298075							
Colonie	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				
298188							
Lackawanna, extremely stony	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
298189							
Lackawanna, extremely stony	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
298221							
Swartswood, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.44	Depth to water	1.00
		Slope	0.08				
298222							
Swartswood, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
298223							
Swartswood, extremely stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
298255							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.68				
298256							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
298257							
Wallpack	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
298258							
Wallpack	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
298259							
Wallpack, extremely stony	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.08	Piping	0.96	Depth to water	1.00
298260							
Wallpack, extremely stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.96	Depth to water	1.00
298261							
Wallpack	85	Somewhat limited		Not limited		Very limited	
		Slope	0.08			Depth to water	1.00
298262							
Wallpack, extremely stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.96	Depth to water	1.00
298265							
Venango, extremely stony	90	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00
298266							
Venango, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
298409							
Swartswood, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.44	Depth to water	1.00
		Slope	0.08				
298411							
Swartswood, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
298413							
Swartswood, extremely stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
318498							
Hazen, very stony	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				
Hoosic, very stony	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
318533							
Hazen, very stony	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
Hoosic, very stony	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
319783							
Catden	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Organic matter content	1.00	Unstable excavation walls	0.10
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Seepage	1.00		
				Hard to pack	1.00		
319784							
Fredon, very stony	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
				Seepage	1.00		
Halsey, very stony	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	1.00		
				Seepage	1.00		
543222							
Andover, extremely stony	55	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.02				
Buchanan, extremely stony	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
543243							
Berks	65	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00				
		Depth to bedrock	0.77				
Weikert	25	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
		Seepage	1.00				
543246							
Buchanan	75	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
543247							
Buchanan, extremely stony	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
543257							
Chippewa	90	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Depth to water	1.00
				Piping	1.00		
543258							
Chippewa	90	Somewhat limited		Very limited		Very limited	
		Slope	0.32	Depth to saturated zone	1.00	Depth to water	1.00
				Piping	1.00		
543259							
Chippewa, extremely stony	90	Somewhat limited		Very limited		Very limited	
		Slope	0.08	Depth to saturated zone	1.00	Depth to water	1.00
543271							
Delaware	90	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
543276							
Fluvaquents	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.02	Depth to saturated zone	1.00	Unstable excavation walls	0.10
543292							
Hazleton, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones	0.10	Depth to water	1.00
		Slope	1.00	Thin layer	0.02		
		Depth to bedrock	0.02				
543293							
Hazleton, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones	0.10	Depth to water	1.00
		Slope	1.00				
543299							
Laidig, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.24	Unstable excavation walls	1.00
		Slope	0.08			Slow refill	0.98
						Depth to saturated zone	0.38
543300							
Laidig, extremely stony	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.24	Unstable excavation walls	1.00
		Seepage	1.00			Slow refill	0.98
						Depth to saturated zone	0.38

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
543304							
Laidig	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.24	Unstable excavation walls	1.00
		Seepage	1.00			Slow refill	0.98
						Depth to saturated zone	0.38
Rubble land	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Large stones	1.00	Depth to water	1.00
		Slope	1.00	Seepage	1.00		
543318							
Rubble land	75	Very limited		Very limited		Very limited	
		Seepage	1.00	Large stones	1.00	Depth to water	1.00
		Slope	1.00	Seepage	1.00		
543327							
Swartswood	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.62	Depth to water	1.00
		Slope	0.68				
543328							
Swartswood	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.62	Depth to water	1.00
		Seepage	0.72				
543330							
Swartswood, extremely stony	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Depth to saturated zone	0.62	Depth to water	1.00
		Slope	0.08				
Wurtsboro, extremely stony	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
543331							
Swartswood, extremely stony	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.62	Depth to water	1.00
		Seepage	0.72				
Wurtsboro, extremely stony	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
543359							
Volusia	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.32	Depth to saturated zone	1.00	Slow refill	0.28
				Piping	1.00	Unstable excavation walls	0.10
543360							
Volusia, extremely stony	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.08	Depth to saturated zone	1.00	Slow refill	0.28
				Piping	1.00	Unstable excavation walls	0.10

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
543374							
Wurtsboro	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.68				
543375							
Wurtsboro	90	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.72				
612280							
Scio	80	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
				Piping	1.00	Unstable excavation walls	0.10
612666							
Colonie	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
612668							
Hoosic, very stony	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
Hazen, very stony	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
612724							
Lordstown, very rocky	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Wallpack, very rocky	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.96	Depth to water	1.00
612732							
Atherton, very poorly drained	60	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	0.10
				Depth to saturated zone	1.00		
				Piping	0.87		
Atherton, poorly drained	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
				Piping	0.34	Unstable excavation walls	0.10
612738							
Fluvaquents, occasionally flooded	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	0.10
				Piping	1.00		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
612753 Wallpack, aeolian mantle, very stony-	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
612756 Wallpack, aeolian mantle, very stony-	85	Somewhat limited		Not limited		Very limited	
		Seepage	0.70			Depth to water	1.00
		Slope	0.08				
612757 Wallpack, aeolian mantle, very stony-	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
612767 Wellsboro, extremely stony----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.70				
612768 Wellsboro, extremely stony----	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
613393 Alden, extremely stony----------	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.03	Ponding	1.00	Unstable excavation walls	0.10
				Depth to saturated zone	1.00		
				Piping	0.20		
613447 Unadilla----------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
613448 Unadilla----------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.68				
614075 Wurtsboro, extremely stony----	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	1.00				
				Seepage	0.37		
Swartswood, extremely stony----	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
620179							
Arnot, very rocky	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00	Thin layer	1.00		
Lordstown, very rocky	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
620180							
Arnot	45	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Lordstown	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Rock outcrop	15	Not rated		Not rated		Not rated	
620181							
Arnot	60	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Lordstown	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Rock outcrop	15	Not rated		Not rated		Not rated	
623089							
Chippewa, extremely stony	80	Not limited		Very limited		Very limited	
				Ponding	1.00	Depth to water	1.00
				Depth to saturated zone	1.00		
				Piping	0.96		
623109							
Farmington	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Piping	1.00		
Rock outcrop	40	Not rated		Not rated		Not rated	
624811							
Galway, very rocky	80	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.98	Depth to water	1.00
		Depth to bedrock	0.98				
		Seepage	0.70				
624813							
Lackawanna, extremely stony	85	Somewhat limited		Not limited		Very limited	
		Seepage	0.70			Depth to water	1.00
		Slope	0.08				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
624816							
Lordstown, very rocky	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Wallpack, very rocky	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.96	Depth to water	1.00
624822							
Lordstown	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Wallpack	35	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
624823							
Lordstown	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Wallpack	35	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
624824							
Lordstown	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Thin layer	0.66	Depth to water	1.00
		Depth to bedrock	0.66	Seepage	0.36		
		Slope	0.08				
Wallpack	35	Somewhat limited		Not limited		Very limited	
		Slope	0.08			Depth to water	1.00
624826							
Manlius, very rocky	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.93	Depth to water	1.00
		Seepage	1.00	Large stones	0.42		
		Depth to bedrock	0.93				
Nassau, very rocky	25	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Large stones	0.39		
				Seepage	0.20		
624827							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.08	Seepage	0.20		
				Large stones	0.15		
Manlius, very rocky	44	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.88	Depth to water	1.00
		Depth to bedrock	0.88	Large stones	0.33		
		Slope	0.08				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
624828							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Seepage	0.20		
				Large stones	0.15		
Manlius, very rocky-	44	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.88	Depth to water	1.00
		Seepage	1.00	Large stones	0.33		
		Depth to bedrock	0.88				
624829							
Nassau, very rocky--	55	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Seepage	0.20		
				Large stones	0.15		
Manlius, very rocky-	44	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.88	Depth to water	1.00
		Seepage	1.00	Large stones	0.33		
		Depth to bedrock	0.88				
624832							
Nassau----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Large stones	0.39		
				Seepage	0.20		
Rock outcrop--------	45	Not rated		Not rated		Not rated	
624841							
Oquaga----------	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Rock outcrop--------	25	Not rated		Not rated		Not rated	
624845							
Rock outcrop--------	45	Not rated		Not rated		Not rated	
Farmington----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Piping	1.00		
Galway----------	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.98	Depth to water	1.00
		Depth to bedrock	0.98				
		Seepage	0.70				
624846							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Rubble land---------	20	Very limited		Not rated		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	1.00				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
626816							
Udifluvents, occasionally flooded	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.18	Unstable excavation walls	1.00
				Seepage	0.08	Depth to saturated zone	0.44
635458							
Oquaga, very rocky	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Lackawanna, very rocky	30	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
635459							
Oquaga, very rocky	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Lackawanna, very rocky	35	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
740953							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
740968							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Seepage	0.20		
				Large stones	0.15		
Manlius, very rocky	44	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.88	Depth to water	1.00
		Seepage	1.00	Large stones	0.33		
		Depth to bedrock	0.88				
740969							
Nassau, very rocky	55	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Seepage	0.20		
				Large stones	0.15		
Manlius, very rocky	44	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.88	Depth to water	1.00
		Seepage	1.00	Large stones	0.33		
		Depth to bedrock	0.88				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
740971							
Oquaga, very rocky--	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Lackawanna, very rocky----------	30	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
740972							
Oquaga, very rocky--	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Lackawanna, very rocky----------	35	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
740974							
Oquaga----------	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Rock outcrop--------	25	Not rated		Not rated		Not rated	
740975							
Rock outcrop--------	40	Not rated		Not rated		Not rated	
Arnot----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Rubble land---------	20	Very limited		Not rated		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	1.00				
740987							
Scio----------	80	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
				Piping	1.00	Unstable excavation walls	0.10
740988							
Udifluvents, occasionally flooded----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Depth to saturated zone	0.18	Unstable excavation walls	1.00
				Seepage	0.08	Depth to saturated zone	0.44
740991							
Unadilla----------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
740992							
Unadilla	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.68				
740995							
Wellsboro, extremely stony	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08				
740996							
Wellsboro, extremely stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	0.70				
741149							
Lackawanna, extremely stony	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
741150							
Lackawanna, extremely stony	85	Very limited		Not limited		Very limited	
		Slope	1.00			Depth to water	1.00
		Seepage	0.70				
801114							
Oquaga	75	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Rock outcrop	15	Not rated		Not rated		Not rated	
810906							
Oquaga	75	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.96	Large stones	0.01		
		Seepage	0.70				
Rock outcrop	15	Not rated		Not rated		Not rated	
1147465							
Alden, extremely stony	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.03	Ponding	1.00	Unstable excavation walls	0.10
				Depth to saturated zone	1.00		
				Piping	0.20		
1147467							
Arnot, very rocky	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00	Thin layer	1.00		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1147467							
Lordstown, very rocky	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
1147468							
Arnot	45	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Lordstown	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Rock outcrop	15	Not rated		Not rated		Not rated	
1147469							
Arnot	60	Very limited		Very limited		Very limited	
		Slope	1.00	Seepage	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Thin layer	1.00		
Lordstown	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.66	Depth to water	1.00
		Seepage	0.70	Seepage	0.36		
		Depth to bedrock	0.66				
Rock outcrop	15	Not rated		Not rated		Not rated	
1147470							
Atherton, very poorly drained	60	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	0.10
				Depth to saturated zone	1.00		
				Piping	0.87		
Atherton, poorly drained	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
						Unstable excavation walls	0.10
				Piping	0.34		
1147471							
Catden	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Organic matter content	1.00	Unstable excavation walls	0.10
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Seepage	1.00		
				Hard to pack	1.00		

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1147474							
Chippewa, extremely stony	80	Not limited		Very limited		Very limited	
				Ponding	1.00	Depth to water	1.00
				Depth to saturated zone	1.00		
				Piping	0.96		
1147475							
Colonie	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
1147478							
Delaware, rarely flooded	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.68				
1147482							
Fredon, very stony	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
				Seepage	1.00		
Halsey, very stony	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Unstable excavation walls	1.00
				Depth to saturated zone	1.00		
				Seepage	1.00		
1147485							
Hazen, very stony	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				
Hoosic, very stony	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.68				
1147490							
Hoosic, very stony	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
Hazen, very stony	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
1147491							
Hoosic, very stony	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				
Otisville, very stony	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	1.00				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1147492							
Lackawanna, extremely stony----	85	Somewhat limited		Not limited		Very limited	
		Seepage	0.70			Depth to water	1.00
		Slope	0.08				
1147500							
Wurtsboro, extremely stony----	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08	Seepage	0.37		
1147501							
Wurtsboro, extremely stony----	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Slope	0.08	Seepage	0.37		
Swartswood, extremely stony----	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.44	Depth to water	1.00
		Slope	0.08				
1147502							
Wurtsboro, extremely stony----	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	1.00	Seepage	0.37		
Swartswood, extremely stony----	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				
1147527							
Udorthents----------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.58	Depth to water	1.00
		Slope	0.08				
Urban land----------	40	Not rated		Not rated		Not rated	
1147532							
Udorthents----------	100	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.58	Depth to water	1.00
		Slope	0.08				
1147533							
Wurtsboro, extremely stony----	80	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to saturated zone	1.00	Depth to water	1.00
		Seepage	1.00	Seepage	0.37		
Swartswood, extremely stony----	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.44	Depth to water	1.00
		Seepage	1.00				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1948749							
Arnot	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.68				
		Seepage	0.54				
1948750							
Arnot	90	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00				
		Seepage	0.54				
1948751							
Arnot	90	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00				
		Seepage	0.54				
1948774							
Conotton	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.86	Depth to water	1.00
		Slope	0.68				
1948775							
Conotton	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.86	Depth to water	1.00
		Slope	1.00				
1948776							
Conotton	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.86	Depth to water	1.00
		Slope	1.00				
1948777							
Conotton	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.86	Depth to water	1.00
		Slope	1.00				
1948797							
Manlius	90	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.81	Thin layer	0.81	Depth to water	1.00
		Seepage	0.72	Seepage	0.09		
		Slope	0.68				
1948802							
Manlius	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.81	Depth to water	1.00
		Depth to bedrock	0.81	Seepage	0.09		
		Seepage	0.72				
1948818							
Manlius	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.81	Depth to water	1.00
		Depth to bedrock	0.81	Seepage	0.09		
		Seepage	0.72				
1948832							
Penargyl	90	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.68				

Table 13.--Ponds and Embankments--Continued

Map unit symbol and soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
1948846							
Phelps	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
		Slope	0.32	Seepage	1.00		
1948855							
Udorthents, loamy	95	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Unstable excavation walls	1.00
		Slope	0.08	Piping	1.00		
1948989							
Urban land	65	Not rated		Not rated		Not rated	
Delaware	25	Very limited		Not limited		Very limited	
		Seepage	1.00			Depth to water	1.00
		Slope	0.08				

Table 14.--Engineering Properties

[Absence of an entry indicates that data were not estimated]

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
290836 Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
290836												
Otisville, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly sandy loam	SC-SM, SM	A-2-4, A-1-b	0	0	64-92	51-84	37-66	17-34	23-35	5-8
	2-7	Sand, loamy fine sand, coarse sand, very gravelly loamy sand, loamy coarse sand	SM, SP-SM, SW-SM	A-1-b, A-1-a	0	0-7	60-73	41-60	25-49	6-16	0-19	NP-4
	7-11	Sand, loamy fine sand, coarse sand, very gravelly loamy coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-1-a	0	0-7	53-85	18-78	9-54	2-19	0-19	NP-4
	11-19	Sand, loamy fine sand, coarse sand, very gravelly loamy coarse sand, loamy sand	SM, SP, SW-SM	A-2-4, A-1-a	0	0-14	51-93	7-78	3-54	1-19	0-19	NP-4
	19-31	Loamy sand, extremely gravelly coarse sand, loamy coarse sand, sand	SM, SP	A-1-b, A-1-a	0	0-22	51-93	7-78	3-48	0-13	0-19	NP-4
	31-43	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SM, SP, SW	A-1-b, A-1-a	0	0-22	51-93	7-78	3-48	0-13	0-19	NP-4
	43-60	Sand, loamy sand, loamy coarse sand, stratified sand to loamy sand, coarse sand	SP, SM	A-3, A-2-4, A-1-b	0	0	100	92-100	48-74	3-15	0-19	NP-4
296265												
Alden----------	0-9	Mucky silt loam	OL	A-5	0	0	80-100	75-100	65-95	55-85	40-50	5-15
	9-35	Silty clay loam, silt loam	CL	A-4	0	0	80-100	75-100	65-95	55-85	20-35	5-15
	35-60	Gravelly loam	CL	A-4	0	0-5	60-95	50-90	45-90	30-85	20-35	5-15
296269												
Fluvents, (alluvial land)	0-6	Sandy loam	SM	A-4	0	0-5	75-100	60-100	50-80	35-60	10-20	NP-5
	6-42	Sandy loam	ML	A-4	0	0-10	75-100	60-100	50-90	35-80	10-25	NP-6
	42-60	Gravelly silt loam	CL	A-6	0	0	95-100	95-100	80-100	50-95	15-40	2-25

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296271												
Alvira----------	0-10	Gravelly loam, gravelly silt loam	ML	A-4	0-5	3-15	70-100	60-95	55-90	40-80	22-35	6-13
	10-21	Gravelly silt loam, silt loam	CL	A-4	0	0-10	65-100	55-90	50-90	35-85	25-40	5-15
	21-60	Very gravelly silt loam, gravelly silt loam	CL	A-4	0	0-20	65-95	45-90	40-90	30-85	25-40	5-15
Watson----------	0-10	Gravelly loam, silt loam	ML	A-4	0-5	3-10	70-90	70-90	60-85	55-80	---	---
	10-27	Gravelly silty clay loam	CL	A-6	0	0-10	70-100	65-95	60-95	45-90	25-45	8-20
	27-60	Gravelly clay loam, gravelly silty clay loam	CL	A-4	0	0-15	55-100	50-100	45-95	30-85	25-39	4-15
296272												
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0	5-15	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery silt loam, gravelly loam, very channery silt loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Channery silt loam, gravelly loam, very channery silt loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Channery silt loam, channery loam, very channery loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
296273												
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0	5-15	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery silt loam, gravelly loam, very channery silt loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Channery silt loam, gravelly loam, very channery silt loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Channery silt loam, channery loam, very channery loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296274												
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0	5-15	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery silt loam, gravelly loam, very channery silt loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Channery silt loam, gravelly loam, very channery silt loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Channery silt loam, channery loam, very channery loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
296275												
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0-5	5-20	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery loam, silt loam, gravelly loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Very channery loam, very channery silt loam, gravelly sandy loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Flaggy loam, channery silt loam, very channery sandy loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
296276												
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0-5	5-20	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery loam, silt loam, gravelly loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Very channery loam, very channery silt loam, gravelly sandy loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Flaggy loam, channery silt loam, very channery sandy loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
296277												
Benson----------	0-8	Channery silt loam, channery loam	CL	A-4	0	10-30	75-90	70-85	60-85	40-80	20-40	NP-18
	8-18	Very channery silt loam, very channery loam	GC	A-4	0	15-50	40-85	35-80	30-80	20-75	20-40	NP-18
	18-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296278												
Benson----------	0-8	Channery silt loam, channery loam	CL	A-4	0	10-30	75-90	70-85	60-85	40-80	20-40	NP-18
	8-18	Very channery silt loam, very channery loam	GC	A-4	0	15-50	40-85	35-80	30-80	20-75	20-40	NP-18
	18-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296279												
Benson----------	0-8	Channery silt loam, channery loam	CL	A-4	0	10-30	75-90	70-85	60-85	40-80	20-40	NP-18
	8-18	Very channery silt loam, very channery loam	GC	A-4	0	15-50	40-85	35-80	30-80	20-75	20-40	NP-18
	18-22	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296280												
Braceville------	0-3	Gravelly loam	ML, SM, CL, GM	A-4, A-2, A-1	0	0-10	65-90	60-80	40-70	20-55	15-30	NP-10
	3-30	Gravelly sandy loam, silt loam, gravelly silt loam	ML, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	0-10	65-100	60-100	40-100	20-90	15-35	NP-10
	30-55	Gravelly sandy loam, gravelly silt loam, very gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	0-11	73-100	27-100	22-96	15-71	15-35	NP-10
	55-60	Stratified sand and gravel	GW-GM, SM, GM, GP-GM	A-4, A-2, A-1	---	0-15	40-100	35-100	25-90	10-50	15-30	NP-5
296281												
Braceville------	0-3	Gravelly loam	ML, SM, CL, GM	A-4, A-2, A-1	0	0-10	65-90	60-80	40-70	20-55	15-30	NP-10
	3-30	Gravelly sandy loam, silt loam, gravelly silt loam	ML, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	0-10	65-100	60-100	40-100	20-90	15-35	NP-10
	30-55	Gravelly sandy loam, gravelly silt loam, very gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2, A-1	0	0-11	73-100	27-100	22-96	15-71	15-35	NP-10
	55-60	Stratified sand and gravel	GW-GM, SM, GM, GP-GM	A-4, A-2, A-1	---	0-15	40-100	35-100	25-90	10-50	15-30	NP-5

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296283												
Buchanan--------	0-4	Channery loam	GM, ML, CL, CL-ML	A-6, A-4, A-2	2-15	15-35	50-85	45-70	40-70	30-60	20-35	2-11
	4-25	Gravelly loam, silt loam, gravelly sandy clay loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	50-100	45-90	40-90	20-80	20-35	2-15
	25-60	Gravelly loam, loam, channery clay loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	50-100	30-80	30-75	20-60	20-35	2-15
296288												
Chippewa--------	0-8	Silt loam	ML	A-5	0	0-5	80-100	75-100	65-95	55-85	40-50	5-15
	8-16	Channery silt loam	CL	A-4	0	5-10	65-85	60-85	45-85	35-75	25-35	5-10
	16-48	Gravelly silt loam, very channery silt loam	GC	A-4	0	10-15	60-80	55-70	45-70	30-65	15-25	5-10
	48-80	Very gravelly loam, very channery silt loam	GC	A-4	0	10-15	60-80	55-70	45-70	30-65	25-35	5-10
Norwich---------	0-8	Silt loam	ML	A-5	0	0-5	80-100	75-95	65-90	55-85	40-50	5-15
	8-16	Channery silt loam	CL	A-4	0	0-15	65-95	65-90	60-85	40-80	25-35	5-10
	16-48	Channery silt loam	SC	A-4	0	10-20	60-90	55-70	35-70	20-65	15-25	5-10
	48-80	Very channery silt loam, channery loam, channery silt loam	SM, GC, ML, CL-ML, GM	A-4, A-2	0	10-15	60-80	55-70	45-70	30-65	25-35	5-10
296289												
Chippewa--------	0-8	Channery silt loam, silt loam	SM	A-5	2-15	5-25	65-90	60-70	50-70	35-65	40-50	5-15
	8-16	Channery silt loam	CL	A-4	0	5-10	65-85	60-85	45-85	35-75	25-35	5-10
	16-48	Gravelly silt loam, very channery silt loam	GC	A-4	0	10-25	60-80	55-70	45-70	30-65	15-25	5-10
	48-80	Very gravelly loam, very channery silt loam	GC	A-4	0-2	10-25	60-80	55-70	45-70	30-65	25-35	5-10
Norwich---------	0-8	Channery silt loam, silt loam	ML	A-5	2-15	15-25	70-90	65-85	60-80	40-75	40-50	5-15
	8-16	Channery silt loam	CL	A-4	0	0-15	65-95	65-90	60-85	40-80	25-35	5-10
	16-48	Channery silt loam	SC	A-4	0	10-25	60-90	55-70	35-70	20-65	15-25	5-10
	48-80	Very channery silt loam, channery loam, channery silt loam	SM, GC, ML, CL-ML, GM	A-4, A-2	0	10-15	60-80	55-70	45-70	30-65	25-35	5-10
296295 Udorthents, cut and fill.												

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296297												
Dekalb----------	0-7	Very channery loam, extremely stony loam	SC-SM	A-4	2-15	15-30	50-90	45-80	40-75	20-55	10-32	NP-10
	7-24	Very channery sandy loam, channery sandy loam	SC-SM	A-4	0	5-40	50-85	40-75	40-75	20-55	15-32	NP-9
	24-32	Very channery sandy loam, channery silt loam	SM	A-2	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
	32-36	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296298												
Dekalb----------	0-7	Very channery loam, extremely stony loam	SC-SM	A-4	2-15	15-30	50-90	45-80	40-75	20-55	10-32	NP-10
	7-24	Very channery sandy loam, channery sandy loam	SC-SM	A-4	0	5-40	50-85	40-75	40-75	20-55	15-32	NP-9
	24-32	Very channery sandy loam, channery sandy loam	SM	A-2	0	10-50	45-85	25-75	20-65	15-40	15-32	NP-9
	32-36	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296303												
Hazleton--------	0-5	Very channery sandy loam, extremely stony sandy loam	GM	A-4	2-15	15-50	60-85	50-80	50-70	35-55	---	---
	5-31	Channery sandy loam, channery silt loam	SC-SM	A-4	0	0-50	60-95	45-90	35-70	20-55	15-30	NP-8
	31-58	Very channery coarse sandy loam, channery loam	GC-GM	A-2	0	5-60	50-80	35-75	25-65	15-50	15-30	NP-8
	58-69	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296304												
Holly----------	0-8	Silt loam	ML	A-4	0	0	90-100	85-100	80-100	70-90	25-35	3-10
	8-28	Very fine sandy loam, silt loam	ML	A-4	0	0	85-100	75-100	70-95	45-85	20-40	NP-14
	28-41	Loam, silt loam	ML	A-4	0	0	85-100	75-100	50-95	25-80	20-40	NP-10
	41-60	Stratified gravelly sand to silt loam	SM	A-4	0	0-5	70-100	65-100	40-90	10-70	20-40	NP-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296311												
Lackawanna------	0-8	Channery loam	ML, SM, CL, GM	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-25	Channery loam, silt loam, flaggy loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, channery silt loam, very channery loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12
Bath----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	2-15	5-25	55-80	50-75	40-75	30-70	30-40	5-10
	8-27	Channery silt loam, silt loam, gravelly loam	SM, ML, GM	A-4, A-2, A-1	0	5-10	55-95	50-90	40-85	20-80	20-35	NP-7
	27-60	Channery silt loam, very channery silt loam, gravelly sandy loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	0-2	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
	60-64	Flaggy loam, channery silt loam, very channery loam	GM, SM, CL-ML, GC-GM	A-4, A-2, A-1	0-2	10-15	30-80	25-75	15-75	10-70	15-25	NP-6
296312												
Lackawanna------	0-8	Channery loam	SM, CL, GM, ML	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-25	Channery loam, silt loam, flaggy loam	SM, GC, ML, CL, GM	A-4, A-2, A-6	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, channery silt loam, very channery loam	SM, GC-GM, ML, CL, GM	A-6, A-4, A-2	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296313												
Lackawanna------	0-8	Channery loam	SM, CL, GM, ML	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-25	Channery loam, silt loam, flaggy loam	SM, GC, ML, CL, GM	A-4, A-2, A-6	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, channery silt loam, very channery loam	SM, GC-GM, ML, CL, GM	A-6, A-4, A-2	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296315												
Lackawanna------	0-8	Channery loam	ML, SM, CL, GM	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-25	Channery loam, silt loam, flaggy loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, channery silt loam, very channery loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296316												
Lackawanna------	0-8	Channery loam	ML, SM, CL, GM	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-25	Channery loam, silt loam, flaggy loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, channery silt loam, very channery loam	ML, SM, CL, GM	A-6, A-4, A-2	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296317												
Laidig----------	0-6	Very gravelly loam, extremely stony loam	CL-ML	A-4	2-15	15-30	65-90	50-80	45-80	35-70	15-30	NP-10
	6-33	Gravelly loam, very channery loam	SC	A-4	0	5-20	70-95	50-90	40-80	20-70	15-40	2-18
	33-65	Very gravelly loam, gravelly loam, channery sandy clay loam	GC	A-4	0-2	5-20	50-90	40-85	30-80	15-70	15-35	2-16
296326												
Lordstown-------	0-7	Channery silt loam	SM, ML, GM	A-4	2-15	10-25	65-85	50-75	50-75	40-65	15-30	NP-4
	7-26	Channery silt loam	SM, ML, GM	A-4	2-15	10-25	65-85	50-75	50-75	40-65	15-30	NP-4
	26-30	Very channery silt loam, channery loam, very channery fine sandy loam	SM, ML, GM	A-4, A-2, A-1	0	5-25	40-75	30-70	25-70	15-60	15-30	NP-4
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296327												
Lordstown-------	0-7	Channery silt loam	SM, ML, GM	A-4	2-15	10-25	65-85	50-75	50-75	40-65	15-30	NP-4
	7-26	Channery silt loam	SM, ML, GM	A-4	2-15	10-25	65-85	50-75	50-75	40-65	15-30	NP-4
	26-30	Very channery silt loam, channery loam, very channery fine sandy loam	SM, ML, GM	A-4, A-2, A-1	0	5-25	40-75	30-70	25-70	15-60	15-30	NP-4
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296328												
Lordstown-------	0-7	Very channery silt loam, extremely stony silt loam	ML	A-4	2-15	10-25	65-85	50-75	50-75	40-65	15-30	NP-4
	7-26	Very channery loam, very channery silt loam	ML	A-4	0	5-10	65-85	50-75	50-75	40-65	15-30	NP-4
	26-30	Very channery silt loam	GM	A-4	0	5-25	40-75	30-70	25-70	15-60	15-30	NP-4
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296328												
Oquaga----------	0-7	Very channery loam, very channery silt loam	GM	A-4	2-15	10-25	50-85	40-70	35-70	25-65	35-45	2-7
	7-30	Very channery loam, very channery silt loam	SM	A-2	0	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296329												
Mardin----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0	5-15	55-80	50-75	40-75	30-70	30-40	5-10
	8-17	Channery silt loam, loam, gravelly loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, gravelly loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-60	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
296330												
Mardin----------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2	0	5-15	55-80	50-75	40-75	30-70	30-40	5-10
	8-17	Channery silt loam, loam, gravelly loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, gravelly loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-60	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
296331												
Mardin----------	0-8	Very stony silt loam	ML, SM, CL, GM	A-4, A-2	0-5	3-20	40-100	40-95	35-90	20-85	20-30	1-8
	8-17	Channery silt loam, loam, gravelly loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, gravelly loam	CL, CL-ML, GC, SC-SM	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-60	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296332												
Mardin----------	0-8	Very stony silt loam	ML, SM, CL, GM	A-4, A-2	0-5	3-20	40-100	40-95	35-90	20-85	20-30	1-8
	8-17	Channery silt loam, loam, gravelly loam	CL, CL-ML, GC, SC-SM	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, gravelly loam	CL, CL-ML, GC, SC-SM	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-60	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
296335												
Meckesville-----	0-9	Gravelly loam, gravelly silt loam	ML	A-4	0	0-15	80-100	60-70	60-65	55-60	30-40	5-10
	9-36	Channery loam, loam	ML	A-4	0	0-20	60-100	60-95	60-90	55-70	25-40	2-15
	36-60	Channery loam, loam	GC-GM	A-4	0	0-20	45-95	40-90	35-85	30-65	20-30	2-10
	60-64	Very channery loam, loam	GC-GM	A-4	0	0-50	45-90	30-85	30-85	25-60	20-30	2-10
296337												
Meckesville-----	0-9	Gravelly loam, very stony silt loam	ML	A-4	0-5	3-15	80-100	70-95	65-85	55-80	---	---
	9-36	Channery loam, loam	ML	A-4	0	0-20	60-100	60-95	60-90	55-70	25-40	2-15
	36-60	Channery loam, loam	GC-GM	A-4	0-2	0-20	45-95	40-90	35-85	30-65	20-30	2-10
	60-64	Very channery loam, loam	GC-GM	A-4	0-2	0-50	45-90	30-85	30-85	25-60	20-30	2-10
296338												
Morris----------	0-8	Channery silt loam	ML, SM, CL, GM	A-4, A-2	0	0-15	60-95	50-75	40-75	30-65	20-30	1-10
	8-17	Channery silt loam, channery loam, channery silty clay loam	SM, CL	A-4, A-2	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
	17-70	Channery silt loam, channery loam, channery silty clay loam	SM, CL	A-4, A-2	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
	70-80	Channery silt loam, channery loam, channery silty clay loam	SM, CL	A-4, A-2	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296339												
Morris----------	0-8	Extremely stony silt loam, very channery silt loam	CL	A-4	2-15	5-25	60-95	55-85	40-80	30-70	20-30	1-10
	8-17	Very channery silt loam, extremely stony silt loam	CL	A-4	2-15	5-25	60-95	55-85	40-80	30-70	20-30	1-10
	17-70	Channery silt loam, gravelly loam	CL	A-4	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
	70-80	Gravelly loam, channery silt loam	CL	A-4	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
296340												
Morris----------	0-8	Extremely stony silt loam, very channery silt loam	CL	A-4	2-15	5-25	60-95	55-85	40-80	30-70	20-30	1-10
	8-17	Extremely stony silt loam, very channery silt loam	CL	A-4	2-15	5-25	60-95	55-85	40-80	30-70	20-30	1-10
	17-70	Gravelly loam, channery loam	CL	A-4	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
	70-80	Channery silt loam, gravelly loam	CL	A-4	0	0-20	60-95	45-80	40-80	25-75	15-25	NP-9
296341												
Freetown, mucky peat----------	0-6	Mucky peat	GP, PT	A-1, A-8	0	0	---	---	---	---	---	---
	6-72	Muck, mucky peat	GP, PT	A-1, A-8	---	---	---	---	---	---	---	---
296342												
Paupack, mucky peat (shallow)-	0-3	Mucky peat	GW, PT	A-1, A-8	0	0	0	---	---	---	0-14	NP
	3-26	Muck	GP, PT	A-1, A-8	0-5	0-10	---	---	---	---	0-14	NP
	26-36	Very stony muck	GW, PT	A-1, A-8	0	0	0	---	---	---	0-14	NP
	36-70	Extremely stony sandy loam, extremely stony loam	SC, GM	A-1, A-2	1-5	5-10	40-90	40-60	30-40	10-25	10-30	NP-15
296343												
Oquaga----------	0-7	Very channery loam	GM	A-4	0	5-20	50-85	40-70	35-70	25-65	35-45	2-7
	7-30	Very channery loam	SM	A-2	0	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna------	0-8	Channery loam	GM	A-4	0	0-15	40-80	40-75	35-70	20-60	---	---
	8-25	Channery loam, loam	GC	A-4	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, silt loam	GC	A-4	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296344												
Oquaga----------	0-7	Very channery loam	GM	A-4	0	5-20	50-85	40-70	35-70	25-65	35-45	2-7
	7-30	Very channery loam	SM	A-2	0	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna------	0-8	Channery loam	GM	A-4	0	0-15	40-80	40-75	35-70	20-60	---	---
	8-25	Channery loam, loam	GC	A-4	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam, silt loam	GC	A-4	0	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296346												
Oquaga----------	0-7	Very channery loam, extremely stony loam	GM	A-4	2-15	10-25	50-85	40-70	35-70	25-65	35-45	2-7
	7-30	Very channery loam, very channery silt loam	SM	A-2	0	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna------	0-8	Very channery loam, extremely stony loam	ML	A-4	2-15	15-30	40-100	40-95	35-90	20-85	---	---
	8-25	Channery loam	GC	A-4	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam	GM	A-4	0-2	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296347												
Oquaga----------	0-7	Very channery loam, extremely stony loam	GM	A-4	2-15	10-25	50-85	40-70	35-70	25-65	35-45	2-7
	7-30	Very channery loam, very channery silt loam	SM	A-2	0	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	30-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna------	0-8	Very channery loam, extremely stony loam	ML	A-4	2-15	15-30	40-100	40-95	35-90	20-85	---	---
	8-25	Channery loam	GC	A-4	0	0-20	40-80	40-75	35-70	20-60	20-35	1-14
	25-60	Channery loam	GC	A-4	0-2	0-20	50-85	40-80	35-75	20-55	15-35	1-12
296348												
Philo----------	0-10	Silt loam	CL-ML	A-4	0	0-5	95-100	80-100	85-90	60-80	20-35	1-10
	10-40	Fine sandy loam, silt loam	SC-SM	A-4	0	0-5	95-100	75-100	70-90	45-80	20-35	1-10
	40-60	Gravelly fine sandy loam, stratified sand	SM	A-4	0	0-5	60-95	50-90	40-85	30-80	15-30	1-10
296349												
Pope----------	0-10	Silt loam	CL-ML	A-4	0	0	85-100	75-100	70-100	45-90	15-30	NP-10
	10-30	Silt loam, fine sandy loam	SM	A-4	0	0	95-100	80-100	51-95	25-75	15-30	NP-7
	30-60	Loamy very fine sand, sandy loam	SM	A-4	0	0-20	45-100	35-100	30-95	15-70	15-30	NP-7

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296350												
Pope----------	0-10	Silt loam	CL-ML	A-4	0	0	85-100	75-100	70-100	45-90	15-30	NP-10
	10-30	Silt loam, fine sandy loam	SM	A-4	0	0	95-100	80-100	51-95	25-75	15-30	NP-7
	30-60	Loamy very fine sand, sandy loam	SM	A-4	0	0-20	45-100	35-100	30-95	15-70	15-30	NP-7
296351												
Rexford, somewhat poorly drained-	0-8	Silt loam	SC, SM, CL, ML	A-4, A-2	0	0-5	95-100	80-100	75-95	30-90	15-35	NP-10
	8-18	Gravelly sandy loam, loam, silt loam	SM, ML, GM	A-4, A-2	0	0-10	60-100	50-100	40-85	25-70	20-35	NP-5
	18-40	Gravelly sandy loam, gravelly loam, silt loam	SM, ML, GM	A-4, A-2	0	0-10	60-100	50-100	40-85	25-70	20-35	NP-5
	40-63	Stratified gravel, very gravelly sandy loam	SP, SP-SM, GP-GM, GW	A-2, A-1	0	0-20	40-55	30-50	10-40	4-35	10-15	NP
Rexford, poorly drained--------	0-8	Silt loam	SC, SM, CL, ML	A-4, A-2	0	0-5	95-100	80-100	75-95	30-90	15-35	NP-10
	8-18	Gravelly sandy loam, loam, silt loam	SM, ML, GM	A-4, A-2	0	0-10	60-100	50-100	40-85	25-70	20-35	NP-5
	18-40	Gravelly sandy loam, gravelly loam, silt loam	SM, ML, GM	A-4, A-2	0	0-10	60-100	50-100	40-85	25-70	20-35	NP-5
	40-63	Stratified gravel, very gravelly sandy loam	SP, SP-SM, GP-GM, GW	A-2, A-1	0	0-20	40-55	30-50	10-40	4-35	10-15	NP
296355												
Sheffield-------	0-7	Silt loam	CL	A-4	0	0-5	95-100	90-100	85-100	80-95	25-35	4-11
	7-19	Silty clay loam, silt loam	CL	A-6	0	0-5	95-100	90-95	85-95	80-90	25-40	11-20
	19-38	Silty clay loam, silt loam	CL	A-6	0	0-5	95-100	90-95	85-95	70-90	25-40	11-20
	38-66	Very channery silty clay loam, silt loam	CL	A-6	0	0-5	85-95	80-95	75-90	70-85	20-40	4-20

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296363 Dystrochrepts, very stony-----	0-6	Very channery loam	SM, ML, GM	A-4, A-2	0-5	5-15	60-85	50-80	50-70	30-55	10-25	NP-4
	6-32	Very channery silt loam, channery loam, very channery loam	SC, SM, GM, ML	A-4, A-2, A-1	0	0-50	60-95	45-90	35-70	20-55	15-30	NP-8
	32-56	Extremely channery loam, very channery silt loam, very channery loam	SC, SM, GC, GM	A-4, A-2, A-1	0	5-60	50-80	35-75	25-65	15-50	15-30	NP-8
	56-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
296369 Wayland---------	0-9	Silty clay loam	ML	A-5	0	0	100	95-100	90-100	70-95	40-50	5-15
	9-41	Silty clay loam, silt loam	ML	A-4	0	0	100	95-100	90-100	70-95	25-45	5-15
	41-60	Very gravelly loam, stratified silt loam	CL	A-4	0	0	65-100	55-100	50-95	25-90	15-25	5-10
296376 Wellsboro-------	0-8	Channery loam	SM, CL, GM, ML	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-17	Channery loam, channery silt loam, gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2	0	0-15	70-100	60-100	55-95	30-70	15-30	NP-10
	17-21	Channery loam, channery silt loam, gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2	0	0-15	70-100	60-100	55-95	30-70	15-30	NP-10
	21-60	Very channery loam, channery sandy loam, channery silt loam	ML, SM, CL, GM	A-4, A-2	0	0-20	55-90	45-90	35-80	25-60	15-30	NP-10
	60-80	Very channery silt loam, channery sandy loam, channery loam	ML, SM, CL, GM	A-4, A-2	0	0-20	55-90	45-90	35-80	25-60	15-30	NP-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296379												
Wellsboro-------	0-8	Channery loam	SM, CL, GM, ML	A-4, A-2	2-15	15-30	40-100	40-95	35-90	20-85	15-35	1-12
	8-17	Channery loam, channery silt loam, gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2	0	0-15	70-100	60-100	55-95	30-70	15-30	NP-10
	17-21	Channery loam, channery silt loam, gravelly loam	ML, SM, CL-ML, GC-GM	A-4, A-2	0	0-15	70-100	60-100	55-95	30-70	15-30	NP-10
	21-60	Very channery loam, channery sandy loam, channery silt loam	ML, SM, CL, GM	A-4, A-2	0	0-20	55-90	45-90	35-80	25-60	15-30	NP-10
	60-80	Very channery silt loam, channery sandy loam, channery loam	ML, SM, CL, GM	A-4, A-2	0	0-20	55-90	45-90	35-80	25-60	15-30	NP-10
296385												
Wyoming---------	0-7	Gravelly sandy loam	SP-SM, SW-SM, GM, SM	A-3, A-2, A-1	0	0-15	40-90	30-80	10-60	8-35	15-30	NP-5
	7-25	Gravelly sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	25-60	Extremely gravelly loamy coarse sand, very gravelly sand, gravelly sandy loam	SM, SW, GP-GM, GW	A-1	0	5-30	30-65	20-55	5-50	1-13	15-25	NP-5
296386												
Wyoming---------	0-7	Gravelly sandy loam	SP-SM, SW-SM, GM, SM	A-3, A-2, A-1	0	0-15	40-90	30-80	10-60	8-35	15-30	NP-5
	7-25	Gravelly sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	25-60	Extremely gravelly loamy coarse sand, very gravelly sand, gravelly sandy loam	GP-GM, GW, SM, SW	A-1	0	5-30	30-65	20-55	5-50	1-13	15-25	NP-5

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
296387												
Wyoming---------	0-7	Gravelly sandy loam	SP-SM, SW-SM, GM, SM	A-3, A-2, A-1	0	0-15	40-90	30-80	10-60	8-35	15-30	NP-5
	7-25	Gravelly sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	25-60	Extremely gravelly loamy coarse sand, very gravelly sand, gravelly sandy loam	GP-GM, GW, SM, SW	A-1	0	5-30	30-65	20-55	5-50	1-13	15-25	NP-5
296388												
Wyoming---------	0-7	Gravelly sandy loam	SP-SM, SW-SM, GM, SM	A-3, A-2, A-1	0	0-15	40-90	30-80	10-60	8-35	15-30	NP-5
	7-25	Gravelly sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	25-60	Extremely gravelly loamy coarse sand, very gravelly sand, gravelly sandy loam	GP-GM, GW, SM, SW	A-1	0	5-30	30-65	20-55	5-50	1-13	15-25	NP-5
296389												
Wyoming---------	0-8	Very gravelly sandy loam	SM	A-1	0	0-15	40-90	30-80	10-60	8-35	15-30	NP-5
	8-26	Very gravelly sandy loam, gravelly sandy loam	GM	A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	26-60	Stratified sand to very gravelly loamy sand, very gravelly silt loam	GP-GM	A-1	0	5-30	30-65	20-55	5-50	1-12	15-25	NP-5
297185												
Edgemere--------	0-2	Extremely stony mucky peat	PT	A-8	0	0	0	100	---	---	0-14	NP
	2-5	Extremely stony loam, extremely stony silt loam	OL, SM, GM, ML	A-7, A-5	10-30	5-25	70-90	65-85	60-80	40-75	40-50	5-15
	5-24	Very stony loam, very stony sandy loam	SM, CL, GM, ML	A-4	5-20	5-20	65-95	65-90	60-85	40-80	25-35	5-10
	24-66	Very gravelly sandy loam, very gravelly loam	SC-SM, SC, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	5-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297185												
Shohola---------	0-3	Very flaggy loam	SM, CL, GM, ML	A-6, A-4	5-20	15-35	70-90	65-85	60-80	40-75	20-30	3-15
	3-24	Very flaggy loam, extremely flaggy silt loam, extremely flaggy fine sandy loam	SM, CL, ML, CL-ML, GM	A-6, A-4	1-5	0-15	65-95	65-90	60-85	40-80	15-25	3-12
	24-72	Very flaggy fine sandy loam, very gravelly sandy loam, very gravelly loam	SC, SC-SM, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	NP-10
297186												
Edgemere--------	0-2	Extremely stony mucky peat	PT	A-8	10-20	5-12	5-10	100	---	---	20-40	NP
	2-5	Extremely stony loam, extremely stony silt loam	OL, SM, GM, ML	A-7, A-5	10-30	5-25	70-90	65-85	60-80	40-75	40-50	5-15
	5-24	Very stony loam, very stony sandy loam	SM, CL, GM, ML	A-4	5-20	5-20	65-95	65-90	60-85	40-80	25-35	5-10
	24-66	Very gravelly sandy loam, very gravelly loam	SC-SM, SC, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	5-10
297188												
Manlius---------	0-5	Very channery silt loam	GM, GC-GM	A-4, A-2, A-1	0-1	10-25	45-55	40-50	30-50	20-45	25-35	4-10
	5-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-30	Very channery silt loam, extremely channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	30-40	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Arnot----------	0-3	Very channery loam	SM, ML, GM	A-5, A-4, A-2	25-55	15-30	60-85	55-80	45-80	30-70	35-45	1-9
	3-14	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	14-24	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297189												
Manlius---------	0-5	Very channery silt loam	GM, GC-GM	A-4, A-2, A-1	0-1	10-25	45-55	40-50	30-50	20-45	25-35	4-10
	5-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-30	Very channery silt loam, extremely channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	30-40	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Arnot----------	0-3	Very channery loam	SM, ML, GM	A-5, A-4, A-2	25-55	15-30	60-85	55-80	45-80	30-70	35-45	1-9
	3-14	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	14-24	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297190												
Braceville------	0-11	Fine sandy loam	SC-SM, SM, ML	A-4	0	0-1	95-100	90-100	80-95	45-55	10-20	NP-10
	11-27	Fine sandy loam, gravelly fine sandy loam	SC-SM, SM, ML	A-4	0	0-1	95-100	80-100	40-80	40-55	10-20	NP-10
	27-48	Fine sandy loam	SC-SM, SM, ML	A-4	0	0-5	80-100	70-100	60-90	45-55	10-25	NP-10
	48-70	Loamy sand	SM, ML	A-4	0	0-8	80-100	65-100	60-85	20-55	10-15	NP
297191												
Wyalusing-------	0-6	Fine sandy loam	SM, ML	A-4	0	0-5	95-100	95-100	70-100	40-90	25-35	NP-10
	6-31	Loam, fine sandy loam, gravelly loam	SM, ML	A-4, A-2	0-1	15-25	80-100	75-100	40-70	20-60	20-35	NP-10
	31-70	Very cobbly loamy sand, gravelly loam, fine sandy loam	SM, GM	A-4, A-2, A-1	0-5	15-50	40-60	30-55	20-40	4-40	15-25	NP-5
297192												
Pope----------	0-6	Fine sandy loam	SC-SM, SM, CL-ML, ML	A-4, A-2	0	0	85-100	75-100	51-85	25-55	15-20	NP-5
	6-33	Fine sandy loam, sandy loam, loam	SC-SM, SM, CL-ML, ML	A-4, A-2	0	0	95-100	80-100	51-95	25-75	15-30	NP-7
	33-70	Sandy loam, loamy sand	SC-SM, SM, GM, ML	A-4, A-2, A-1	0	0-15	45-100	35-100	30-95	15-70	15-30	NP-7
297193												
Paupack---------	0-3	Mucky peat	GW, PT	A-1, A-8	0	0	0	---	---	---	0-14	NP
	3-26	Muck	GP, PT	A-1, A-8	0-5	0-10	---	---	---	---	0-14	NP
	26-36	Very stony muck	GW, PT	A-1, A-8	0	0	0	---	---	---	0-14	NP
	36-70	Extremely stony sandy loam, extremely stony loam	SC, GM	A-2, A-1	1-5	5-10	40-90	40-60	30-40	10-25	10-30	NP-15

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297196												
Freetown--------	0-6	Mucky peat	GP, PT	A-1, A-8	0	0	---	---	---	---	---	---
	6-72	Muck, mucky peat	GP, PT	A-1, A-8	---	---	---	---	---	---	---	---
297197												
Manlius---------	0-5	Very channery silt loam	SM, ML, GM	A-4, A-2	1-5	5-25	55-75	50-70	35-60	25-50	25-35	4-10
	5-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-30	Very channery silt loam, extremely channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	30-40	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297198												
Manlius---------	0-5	Very channery silt loam	SM, ML, GM	A-4, A-2	1-5	5-25	55-75	50-70	35-60	25-50	25-35	4-10
	5-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-30	Very channery silt loam, extremely channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	30-40	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297201												
Oquaga----------	0-2	Very channery loam	SM, ML, GM	A-5, A-4, A-2	1-5	10-20	50-85	40-70	35-70	25-65	35-45	2-7
	2-26	Very channery silt loam, very stony loam	ML, SM, GC-GM, GM	A-4, A-2, A-1	1-20	10-25	35-70	25-60	20-60	15-55	20-30	2-7
	26-32	Extremely stony sandy loam, very channery loam	GC-GM, GM, ML, SM	A-4, A-2, A-1	0-15	10-45	35-70	25-60	20-60	15-55	20-30	2-7
	32-42	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297203												
Delaware--------	0-14	Fine sandy loam	SM, ML	A-4	0	0	100	95-100	75-95	45-55	10-15	NP
	14-48	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0-1	99-100	95-100	70-90	40-55	10-15	NP
	48-72	Fine sandy loam, loamy fine sand, loamy sand	SM, ML	A-4, A-2	0	0-5	95-100	95-100	80-95	20-55	10-15	NP
297204												
Delaware--------	0-14	Fine sandy loam	SM, ML	A-4	0	0	100	95-100	75-95	45-55	10-15	NP
	14-48	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0-1	99-100	95-100	70-90	40-55	10-15	NP
	48-72	Fine sandy loam, loamy fine sand, loamy sand	SM, ML	A-4, A-2	0	0-5	95-100	95-100	80-95	20-55	10-15	NP

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297205												
Delaware--------	0-14	Fine sandy loam	SM, ML	A-4	0	0	100	95-100	75-95	45-55	10-15	NP
	14-48	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0-1	99-100	95-100	70-90	40-55	10-15	NP
	48-72	Fine sandy loam, loamy fine sand, loamy sand	SM, ML	A-4, A-2	0	0-5	95-100	95-100	80-95	20-55	10-15	NP
297209												
Philo----------	0-6	Loam	ML, CL-ML	A-4	0	0-5	95-100	80-100	75-90	60-80	20-35	1-10
	6-36	Silt loam, loam, fine sandy loam	SM, ML, CL-ML	A-4	0	0-5	95-100	75-100	70-90	45-80	20-35	1-10
	36-70	Stratified sand to very gravelly sandy loam	ML, SM, CL-ML, GM	A-2-4, A-2, A-1	0-2	0-5	45-95	40-90	20-70	10-70	15-30	1-10
297210												
Barbour---------	0-10	Fine sandy loam	SC-SM, SM, CL-ML, ML	A-4, A-2	0	0	80-100	75-100	50-95	30-90	15-25	2-7
	10-38	Silt loam, fine sandy loam, gravelly loam	SC-SM, SM, CL-ML, ML	A-4, A-2, A-1	0	0	60-100	55-95	30-95	15-85	15-25	2-7
	38-72	Loamy fine sand, very cobbly loamy sand, very cobbly sand	SM, SP, GM, GP	A-3, A-4, A-1, A-2	0-1	0-5	35-95	30-95	20-80	2-40	15-25	NP
297216												
Wurtsboro-------	0-4	Stony fine sandy loam	SM, SC-SM, GM, ML	A-4, A-2	15-20	3-5	70-100	65-90	55-90	30-70	20-28	NP-10
	4-22	Fine sandy loam, gravelly fine sandy loam, channery loam	SM, GM	A-4, A-2	0-2	0-15	70-95	55-90	45-85	30-50	15-30	NP-4
	22-70	Gravelly fine sandy loam, fine sandy loam, very gravelly fine sandy loam, channery loam	SM, GM	A-4, A-2, A-1	0-2	0-20	50-95	35-90	30-80	20-50	15-25	NP-4
297217												
Wurtsboro-------	0-4	Stony fine sandy loam	SM, ML, GM	A-4, A-2	15-20	3-5	70-100	65-90	55-90	30-70	20-28	NP-4
	4-22	Fine sandy loam, gravelly fine sandy loam, channery loam	SM, GM	A-4, A-2	0	0-15	70-95	55-90	45-85	30-50	15-30	NP-4
	22-70	Gravelly fine sandy loam, fine sandy loam, very gravelly fine sandy loam, channery loam	SM, GM	A-4, A-2, A-1	0	0-20	50-95	35-90	30-80	20-50	15-25	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297227												
Arnot----------	0-3	Very channery loam	GM	A-4, A-5, A-1, A-2	0	10-25	30-60	25-55	20-55	15-50	35-45	1-9
	3-10	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	10-14	Extremely channery loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	14-24	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297228												
Arnot----------	0-3	Very channery loam	GM	A-4, A-5, A-1, A-2	0	10-25	30-60	25-55	20-55	15-50	35-45	1-9
	3-10	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	10-14	Extremely channery loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	14-24	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
297229												
Wyoming---------	0-3	Very cobbly sandy loam	SM, SW-SM, GM, GP-GM	A-3, A-2, A-1	0	20-40	40-90	30-80	10-60	8-35	15-30	NP-5
	3-33	Very cobbly sandy loam, very cobbly fine sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	25-40	40-75	35-70	5-55	5-35	15-30	NP-5
	33-72	Extremely cobbly loamy coarse sand, very gravelly sand, gravelly sandy loam	SM, SW, GP-GM, GW	A-1	0-5	40-60	30-65	20-55	5-50	1-13	15-25	NP-5
297230												
Wyoming---------	0-3	Very cobbly sandy loam	SM, SW-SM, GM, GP-GM	A-3, A-2, A-1	0	20-40	40-90	30-80	10-60	8-35	15-30	NP-5
	3-33	Gravelly sandy loam, very cobbly fine sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-30	NP-5
	33-72	Extremely cobbly loamy coarse sand, very gravelly sand, gravelly sandy loam	SM, SW, GP-GM, GW	A-1	0-5	40-60	30-65	20-55	5-50	1-13	15-25	NP-5

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297231												
Wyoming---------	0-3	Very cobbly sandy loam	SM, SW-SM, GM, GP-GM	A-3, A-2, A-1	0	20-40	40-90	30-80	10-60	8-35	0-30	NP-5
	3-33	Very cobbly sandy loam, very cobbly fine sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0-1	20-40	40-75	35-70	5-55	5-35	0-30	NP-5
	33-72	Extremely cobbly loamy coarse sand, very gravelly sand, gravelly sandy loam	SM, SW, GP-GM, GW	A-1	0-5	40-60	30-65	20-55	5-50	1-13	0-25	NP-5
297236												
Suncook---------	0-10	Loamy sand	SM	A-2	0	0	95-100	85-100	45-85	15-35	0-14	NP-1
	10-70	Sand, loamy sand	SP, SM	A-3, A-2, A-1	0	0	60-100	45-100	20-85	0-35	0-14	NP-1
297237												
Mardin----------	0-8	Channery silt loam	GM, ML, CL, GC	A-4	0	5-20	65-75	60-70	50-70	35-60	25-35	5-10
	8-17	Channery silt loam, loam, channery loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, channery loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-30	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	30-60	Very channery loam, channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0-1	10-25	40-80	35-75	30-70	20-65	20-30	5-10
297238												
Mardin----------	0-8	Channery silt loam	GM, ML, CL, GC	A-4	0	5-20	65-75	60-70	50-70	35-60	25-35	5-10
	8-17	Channery silt loam, loam, channery loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, channery loam	GC, SC-SM, CL, CL-ML	A-4	0	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-30	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	30-60	Very channery loam, channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0-1	10-25	40-80	35-75	30-70	20-65	20-30	5-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297239												
Mardin----------	0-8	Stony loam	GM, ML, CL, GC	A-4	10-20	5-10	65-75	60-70	50-70	35-60	25-35	5-10
	8-17	Channery silt loam, loam, channery loam	GC, SC, CL, CL-ML	A-4	5-15	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, channery loam	GC, SC, CL, CL-ML	A-4	5-15	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-30	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	30-60	Very channery loam, channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0-1	10-25	40-80	35-75	30-70	20-65	20-30	5-10
297240												
Mardin----------	0-8	Stony loam	GM, ML, CL, GC	A-4	10-20	5-10	65-75	60-70	50-70	35-60	25-35	5-10
	8-17	Channery silt loam, loam, channery loam	GC, SC, CL, CL-ML	A-4	5-15	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	17-21	Channery silt loam, loam, channery loam	GC, SC, CL, CL-ML	A-4	5-15	5-10	60-90	55-90	45-90	35-80	15-25	5-10
	21-30	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	30-60	Very channery loam, channery silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-80	35-75	30-70	20-65	20-30	5-10
	60-80	Channery loam, channery silt loam, very channery loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0-1	10-25	40-80	35-75	30-70	20-65	20-30	5-10
297241												
Unadilla--------	0-13	Silt loam	ML, CL-ML	A-4	0	0	100	100	100	80-95	15-35	5-10
	13-49	Silt loam	CL, ML, CL-ML	A-4	0	0	100	100	100	80-95	15-25	3-10
	49-80	Silt loam	CL, ML, CL-ML	A-4	0	0	100	100	100	75-90	15-25	3-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297242												
Shohola---------	0-3	Extremely flaggy loam	SM, CL, GM, ML	A-6, A-4	5-20	15-35	70-90	65-85	60-80	40-75	20-30	3-15
	3-24	Very flaggy loam, extremely flaggy loam, extremely flaggy fine sandy loam, extremely flaggy silt loam	SM, CL, ML, CL-ML, GM	A-6, A-4	1-5	0-15	65-95	65-90	60-85	40-80	15-25	3-12
	24-72	Very gravelly fine sandy loam, very gravelly loam, very gravelly sandy loam, very flaggy fine sandy loam	SC, SC-SM, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	NP-10
Edgemere--------	0-2	Extremely stony mucky peat	GW, PT	A-8	0	0	0	100	---	---	20-40	NP
	2-5	Extremely stony loam, extremely stony silt loam	OL, SM, GM, ML	A-7, A-5	10-30	5-25	70-90	65-85	60-80	40-75	40-50	5-15
	5-24	Very stony sandy loam, extremely stony loam	SM, CL, GM, ML	A-4	5-20	5-20	65-95	65-90	60-85	40-80	25-35	5-10
	24-66	Very gravelly sandy loam, very gravelly loam	SC-SM, SC, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	5-10
297243												
Shohola---------	0-3	Extremely flaggy loam	SM, CL, GM, ML	A-6, A-4	5-20	15-35	70-90	65-85	60-80	40-75	20-30	3-15
	3-24	Very flaggy loam, extremely flaggy loam, extremely flaggy fine sandy loam, extremely flaggy silt loam	SM, CL, ML, CL-ML, GM	A-6, A-4	1-5	0-15	65-95	65-90	60-85	40-80	15-25	3-12
	24-72	Very gravelly fine sandy loam, very gravelly loam, very gravelly sandy loam, very flaggy fine sandy loam	SC, SC-SM, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	NP-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297243												
Edgemere--------	0-2	Extremely stony mucky peat	GW, PT	A-8	0	0	0	100	---	---	20-40	NP
	2-5	Extremely stony loam, extremely stony silt loam	OL, SM, GM, ML	A-7, A-5	10-30	5-25	70-90	65-85	60-80	40-75	40-50	5-15
	5-24	Very stony sandy loam, extremely stony loam	SM, CL, GM, ML	A-4	5-20	5-20	65-95	65-90	60-85	40-80	25-35	5-10
	24-66	Very gravelly sandy loam, very gravelly loam	SC-SM, SC, CL-ML, GC	A-4, A-2	1-5	10-25	60-90	55-70	35-70	20-65	15-25	5-10
297244												
Lordstown-------	0-3	Very channery loam	SM, ML, GM	A-4	0-1	20-40	65-85	50-75	50-75	40-65	15-30	NP-4
	3-28	Gravelly fine sandy loam, channery loam	SM, ML, GM	A-4	0	5-10	65-85	50-75	50-75	40-65	15-30	NP-4
	28-30	Very gravelly loam, channery silt loam, gravelly sandy loam	SM, ML, GM	A-4, A-2, A-1	0	5-25	40-75	30-70	25-70	15-60	15-30	NP-4
	30-40	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
Swartswood------	0-4	Stony fine sandy loam	SM, ML, GM	A-4, A-2, A-1	5-15	5-20	60-90	50-85	30-80	15-65	15-25	NP-3
	4-32	Channery loam, flaggy sandy loam, channery fine sandy loam	SM, ML, GM	A-4, A-2, A-1	0-1	0-25	60-90	50-90	30-85	15-65	10-25	NP-3
	32-70	Very gravelly fine sandy loam, flaggy sandy loam, channery loam	ML, SM, GM, GW-GM	A-4, A-2, A-1	0-1	5-25	50-80	35-80	20-70	10-60	10-20	NP-3
297247												
Chenango--------	0-10	Gravelly fine sandy loam	SM, ML	A-2-4, A-1	0-1	0-5	60-90	55-80	40-80	20-70	15-35	NP-5
	10-29	Gravelly fine sandy loam, very gravelly fine sandy loam	SM, GM	A-2-4, A-1	0-5	0-10	55-80	35-75	30-75	15-50	15-20	NP-5
	29-70	Extremely cobbly loamy coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand	GW-GM, GP-GM, GM	A-1	5-10	10-25	30-65	15-45	7-40	1-15	10-20	NP

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
297248												
Chenango--------	0-10	Gravelly fine sandy loam	SM, ML	A-2-4, A-1	0-1	0-5	60-90	55-80	40-80	20-70	15-35	NP-5
	10-29	Gravelly fine sandy loam, very gravelly fine sandy loam	SM, GM	A-2-4, A-1	0-5	0-10	55-80	35-75	30-75	15-50	15-20	NP-5
	29-70	Extremely cobbly loamy coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand	GW-GM, GP-GM, GM	A-1	5-10	10-25	30-65	15-45	7-40	1-15	10-20	NP
297249												
Chenango--------	0-10	Gravelly fine sandy loam	SM, ML	A-2-4, A-1	0-1	0-5	60-90	55-80	40-80	20-70	15-35	NP-5
	10-29	Gravelly fine sandy loam, very gravelly fine sandy loam	SM, GM	A-2-4, A-1	0-5	0-10	55-80	35-75	30-75	15-50	15-20	NP-5
	29-70	Extremely cobbly loamy coarse sand, very gravelly loamy coarse sand, extremely gravelly loamy coarse sand	GW-GM, GP-GM, GM	A-1	5-10	10-25	30-65	15-45	7-40	1-15	10-20	NP
297253												
Craigsville-----	0-5	Very gravelly loam	SM, SC-SM, SC, CL-ML, ML	A-4, A-2	2-15	0-25	65-90	60-85	40-75	25-60	20-35	NP-10
	5-27	Gravelly sandy loam, cobbly loam, very gravelly sandy loam	SM, SC-SM, SC, GC, GM	A-4, A-2, A-1	0	25-60	50-80	30-65	25-60	15-40	15-27	NP-10
	27-77	Very gravelly loamy sand, very gravelly sandy loam, extremely cobbly loamy sand	GM, GC-GM, GC	A-2, A-1	0	35-75	35-55	30-50	20-45	10-25	15-25	NP-8
Wyoming---------	0-3	Very cobbly sandy loam	SM, SW-SM, GM, GP-GM	A-3, A-2, A-1	0	10-40	40-90	30-80	10-60	8-35	20-35	NP-5
	3-33	Very cobbly fine sandy loam, gravelly sandy loam, very gravelly sandy loam	SM, SP-SM, GM, GP-GM	A-3, A-2, A-1	0	0-25	40-75	35-70	5-55	5-35	15-27	NP-5
	33-72	Extremely cobbly loamy coarse sand, very gravelly sand, gravelly sandy loam	SM, SW, GP-GM, GW	A-1	0-5	5-30	30-65	20-55	5-50	1-13	10-25	NP-5

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298049												
Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Loam	SC-SM, ML, CL	A-6, A-4	0	0	87-100	74-100	61-90	42-66	24-38	6-11
	3-5	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	5-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-30	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	30-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, GP-GM, SC	A-6, A-2-4, A-1-a	0	0	33-87	33-87	22-75	10-45	0-28	NP-11
298050												
Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298050 Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
298051 Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, SC, GP-GM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298051												
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	GM, GC-GM, CL	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
298075												
Colonie---------	0-2	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	2-11	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	11-24	Loamy fine sand, fine sand	SP-SM, SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	24-40	Loamy fine sand, fine sandy loam, fine sand	SP-SM, SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	40-62	Loamy fine sand, fine sandy loam, fine sand	SP-SM, SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
298188												
Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298189 Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
298221 Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298222												
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
298223												
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298255												
Delaware, rarely flooded-	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	80-100	33-53	0-36	NP-10
	4-11	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	95-100	91-100	79-100	28-48	0-30	NP-11
	11-20	Fine sandy loam	SM, SC-SM, CL	A-2-4, A-4	0	0	95-100	91-100	81-100	35-57	0-27	NP-11
	20-33	Fine sandy loam	CL-ML, SM, ML	A-4	0	0	96-100	91-100	81-100	37-60	0-27	NP-11
	33-41	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	79-100	34-57	0-27	NP-11
	41-56	Loamy sand, loam, fine sandy loam	CL-ML, SM, CL	A-2-4, A-4	0	0	95-100	90-100	77-100	35-61	0-27	NP-11
	56-60	Loamy sand, fine sandy loam, loam	SM, CL, CL-ML	A-4	0	0	95-100	91-100	79-100	47-74	0-27	NP-11
298256												
Delaware, rarely flooded-	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	80-100	33-53	0-36	NP-10
	4-11	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	95-100	91-100	79-100	28-48	0-30	NP-11
	11-20	Fine sandy loam	SM, CL, SC-SM	A-2-4, A-4	0	0	95-100	91-100	81-100	35-57	0-27	NP-11
	20-33	Fine sandy loam	CL-ML, SM, ML	A-4	0	0	96-100	91-100	81-100	37-60	0-27	NP-11
	33-41	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	79-100	34-57	0-27	NP-11
	41-56	Loamy sand, loam, fine sandy loam	CL-ML, SM, CL	A-2-4, A-4	0	0	95-100	90-100	77-100	35-61	0-27	NP-11
	56-60	Loamy sand, fine sandy loam, loam	SM, CL, CL-ML	A-4	0	0	95-100	91-100	79-100	47-74	0-27	NP-11
298257												
Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Loam, sandy loam, fine sandy loam, very gravelly silt loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298258												
Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Loam, sandy loam, fine sandy loam, very gravelly silt loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13
298259												
Wallpack, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly silt loam	SC, OH	A-4, A-5	0	0	100	61-91	55-89	46-77	25-70	8-10
	2-5	Sandy loam, fine sandy loam, gravelly silt loam, loam	GC-GM, CL	A-4, A-6	0	0	63-91	63-91	51-91	37-75	21-32	5-11
	5-18	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GC-GM	A-6, A-4	0	0	64-92	64-92	52-92	37-75	19-27	5-11
	18-24	Fine sandy loam, sandy loam, silt loam, gravelly loam	CL, GC-GM, GC	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
	24-42	Fine sandy loam, sandy loam, gravelly silt loam, loam	GC-GM, CL	A-2-4, A-6	0	0	46-80	46-80	36-80	26-65	19-30	5-13
	42-60	Fine sandy loam, sandy loam, silt loam, gravelly loam	GC-GM, CL	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298260 Wallpack, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly silt loam	SC, OH	A-4, A-5	0	0	100	61-91	55-89	46-77	25-70	8-10
	2-5	Sandy loam, fine sandy loam, gravelly silt loam, loam	GC-GM, CL	A-4, A-6	0	0	63-91	63-91	51-91	37-75	21-32	5-11
	5-18	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GC-GM	A-6, A-4	0	0	64-92	64-92	52-92	37-75	19-27	5-11
	18-24	Fine sandy loam, sandy loam, silt loam, gravelly loam	CL, GC-GM, GC	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
	24-42	Fine sandy loam, sandy loam, gravelly silt loam, loam	GC-GM, CL	A-2-4, A-6	0	0	46-80	46-80	36-80	26-65	19-30	5-13
	42-60	Fine sandy loam, sandy loam, silt loam, gravelly loam	GC-GM, CL	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
298261 Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Loam, sandy loam, fine sandy loam, very gravelly silt loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298262 Wallpack, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly silt loam	SC, OH	A-4, A-5	0	0	100	61-91	55-89	46-77	25-70	8-10
	2-5	Sandy loam, fine sandy loam, gravelly silt loam, loam	GC-GM, CL	A-4, A-6	0	0	63-91	63-91	51-91	37-75	21-32	5-11
	5-18	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GC-GM	A-6, A-4	0	0	64-92	64-92	52-92	37-75	19-27	5-11
	18-24	Fine sandy loam, sandy loam, silt loam, gravelly loam	CL, GC-GM, GC	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
	24-42	Fine sandy loam, sandy loam, gravelly silt loam, loam	GC-GM, CL	A-2-4, A-6	0	0	46-80	46-80	36-80	26-65	19-30	5-13
	42-60	Fine sandy loam, sandy loam, silt loam, gravelly loam	GC-GM, CL	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
298265 Venango, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-6	Silt loam	CL	A-6	0	0	74-100	74-100	69-94	59-82	34-39	14
	6-16	Silty clay loam, loam, silt loam	CL	A-6	0	0	70-92	70-92	61-90	52-79	28-38	12-20
	16-22	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-89	27-42	12-24
	22-34	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-89	27-42	12-24
	34-60	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-89	27-42	12-24

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298266 Venango, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-6	Silt loam	CL	A-6	0	0	74-100	74-100	69-94	59-82	34-39	14
	6-16	Silty clay loam, loam, silt loam	CL	A-6	0	0	70-92	70-92	61-90	52-79	28-38	12-20
	16-22	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-90	27-46	12-27
	22-34	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-90	27-46	12-27
	34-60	Loam, silt loam, gravelly silty clay loam	GC, CL	A-7-6, A-6	0	0	46-93	46-93	42-93	38-90	27-45	12-27
298409 Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
298411												
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
298413												
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
318498												
Hazen, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-10	Loam	ML, SC-SM, CL	A-6, A-4	0	0	86-100	86-100	71-90	49-66	24-38	6-11
	10-18	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-4, A-1-b, A-2-4	0	0	72-100	72-100	50-79	23-41	16-26	2-8
	18-29	Sand, loamy sand, very stony loamy coarse sand, coarse sand	SC-SM, GP, SM	A-2-4, A-1-a, A-1-b	0-61	0-51	14-92	14-92	6-64	2-23	0-19	NP-4
	29-41	Sand, loamy sand, very gravelly coarse sand, loamy coarse sand	SP-SC, GP, SP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
	41-60	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SP-SC, GP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
318533												
Hazen, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-10	Loam	ML, SC-SM, CL	A-6, A-4	0	0	86-100	86-100	71-90	49-66	24-38	6-11
	10-18	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-4, A-1-b, A-2-4	0	0	72-100	72-100	50-79	23-41	16-26	2-8
	18-29	Sand, loamy sand, very stony loamy coarse sand, coarse sand	SC-SM, GP, SM	A-2-4, A-1-a, A-1-b	0-61	0-51	14-92	14-92	6-64	2-23	0-19	NP-4
	29-41	Sand, loamy sand, very gravelly coarse sand, loamy coarse sand	SP-SC, GP, SP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
	41-60	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SP-SC, GP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
319783												
Catden----------	0-2	Mucky peat	PT	A-8	0	0	100	100	100	100	0	NP
	2-13	Muck	PT	A-8	0	0	100	100	100	100	0	NP
	13-20	Woody muck	PT	A-8	0	0	100	100	100	100	0	NP
	20-32	Muck	PT	A-8	0	0	100	100	100	100	0	NP
	32-60	Muck	PT	A-8	0	0	100	100	100	100	0	NP
319784												
Fredon, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-8	Silt loam	ML, CL	A-4	0	0	85-100	85-100	75-96	66-86	30-38	8-11
	8-14	Fine sandy loam, very fine sandy loam, silt loam, loam	CL, ML	A-4	0	0	100	86-100	68-100	54-94	0-29	NP-11
	14-18	Fine sandy loam, very fine sandy loam, loam, silt loam	SM, CL	A-4	0	0	86-100	86-100	64-100	41-78	0-29	NP-11
	18-23	Fine sandy loam, very fine sandy loam, loam, silt loam	SM, CL	A-4	0	0	86-100	86-100	64-100	41-78	0-29	NP-11
	23-31	Loamy fine sand, loamy sand, sand, extremely gravelly loamy coarse sand, coarse sand	SP, SP-SM	A-1-b, A-1-a	0	0	77-87	21-49	10-34	3-12	0-19	NP-4
	31-36	Loamy fine sand, loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SP-SM, SP	A-1-a	0	0	78-87	21-49	8-30	1-8	0-19	NP-4
	36-45	Loamy fine sand, loamy sand, sand, very gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	68-87	14-49	5-30	1-8	0-19	NP-4
	45-55	Loamy fine sand, loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	65-87	14-49	5-30	1-8	0-19	NP-4
	55-60	Loamy fine sand, loamy sand, sand, very gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	78-88	21-49	8-30	1-8	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
319784												
Halsey, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-5	Silt loam	ML, CL	A-4	0	0	100	92-100	82-96	72-86	30-38	8-11
	5-11	Silt loam	ML, CL	A-4	0	0	100	92-100	82-96	72-86	30-38	8-11
	11-20	Loam, very fine sandy loam, silt loam, fine sandy loam	ML, CL	A-4	0	0	100	86-100	68-100	54-94	0-30	NP-11
	20-25	Sand, loamy fine sand, coarse sand, loamy sand, loamy coarse sand	SP-SM, SM	A-1-b, A-2-4	0	0	100	54-92	32-76	8-24	0-19	NP-4
	25-35	Sand, loamy fine sand, loamy coarse sand, very gravelly coarse sand, loamy sand	SM, SW	A-1-b, A-1-a	0	0	66-85	25-78	10-48	1-13	0-19	NP-4
	35-49	Sand, loamy fine sand, loamy coarse sand, very gravelly coarse sand, loamy sand	SP-SM, SW	A-1-b, A-1-a	0	0	60-70	25-60	10-37	1-10	0-19	NP-4
	49-56	Sand, loamy fine sand, loamy coarse sand, extremely gravelly coarse sand, loamy sand	SP-SM, SW, SP	A-1-b, A-1-a	0	0	60-66	25-60	10-37	1-10	0-19	NP-4
	56-60	Sand, loamy fine sand, loamy coarse sand, extremely gravelly coarse sand, loamy sand	SP-SM, GP	A-1-b, A-1-a	0	0	43-66	25-60	10-37	1-10	0-19	NP-4
543222												
Andover, extremely stony	0-8	Gravelly loam	SM, CL-ML, SC, CL, ML	A-4, A-2	5-10	5-15	70-100	65-95	60-90	30-85	20-25	NP-10
	8-17	Gravelly clay loam, gravelly loam, cobbly sandy clay loam	SM, SC-SM, SC, CL, ML	A-4, A-2	0-3	0-25	80-95	65-85	60-80	30-60	20-35	2-10
	17-53	Gravelly clay loam, gravelly loam, cobbly sandy clay loam	SC-SM, SM, CL-ML, ML	A-4, A-2	0-3	0-25	80-95	65-85	60-85	30-60	20-35	2-9
	53-65	Gravelly loam, very gravelly loam, cobbly sandy loam	SC-SM, SM, CL-ML, ML	A-4, A-2	0-3	5-30	70-95	55-90	50-75	25-60	20-35	2-9

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543222												
Buchanan, extremely stony	0-6	Gravelly loam	ML, SC, GM, CL, CL-ML	A-6, A-4, A-2	6-20	15-35	50-85	45-70	40-70	30-60	20-35	2-11
	6-23	Gravelly loam, silt loam, gravelly sandy clay loam	SM, GC, ML, CL, GM	A-6, A-4, A-2	0-3	0-20	50-100	45-90	40-90	20-80	20-35	2-15
	23-47	Gravelly loam, loam, channery clay loam	SM, SC, ML, CL, GM	A-6, A-4, A-2	0-3	0-20	50-100	30-80	30-75	20-60	20-35	2-15
	47-61	Gravelly loam, silt loam, channery clay loam	SM, SC, ML, CL, GM	A-6, A-4, A-2	0-1	0-20	50-100	30-80	30-75	20-60	20-35	2-15
543243												
Berks----------	0-10	Channery loam	ML, SC, GC, GM	A-4, A-2	0	5-20	50-80	45-70	40-60	30-55	20-42	2-15
	10-26	Channery silty clay loam, very channery loam, very channery silt loam	SC, SM, GC, GM	A-4, A-6, A-1, A-2	0	0-20	40-80	35-70	30-60	20-50	16-42	2-22
	26-33	Channery loam, extremely channery loam, channery silt loam	GC, SM, GM	A-2, A-1	0	0-30	35-65	25-55	20-40	15-35	16-32	2-13
	33-43	Bedrock	---	---	---	---	---	---	---	---	---	---
Weikert---------	0-8	Channery silt loam	SM, ML, GM	A-4, A-2, A-1	0	0-10	35-70	35-70	25-65	20-55	30-40	4-10
	8-15	Very channery silt loam, gravelly loam	GP-GM, GM	A-2, A-1	0-1	0-20	15-60	10-55	5-45	5-35	28-36	3-9
	15-18	Extremely channery silt loam, very channery silt loam, gravelly loam	GP-GM, GM	A-2, A-1	0-1	0-30	15-60	10-55	5-45	5-35	28-36	3-9
	18-20	Bedrock	---	---	---	---	---	---	---	---	---	---
543246												
Buchanan--------	0-7	Silt loam, gravelly loam	ML, SC, GM, CL, CL-ML	A-6, A-4, A-2	0	0-10	50-100	45-75	40-75	30-65	20-35	2-11
	7-21	Gravelly loam, silt loam, clay loam	SM, GC, ML, CL, GM	A-6, A-4, A-2	0	0-20	50-100	45-90	40-90	20-80	20-35	2-15
	21-65	Cobbly clay loam, silt loam, loam	SM, SC, ML, CL, GM	A-6, A-4, A-2	0-1	0-25	50-100	30-80	30-75	20-60	20-35	2-15

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543247												
Buchanan, extremely stony	0-3	Silt loam, gravelly loam	ML, SC, SC-SM, CL, CL-ML, GM	A-6, A-4, A-2	0	0-10	50-100	45-75	40-75	30-65	20-35	2-11
	3-21	Gravelly loam, silt loam, clay loam	SM, GC, ML, CL, GM	A-6, A-4, A-2	0	0-20	50-100	45-90	40-90	20-80	20-35	2-15
	21-65	Cobbly clay loam, silt loam, loam	SM, SC, ML, CL, GM	A-6, A-4, A-2	0-1	0-25	50-100	30-80	30-75	20-60	20-35	2-15
543257												
Chippewa--------	0-8	Silt loam	OL, ML	A-7, A-5	0-1	0-5	80-100	75-100	65-95	55-85	40-50	5-15
	8-16	Channery silt loam, loam, channery silty clay loam	SC-SM, CL, ML, CL-ML, GM	A-4	0-1	5-10	65-85	60-85	45-85	35-75	25-35	5-10
	16-48	Very channery silt loam, channery loam, channery silty clay loam	GC, SC, CL, CL-ML	A-4, A-2	0-2	10-15	60-80	55-70	45-70	30-65	15-25	5-10
	48-80	Very channery silt loam, channery loam, channery silty clay loam	SM, GC, ML, CL-ML, GM	A-4, A-2	0-2	10-15	60-80	55-70	45-70	30-65	25-35	5-10
543258												
Chippewa--------	0-8	Silt loam	OL, ML	A-7, A-5	0-1	0-5	80-100	75-100	65-95	55-85	40-50	5-15
	8-16	Channery silt loam, loam, channery silty clay loam	ML, SC-SM, CL, GM	A-4	0-1	5-10	65-85	60-85	45-85	35-75	25-35	5-10
	16-48	Very channery silt loam, channery loam, channery silty clay loam	GC, SC, CL, CL-ML	A-4, A-2	0-2	10-15	60-80	55-70	45-70	30-65	15-25	5-10
	48-80	Very channery silt loam, channery loam, channery silty clay loam	SM, GC, ML, CL-ML, GM	A-4, A-2	0-2	10-15	60-80	55-70	45-70	30-65	25-35	5-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543259 Chippewa, extremely stony	0-8	Gravelly silt loam	OL, SM, GM, ML	A-7, A-5	5-25	5-25	65-90	60-80	50-70	35-65	40-50	5-15
	8-16	Channery silt loam, loam, channery silty clay loam	GM, ML, CL, GC	A-4	0-1	5-10	65-85	60-85	45-85	35-75	25-35	5-10
	16-48	Very channery silt loam, channery loam, channery silty clay loam	GC, SC, CL, CL-ML	A-4, A-2	0-2	10-25	60-80	55-70	45-70	30-65	15-25	5-10
	48-80	Very channery silt loam, channery loam, channery silty clay loam	GM, ML, CL, GC	A-4, A-2	0-2	10-25	60-80	55-70	45-70	30-65	25-35	5-10
543271 Delaware--------	0-10	Fine sandy loam, loam	SM, ML	A-4	0	0	100	95-100	75-95	45-55	10-15	NP
	10-40	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0-1	99-100	95-100	70-90	40-55	10-15	NP
	40-87	Loamy fine sand, fine sandy loam, loamy sand	SM, ML	A-4, A-2	0	0-5	95-100	95-100	80-95	20-55	10-15	NP
543276 Fluvaquents-----	0-6	Silt loam	SM, SC-SM, CL-ML, ML	A-4, A-2	0-3	0-5	80-100	65-95	30-65	5-55	0-25	NP-8
	6-62	Gravelly silty clay loam, gravelly sand, clay	SM, SC, CL, ML	A-4, A-2	0-5	0-8	80-100	65-95	30-65	5-60	0-40	NP-20
543292 Hazleton, extremely stony	0-6	Very channery loam	SM, GC-GM, GM, ML	A-4, A-2	5-20	15-50	60-85	50-80	50-70	35-55	10-25	NP-8
	6-43	Very channery loam, channery loam, loam	SM, SC-SM, SC, GM, ML	A-4, A-2, A-1	0-5	0-50	60-95	45-90	35-70	20-55	15-30	NP-8
	43-55	Extremely channery loam, very channery loam, very channery sandy loam, very channery loamy sand	SM, GC-GM, SC, GC, GM	A-4, A-2, A-1	2-10	5-60	50-80	35-75	25-65	15-50	15-30	NP-8
	55-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543293 Hazleton, extremely stony	0-6	Very channery loam	SM, GC-GM, GM, ML	A-4, A-2	5-20	15-50	60-85	50-80	50-70	35-55	10-25	NP-8
	6-43	Very channery loam, channery loam, loam	SM, SC-SM, SC, GM, ML	A-4, A-2, A-1	0-5	0-50	60-95	45-90	35-70	20-55	15-30	NP-8
	43-60	Extremely channery loam, very channery loam, very channery sandy loam, very channery loamy sand	SM, GC-GM, SC, GC, GM	A-4, A-2, A-1	2-10	5-60	50-80	35-75	25-65	15-50	15-30	NP-8
	60-80	Bedrock	---	---	---	---	---	---	---	---	---	---
543299 Laidig, extremely stony	0-3	Very gravelly loam	SC-SM, SM, CL-ML, GC-GM	A-4	5-20	15-30	65-90	50-80	45-80	35-70	15-30	NP-10
	3-38	Gravelly loam, channery sandy clay loam, channery sandy loam	SC, SM, CL, ML	A-6, A-4, A-2	0-5	5-20	70-95	50-90	40-80	20-70	15-40	2-18
	38-62	Gravelly loam, very channery loam, channery sandy loam	GC-GM, SC, CL-ML, GC	A-6, A-4, A-2	0-5	5-20	50-90	40-85	30-80	15-70	15-35	2-16
543300 Laidig, extremely stony	0-3	Very gravelly loam	SC-SM, SM, CL-ML, GC-GM	A-4	5-20	15-30	65-90	50-80	45-80	35-70	15-30	NP-10
	3-38	Gravelly loam, channery sandy clay loam, channery sandy loam	SC, SM, CL, ML	A-6, A-4, A-2	0-5	5-20	70-95	50-90	40-80	20-70	15-40	2-18
	38-62	Gravelly loam, very channery loam, channery sandy loam	GC-GM, SC, CL-ML, GC	A-6, A-4, A-2	0-5	5-20	50-90	40-85	30-80	15-70	15-35	2-16
543304 Laidig----------	0-3	Very gravelly loam	SC-SM, SM, CL-ML, GC-GM	A-4	5-20	15-30	65-90	50-80	45-80	35-70	15-30	NP-10
	3-38	Gravelly loam, channery sandy clay loam, channery sandy loam	SC, SM, CL, ML	A-6, A-4, A-2	0-5	5-20	70-95	50-90	40-80	20-70	15-40	2-18
	38-62	Gravelly loam, very channery loam, channery sandy loam	GC-GM, SC, CL-ML, GC	A-6, A-4, A-2	0-5	5-20	50-90	40-85	30-80	15-70	15-35	2-16

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543327												
Swartswood------	0-11	Gravelly loam	SM, ML, GM	A-4, A-2, A-1	0	0-20	60-90	50-75	30-60	15-55	15-25	NP-4
	11-34	Gravelly fine sandy loam, flaggy sandy loam, channery loam	SM, ML, GM	A-4, A-2, A-1	0	0-25	60-90	50-90	30-85	15-65	0-25	NP-3
	34-47	Very gravelly fine sandy loam, flaggy sandy loam, channery loam	ML, SM, GM, GW-GM	A-4, A-2, A-1	0	5-25	50-85	35-80	20-75	10-60	0-20	NP-3
543328												
Swartswood------	0-11	Gravelly loam	SM, ML, GM	A-4, A-2, A-1	0	0-20	60-90	50-75	30-60	15-55	15-25	NP-4
	11-34	Gravelly fine sandy loam, flaggy sandy loam, channery loam	SM, ML, GM	A-4, A-2, A-1	0	0-25	60-90	50-90	30-85	15-65	0-25	NP-3
	34-47	Very gravelly fine sandy loam, flaggy sandy loam, channery loam	ML, SM, GM, GW-GM	A-4, A-2, A-1	0	5-25	50-85	35-80	20-75	10-60	0-20	NP-3
543330												
Swartswood, extremely stony	0-11	Gravelly loam	SM, ML, GM	A-4, A-2, A-1	2-15	5-20	60-90	50-85	30-80	15-65	15-25	NP-3
	11-34	Channery loam, flaggy sandy loam, gravelly fine sandy loam	SM, ML, GM	A-4, A-2, A-1	0	0-25	60-90	50-90	30-85	15-65	0-25	NP-3
	34-47	Very gravelly fine sandy loam, flaggy sandy loam, channery loam	ML, SM, GM, GW-GM	A-4, A-2, A-1	0	5-25	50-80	35-80	20-70	10-60	0-20	NP-3
Wurtsboro, extremely stony	0-10	Gravelly loam	SM, ML, GM	A-4, A-2	0-10	15-25	70-100	65-90	55-90	30-70	0-14	---
	10-20	Gravelly loam, fine sandy loam, channery silt, gravelly fine sandy loam	SM, GM	A-4, A-2	0	0-15	70-95	55-90	45-85	30-50	0-30	NP-4
	20-64	Fine sandy loam, very gravelly fine sandy loam, very gravelly loam	SM, GM	A-4, A-2, A-1	0	0-20	50-95	35-90	30-80	20-50	0-25	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543331												
Swartswood, extremely stony	0-11	Gravelly loam	SM, ML, GM	A-4, A-2, A-1	2-15	5-20	60-90	50-85	30-80	15-65	15-25	NP-3
	11-34	Channery loam, flaggy sandy loam, gravelly fine sandy loam	SM, ML, GM	A-4, A-2, A-1	0	0-25	60-90	50-90	30-85	15-65	0-25	NP-3
	34-47	Very gravelly fine sandy loam, flaggy sandy loam, channery loam	ML, SM, GM, GW-GM	A-4, A-2, A-1	0	5-25	50-80	35-80	20-70	10-60	0-20	NP-3
Wurtsboro, extremely stony	0-10	Gravelly loam	SM, ML, GM	A-4, A-2	0-10	15-25	70-100	65-90	55-90	30-70	0-14	---
	10-20	Gravelly loam, fine sandy loam, channery silt loam, gravelly fine sandy loam	SM, GM	A-4, A-2	0	0-15	70-95	55-90	45-85	30-50	0-30	NP-4
	20-64	Fine sandy loam, very gravelly fine sandy loam, very gravelly loam	SM, GM	A-4, A-2, A-1	0	0-20	50-95	35-90	30-80	20-50	0-25	NP-4
543359												
Volusia---------	0-8	Gravelly silt loam	GC, SC, CL, CL-ML	A-4	0	0-5	70-85	65-80	55-80	40-70	15-25	5-10
	8-15	Channery silt loam, channery loam, silt loam	GC-GM, SC, CL, CL-ML	A-4	0	5-10	65-90	60-85	50-85	35-75	15-25	5-10
	15-70	Channery silt loam, channery loam, silty clay loam	SC, SC-SM, CL, CL-ML	A-4	0	10-25	75-90	70-85	60-85	40-80	20-30	5-10
	70-80	Very channery loam, channery loam, silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0	10-25	40-90	35-85	30-85	20-75	20-30	5-10
543360												
Volusia, extremely stony	0-8	Gravelly silt loam	SC, GC, CL	A-4	5-25	5-25	65-85	60-80	50-80	35-70	15-25	5-10
	8-15	Channery silt loam, channery loam, silt loam	GC-GM, SC, CL, CL-ML	A-4	0-1	5-10	65-90	60-85	50-85	35-75	15-25	5-10
	15-70	Channery silt loam, channery loam, silty clay loam	SC, SC-SM, CL, CL-ML	A-4	0-1	10-25	75-90	70-85	60-85	40-80	20-30	5-10
	70-80	Very channery loam, channery loam, silt loam	GC, SC, CL, CL-ML	A-4, A-2, A-1	0-1	10-25	40-90	35-85	30-85	20-75	20-30	5-10

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
543374												
Wurtsboro-------	0-10	Gravelly silt loam	SM, GM	A-4, A-2	0	0-10	70-95	65-75	55-70	30-50	15-25	NP-5
	10-20	Gravelly loam, fine sandy loam, gravelly sandy loam, channery silt loam	SM, GM	A-4, A-2	0	0-15	70-95	55-90	45-85	30-50	0-30	NP-4
	20-64	Fine sandy loam, very gravelly sandy loam, very channery loam	SM, GM	A-4, A-2, A-1	0-1	0-20	50-95	35-90	30-80	20-50	0-25	NP-4
543375												
Wurtsboro-------	0-10	Gravelly silt loam	SM, GM	A-4, A-2	0	0-10	70-95	65-75	55-70	30-50	15-25	NP-5
	10-20	Gravelly loam, fine sandy loam, gravelly sandy loam, channery silt loam	SM, GM	A-4, A-2	0	0-15	70-95	55-90	45-85	30-50	0-30	NP-4
	20-64	Fine sandy loam, very gravelly sandy loam, very channery loam	SM, GM	A-4, A-2, A-1	0-1	0-20	50-95	35-90	30-80	20-50	0-25	NP-4
612280												
Scio----------	0-6	Silt loam	ML, CL	A-7-5, A-4	0	0	100	100	89-96	78-86	27-46	8-11
	6-13	Silt loam	ML, CL	A-7-5, A-4	0	0	100	100	89-96	78-86	27-46	8-11
	13-23	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	19-33	3-12
	23-28	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-31	3-12
	28-50	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-30	3-12
	50-59	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-29	3-12
	59-72	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-29	3-12
612666												
Colonie---------	0-2	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	2-11	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	11-24	Loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	24-40	Loamy fine sand, fine sandy loam, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	40-62	Loamy fine sand, fine sandy loam, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612668												
Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
Hazen, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-10	Loam	ML, SC-SM, CL	A-6, A-4	0	0	86-100	86-100	71-90	49-66	24-38	6-11
	10-18	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-4, A-1-b, A-2-4	0	0	72-100	72-100	50-79	23-41	16-26	2-8
	18-29	Sand, loamy sand, very stony loamy coarse sand, coarse sand	SC-SM, GP, SM	A-2-4, A-1-a, A-1-b	0-61	0-51	14-92	14-92	6-64	2-23	0-19	NP-4
	29-41	Sand, loamy sand, very gravelly coarse sand, loamy coarse sand	SP-SC, GP, SP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
	41-60	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SP-SC, GP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612724												
Lordstown, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Wallpack, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly silt loam	SC, OH	A-4, A-5	0	0	100	61-91	55-89	46-77	25-70	8-10
	2-5	Sandy loam, fine sandy loam, gravelly silt loam, loam	GC-GM, CL	A-4, A-6	0	0	63-91	63-91	51-91	37-75	21-32	5-11
	5-18	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GC-GM	A-6, A-4	0	0	64-92	64-92	52-92	37-75	19-27	5-11
	18-24	Fine sandy loam, sandy loam, silt loam, gravelly loam	CL, GC-GM, GC	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
	24-42	Fine sandy loam, sandy loam, gravelly silt loam, loam	GC-GM, CL	A-2-4, A-6	0	0	46-80	46-80	36-80	26-65	19-30	5-13
	42-60	Fine sandy loam, sandy loam, silt loam, gravelly loam	GC-GM, CL	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612732 Atherton, very poorly drained-	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-4	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	4-8	Mucky silt loam	OH	A-7-5	0	0	100	75-100	70-96	61-84	51-86	14-15
	8-10	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	MH, SM, CL	A-7-5, A-6, A-4	0	0	100	76-100	61-100	47-100	0-58	NP-23
	10-18	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	18-29	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	29-32	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	32-41	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	41-45	Loam, fine sandy loam, very fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24
	45-50	Fine sandy loam, loam, very fine sandy loam, silt loam, silty clay loam	SM, CL	A-7-6, A-6, A-4	0	0	100	75-100	56-100	41-98	0-44	NP-24
	50-60	Loam, very fine sandy loam, fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24
	60-70	Loam, fine sandy loam, very fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612732 Atherton, poorly drained-	0-6	Loam	OH, ML	A-6, A-7-5	0	0	100	73-100	68-98	56-83	36-52	11-14
	6-12	Loam, silty clay loam, fine sandy loam, silt loam, very fine sandy loam	SC-SM, CL	A-6, A-7-6, A-4	0	0	100	75-100	61-100	43-100	0-46	NP-24
	12-30	Fine sandy loam, loam, very fine sandy loam, silt loam, silty clay loam	SC-SM, CL	A-6, A-7-6, A-4	0	0	100	75-100	61-100	43-100	0-46	NP-24
	30-40	Fine sandy loam, loam, sandy clay loam, silt loam, silty clay loam, very fine sandy loam	SC-SM, CL	A-7-6, A-2-4, A-6	0	0	100	77-100	62-100	32-88	0-44	NP-24
	40-60	Fine sandy loam, loam, sandy clay loam, silt loam, silty clay loam, very fine sandy loam	SC-SM, CL	A-7-6, A-2-4, A-6	0	0	100	77-100	62-100	32-88	0-44	NP-24
612738 Fluvaquents, occasionally flooded--------	0-5	Silt loam	CL, CL-ML, ML	A-7-6, A-4	0	0-5	95-100	74-100	67-100	54-87	26-45	7-18
	5-12	Silt loam	CL-ML, CL	A-6, A-4	0	0-5	95-100	76-100	68-100	55-87	22-38	7-19
	12-18	Silty clay loam, sandy loam, silt loam, sandy clay loam	SM, CL	A-1-b, A-7-6, A-6	0	0-11	90-100	57-100	37-92	18-60	18-44	3-25
	18-24	Sandy clay loam, sandy loam, silty clay loam, silt loam	SM, CL	A-1-b, A-7-6, A-6	0	0-11	90-100	57-100	37-92	18-60	18-44	3-25
	24-60	Silty clay loam, sandy clay loam, silt loam, sandy loam	SM, CL, SC-SM	A-7-6, A-4, A-1-b	0-1	0-10	90-100	59-100	43-100	25-71	18-44	3-25

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612753 Wallpack, aeolian mantle, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	74-100	74-100	65-100	27-53	0-36	NP-10
	2-8	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	75-100	75-100	65-100	23-48	0-30	NP-11
	8-14	Silt loam, loam, fine sandy loam	SM, CL, SC-SM	A-2-4, A-4	0	0	75-96	75-96	63-96	27-62	0-28	NP-11
	14-21	Silt loam, fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	21-26	Silt loam, gravelly fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	26-31	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-a, A-1-b	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	31-36	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-b, A-1-a	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	36-60	Silt loam, gravelly fine sandy loam, loam	SM, GP-GM, CL-ML	A-1-a, A-4, A-2-4	0	0	33-90	33-90	27-90	12-58	0-28	NP-11
612756 Wallpack, aeolian mantle, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	74-100	74-100	65-100	27-53	0-36	NP-10
	2-8	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	75-100	75-100	65-100	23-48	0-30	NP-11
	8-14	Silt loam, loam, fine sandy loam	SM, CL, SC-SM	A-2-4, A-4	0	0	75-96	75-96	63-96	27-62	0-28	NP-11
	14-21	Silt loam, fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	21-26	Silt loam, gravelly fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	26-31	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-a, A-1-b	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	31-36	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-b, A-1-a	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	36-60	Silt loam, gravelly fine sandy loam, loam	SM, GP-GM, CL-ML	A-1-a, A-4, A-2-4	0	0	33-90	33-90	27-90	12-58	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612757 Wallpack, aeolian mantle, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	74-100	74-100	65-100	27-53	0-36	NP-10
	2-8	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	75-100	75-100	65-100	23-48	0-30	NP-11
	8-14	Silt loam, loam, fine sandy loam	SM, CL, SC-SM	A-2-4, A-4	0	0	75-96	75-96	63-96	27-62	0-28	NP-11
	14-21	Silt loam, fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	21-26	Silt loam, gravelly fine sandy loam, loam	CL-ML, GM, SM	A-1-b, A-4	0	0	50-96	50-96	42-96	19-65	0-28	NP-11
	26-31	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-a, A-1-b	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	31-36	Silt loam, very gravelly fine sandy loam, loam	CL-ML, GP-GM, GM	A-4, A-1-b, A-1-a	0	0-33	23-90	23-90	19-90	8-58	0-28	NP-11
	36-60	Silt loam, gravelly fine sandy loam, loam	SM, GP-GM, CL-ML	A-1-a, A-4, A-2-4	0	0	33-90	33-90	27-90	12-58	0-28	NP-11
612767 Wellsboro, extremely stony	0-8	Silt loam	ML, CL	A-4	0	10-15	91-97	91-97	76-88	69-82	29-38	8-11
	8-15	Loam, cobbly silt loam	CL-ML, CL	A-4	0	2-26	75-93	75-93	60-87	52-78	21-32	6-11
	15-24	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	71-91	71-91	58-88	43-69	20-28	6-11
	24-29	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	63-91	63-91	52-88	38-69	20-28	6-11
	29-37	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
	37-60	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
612768												
Wellsboro, extremely stony	0-8	Silt loam	ML, CL	A-4	0	10-15	91-97	91-97	76-88	69-82	29-38	8-11
	8-15	Loam, cobbly silt loam	CL-ML, CL	A-4	0	2-26	75-93	75-93	60-87	52-78	21-32	6-11
	15-24	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	71-91	71-91	58-88	43-69	20-28	6-11
	24-29	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	63-91	63-91	52-88	38-69	20-28	6-11
	29-37	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
	37-60	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
613393												
Alden, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-7	Silt loam	OH, ML	A-7-5, A-6	0	0	100	75-100	69-95	59-82	36-52	11-14
	7-14	Loam, silty clay loam, silt loam, very fine sandy loam	CL, ML	A-6, A-7-6, A-4	0	0	79-100	79-100	64-100	50-96	0-44	NP-24
	14-28	Very fine sandy loam, silt loam, silty clay loam, loam	CL, ML	A-4, A-7-6	0	0	80-100	80-100	69-100	58-100	0-44	NP-24
	28-43	Very fine sandy loam, silt loam, loam, silty clay loam	SM, CL	A-6, A-7-6, A-4	0	0	79-100	79-100	61-100	45-90	0-43	NP-24
	43-60	Silty clay loam, fine sandy loam, silt loam, loam	GC-GM, CL	A-2-4, A-7-6, A-6	0	0	56-93	56-93	45-93	35-83	19-43	4-24
613447												
Unadilla--------	0-8	Silt loam	ML, CL	A-4	0	0	100	95-100	84-96	74-86	27-42	8-11
	8-14	Silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-36	NP-11
	14-25	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	25-39	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	39-60	Fine sandy loam, loamy very fine sand, very fine sandy loam, silt loam	SM, ML, CL	A-4	0	0	100	75-100	64-100	36-82	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
613448												
Unadilla--------	0-8	Silt loam	ML, CL	A-4	0	0	100	95-100	84-96	74-86	27-42	8-11
	8-14	Silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-36	NP-11
	14-25	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	25-39	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	39-60	Fine sandy loam, loamy very fine sand, very fine sandy loam, silt loam	SM, ML, CL	A-4	0	0	100	75-100	64-100	36-82	0-28	NP-11
614075												
Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, SC, GP-GM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	GM, GC-GM, CL	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
620179												
Arnot, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lordstown, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
620180												
Arnot----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
620180												
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
620181												
Arnot-----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
623089												
Chippewa, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-4	Silt loam	CL	A-6	0	0	100	100	91-100	78-82	31-39	12-14
	4-8	Silty clay loam, loam, silt loam	CL	A-7-6, A-6	0	0	96-100	96-100	83-99	70-88	28-43	12-24
	8-13	Silty clay loam, clay loam, silt loam, loam	CL	A-7-6, A-6	0	0	92-100	92-100	79-99	67-88	28-43	12-24
	13-21	Loam, silty clay loam, fine sandy loam, silt loam, clay loam	CL, CL-ML	A-4, A-7-6, A-6	0	0	93-100	93-100	75-100	58-90	19-42	4-24
	21-29	Silty clay loam, clay loam, loam, silt loam, fine sandy loam	CL, CL-ML	A-4, A-7-6, A-6	0	0	93-100	93-100	75-100	58-90	19-42	4-24
	29-34	Loam, silty clay loam, fine sandy loam, silt loam, clay loam	GC-GM, CL	A-2-4, A-7-6, A-6	0	0	46-100	46-100	37-100	28-90	19-42	4-24
	34-60	Loam, silty clay loam, silt loam, fine sandy loam, clay loam	CL, SM, SC-SM	A-1-a, A-7-6, A-4	0	0	100	40-100	30-100	15-66	19-42	4-24
623109												
Farmington------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-3	Silt loam	ML, CL	A-4	0	0	90-100	90-100	80-96	71-86	27-38	8-11
	3-9	Fine sandy loam, very fine sandy loam, silt loam, loam	GM, CL	A-4	0	0	62-91	62-91	50-91	40-86	0-30	NP-11
	9-15	Fine sandy loam, very fine sandy loam, silt loam, loam	GM, CL	A-4	0	0	62-91	62-91	50-91	40-86	0-29	NP-11
	15-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624811												
Galway, very rocky----------	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	3-5	Loam	ML, CL-ML	A-4	0	0	88-100	88-100	73-90	51-66	25-40	6-11
	5-15	Fine sandy loam, silt loam, gravelly loam	GP-GM, SC, CL	A-1-a, A-4	0	0	17-100	17-100	13-98	8-73	0-29	NP-11
	15-24	Fine sandy loam, silt loam, gravelly loam	GP-GM, GC, CL	A-1-a, A-4	0	0	17-100	17-100	13-98	8-73	0-29	NP-11
	24-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624813 Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Stony loam, fine sandy loam, silt loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
624816 Lordstown, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624816 Wallpack, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly silt loam	SC, OH	A-5, A-4	0	0	100	61-91	55-89	46-77	25-70	8-10
	2-5	Sandy loam, fine sandy loam, gravelly silt loam, loam	GC-GM, CL	A-6, A-4	0	0	63-91	63-91	51-91	37-75	21-32	5-11
	5-18	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GC-GM	A-6, A-4	0	0	64-92	64-92	52-92	37-75	19-27	5-11
	18-24	Fine sandy loam, sandy loam, silt loam, gravelly loam	CL, GC-GM, GC	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
	24-42	Fine sandy loam, sandy loam, gravelly silt loam, loam	GC-GM, CL	A-2-4, A-6	0	0	46-80	46-80	36-80	26-65	19-30	5-13
	42-60	Fine sandy loam, sandy loam, silt loam, gravelly loam	GC-GM, CL	A-1-b, A-6	0	0	45-79	45-79	36-79	25-64	19-30	5-13
624822 Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624822												
Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Loam, sandy loam, fine sandy loam, very gravelly silt loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13
624823												
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Loam, sandy loam, fine sandy loam, very gravelly silt loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624824												
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Wallpack--------	0-3	Silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-96	25-80	25-33	8-11
	3-9	Gravelly silt loam	GC, CL	A-4, A-6, A-2-4	0	0	35-100	35-100	31-95	25-79	24-31	8-11
	9-16	Fine sandy loam, sandy loam, loam, gravelly silt loam	CL, GM	A-1-b, A-6	0	0	39-100	39-100	30-100	22-81	0-27	NP-11
	16-25	Fine sandy loam, sandy loam, gravelly silt loam, loam	SM, CL	A-1-b, A-6	0	0	71-100	41-100	32-100	23-81	0-29	NP-13
	25-65	Sandy loam, fine sandy loam, very gravelly silt loam, loam	CL, SP, SC	A-6, A-1-a	0	0	53-100	7-100	5-100	4-81	0-29	NP-13
624826												
Manlius, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Very channery silt loam	GC, ML	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	2-18	Loam, extremely channery silt loam	CL, GC, GC-GM	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	18-27	Loam, extremely channery silt loam	GC, GC-GM	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	27-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624826												
Nassau, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	2-15	Loam, extremely channery silt loam	GC-GM, CL, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	15-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624827												
Nassau, very rocky----------	0-7	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	7-13	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	13-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	Very channery silt loam	GC, ML	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	9-20	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	20-29	Loam, extremely channery silt loam	GC-GM, GC	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	29-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624828												
Nassau, very rocky----------	0-7	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	7-13	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	13-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	Very channery silt loam	ML, GC	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	9-20	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	20-29	Loam, extremely channery silt loam	GC-GM, GC	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	29-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624829												
Nassau, very rocky----------	0-7	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	7-13	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	13-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624829												
Manlius, very rocky----------	0-9	Very channery silt loam	ML, GC	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	9-20	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	20-29	Loam, extremely channery silt loam	GC-GM, GC	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	29-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624832												
Nassau----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	2-15	Loam, extremely channery silt loam	GC-GM, CL, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	15-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624841												
Oquaga----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624845												
Farmington------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-3	Silt loam	ML, CL	A-4	0	0	90-100	90-100	80-96	71-86	27-38	8-11
	3-9	Fine sandy loam, very fine sandy loam, silt loam, loam	GM, CL	A-4	0	0	62-91	62-91	50-91	40-86	0-30	NP-11
	9-15	Fine sandy loam, very fine sandy loam, silt loam, loam	GM, CL	A-4	0	0	62-91	62-91	50-91	40-86	0-29	NP-11
	15-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
624845												
Galway----------	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	3-5	Loam	ML, CL-ML	A-4	0	0	88-100	88-100	73-90	51-66	25-40	6-11
	5-15	Fine sandy loam, silt loam, gravelly loam	GP-GM, SC, CL	A-1-a, A-4	0	0	17-100	17-100	13-98	8-73	0-29	NP-11
	15-24	Fine sandy loam, silt loam, gravelly loam	GP-GM, GC, CL	A-1-a, A-4	0	0	17-100	17-100	13-98	8-73	0-29	NP-11
	24-80	Bedrock	---	---	---	---	---	---	---	---	---	---
624846												
Arnot----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
626816												
Udifluvents, occasionally flooded--------	0-3	Loamy sand	SM	A-2-4	0	0	100	100	74-84	18-28	0-35	NP-7
	3-16	Loamy sand	SC-SM, SM	A-2-4	0	0	100	100	74-84	18-28	0-30	NP-7
	16-22	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	22-27	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	27-32	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	32-60	Stratified loamy sand to sandy loam	SC-SM, SM	A-2-4	0	0	100	100	74-84	18-28	0-30	NP-7

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
635458												
Oquaga, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
635459												
Oquaga, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
635459												
Lackawanna, very rocky-----	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
740953												
Delaware, rarely flooded-	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	80-100	33-53	0-36	NP-10
	4-11	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	95-100	91-100	79-100	28-48	0-30	NP-11
	11-20	Fine sandy loam	SM, CL, SC-SM	A-2-4, A-4	0	0	95-100	91-100	81-100	35-57	0-27	NP-11
	20-33	Fine sandy loam	CL-ML, SM, ML	A-4	0	0	96-100	91-100	81-100	37-60	0-27	NP-11
	33-41	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	79-100	34-57	0-27	NP-11
	41-56	Loamy sand, loam, fine sandy loam	CL-ML, SM, CL	A-2-4, A-4	0	0	95-100	90-100	77-100	35-61	0-27	NP-11
	56-60	Loamy sand, fine sandy loam, loam	SM, CL, CL-ML	A-4	0	0	95-100	91-100	79-100	47-74	0-27	NP-11
740968												
Nassau, very rocky----------	0-7	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	7-13	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	13-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	Very channery silt loam	ML, GC	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	9-20	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	20-29	Loam, extremely channery silt loam	GC-GM, GC	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	29-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
740969												
Nassau, very rocky----------	0-7	Very channery silt loam	ML, CL, GC	A-4	0	0-32	53-100	52-100	46-96	41-86	30-38	8-11
	7-13	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-1-b, A-2-4	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	13-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	Very channery silt loam	ML, GC	A-4	0	8-32	53-91	52-91	46-87	41-78	27-44	8-11
	9-20	Loam, extremely channery silt loam	CL, GC-GM, GC	A-4, A-2-4, A-1-b	0	18-40	35-79	34-78	29-76	24-67	20-29	6-11
	20-29	Loam, extremely channery silt loam	GC-GM, GC	A-4, A-1-b, A-2-4	0	31-39	37-57	35-56	30-55	25-48	20-27	6-11
	29-80	Bedrock	---	---	---	---	---	---	---	---	---	---
740971												
Oquaga, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
740972												
Oquaga, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
740974												
Oquaga----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
740975												
Arnot----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
740987												
Scio----------	0-6	Silt loam	ML, CL	A-7-5, A-4	0	0	100	100	89-96	78-86	27-46	8-11
	6-13	Silt loam	ML, CL	A-7-5, A-4	0	0	100	100	89-96	78-86	27-46	8-11
	13-23	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	19-33	3-12
	23-28	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-31	3-12
	28-50	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-30	3-12
	50-59	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-29	3-12
	59-72	Very fine sandy loam, silt loam	ML, CL	A-6, A-4	0	0	100	100	82-100	68-97	18-29	3-12
740988												
Udifluvents, occasionally flooded--------	0-3	Loamy sand	SM	A-2-4	0	0	100	100	74-84	18-28	0-35	NP-7
	3-16	Loamy sand	SC-SM, SM	A-2-4	0	0	100	100	74-84	18-28	0-30	NP-7
	16-22	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	22-27	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	27-32	Sandy loam	SM, SC-SM, SC	A-6, A-2-4, A-4	0	0	100	100	70-86	32-48	0-35	NP-12
	32-60	Stratified loamy sand to sandy loam	SC-SM, SM	A-2-4	0	0	100	100	74-84	18-28	0-30	NP-7

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
740991												
Unadilla--------	0-8	Silt loam	ML, CL	A-4	0	0	100	95-100	84-96	74-86	27-42	8-11
	8-14	Silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-36	NP-11
	14-25	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	25-39	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	39-60	Fine sandy loam, loamy very fine sand, very fine sandy loam, silt loam	SM, ML, CL	A-4	0	0	100	75-100	64-100	36-82	0-28	NP-11
740992												
Unadilla--------	0-8	Silt loam	ML, CL	A-4	0	0	100	95-100	84-96	74-86	27-42	8-11
	8-14	Silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-36	NP-11
	14-25	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	25-39	Very fine sandy loam, loam, silt loam	ML, CL	A-4	0	0	100	91-100	74-100	61-97	0-29	NP-11
	39-60	Fine sandy loam, loamy very fine sand, very fine sandy loam, silt loam	SM, ML, CL	A-4	0	0	100	75-100	64-100	36-82	0-28	NP-11
740995												
Wellsboro, extremely stony	0-8	Silt loam	ML, CL	A-4	0	10-15	91-97	91-97	76-88	69-82	29-38	8-11
	8-15	Loam, cobbly silt loam	CL-ML, CL	A-4	0	2-26	75-93	75-93	60-87	52-78	21-32	6-11
	15-24	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	71-91	71-91	58-88	43-69	20-28	6-11
	24-29	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	63-91	63-91	52-88	38-69	20-28	6-11
	29-37	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
	37-60	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
740996 Wellsboro, extremely stony	0-8	Silt loam	ML, CL	A-4	0	10-15	91-97	91-97	76-88	69-82	29-38	8-11
	8-15	Loam, cobbly silt loam	CL-ML, CL	A-4	0	2-26	75-93	75-93	60-87	52-78	21-32	6-11
	15-24	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	71-91	71-91	58-88	43-69	20-28	6-11
	24-29	Silt loam, cobbly loam	CL, GC-GM, CL-ML	A-4	0	3-30	63-91	63-91	52-88	38-69	20-28	6-11
	29-37	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
	37-60	Loam, silt loam, cobbly sandy loam	CL, SC-SM	A-4, A-1-b, A-2-4	0	5-28	63-98	63-98	41-86	20-54	19-28	5-11
741149 Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
741150 Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-4, A-2-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
801114 Oquaga----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---
810906 Oquaga----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Channery loam	SC-SM, ML	A-7-5, A-4	0	4-18	78-96	77-96	66-89	48-67	25-44	6-11
	4-20	Fine sandy loam, very channery loam, silt loam	CL, GC-GM, GM	A-6, A-1-b, A-4	0	18-36	44-78	43-77	33-77	22-59	0-31	NP-11
	20-25	Fine sandy loam, sandy loam, extremely channery loam, silt loam	CL, GP-GM, GC-GM	A-6, A-2-4, A-1-a	0	23-46	14-70	12-70	9-70	6-54	0-29	NP-11
	25-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147465												
Alden, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-7	Silt loam	OH, ML	A-7-5, A-6	0	0	100	75-100	69-95	59-82	36-52	11-14
	7-14	Loam, silty clay loam, silt loam, very fine sandy loam	CL, ML	A-6, A-7-6, A-4	0	0	79-100	79-100	64-100	50-96	0-44	NP-24
	14-28	Very fine sandy loam, silt loam, silty clay loam, loam	CL, ML	A-4, A-7-6	0	0	80-100	80-100	69-100	58-100	0-44	NP-24
	28-43	Very fine sandy loam, silt loam, loam, silty clay loam	SM, CL	A-6, A-7-6, A-4	0	0	79-100	79-100	61-100	45-90	0-43	NP-24
	43-60	Silty clay loam, fine sandy loam, silt loam, loam	GC-GM, CL	A-2-4, A-7-6, A-6	0	0	56-93	56-93	45-93	35-83	19-43	4-24
1147467												
Arnot, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lordstown, very rocky----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147468												
Arnot----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
1147469												
Arnot----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL-ML, ML	A-4, A-6	0	0	100	100	83-90	57-66	27-40	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-27	NP-11
	3-4	Fine sandy loam	SM, CL, SC-SM	A-4, A-1-b, A-6	0	0	100	59-100	48-93	23-55	0-27	NP-11
	4-12	Silt loam, very gravelly loam	CL, GP-GC, GC	A-1-a, A-6, A-2-4	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	12-17	Silt loam, extremely gravelly loam	CL, GC, GP-GC	A-6, A-2-4, A-1-a	0	0	14-100	14-100	11-93	8-71	20-28	6-11
	17-80	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147469												
Lordstown-------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	CL, SC-SM, ML	A-7-5, A-4	0	0	100	82-100	68-90	47-66	27-44	6-11
	2-3	Fine sandy loam	SM, CL, SC-SM	A-4, A-6	0	0	100	100	80-93	38-55	0-28	NP-11
	3-5	Silt loam, loam	GC-GM, CL	A-2-4, A-4, A-6	0	0	47-100	47-100	38-93	27-71	21-29	6-11
	5-17	Silt loam, gravelly loam	CL, GW, GC	A-6, A-1-a, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	17-22	Silt loam, gravelly loam	CL, GW, GC	A-1-a, A-6, A-4	0	0	4-100	4-100	3-93	2-71	21-29	6-11
	22-36	Silt loam, loam, very gravelly fine sandy loam	GW, CL, GC-GM	A-6, A-2-4, A-1-a	0	0	4-100	4-100	3-98	1-62	0-28	NP-11
	36-80	Bedrock	---	---	---	---	---	---	---	---	---	---
1147470												
Atherton, very poorly drained-	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-4	Moderately decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	4-8	Mucky silt loam	OH	A-7-5	0	0	100	75-100	70-96	61-84	51-86	14-15
	8-10	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	MH, SM, CL	A-7-5, A-6, A-4	0	0	100	76-100	61-100	47-100	0-58	NP-23
	10-18	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	18-29	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	29-32	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	32-41	Loam, silt loam, fine sandy loam, silty clay loam, very fine sandy loam	SM, CL	A-7-6, A-6, A-4	0	0	100	78-100	62-100	48-100	0-46	NP-24
	41-45	Loam, fine sandy loam, very fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147470												
Atherton, very poorly drained-	45-50	Fine sandy loam, loam, very fine sandy loam, silt loam, silty clay loam	SM, CL	A-7-6, A-6, A-4	0	0	100	75-100	56-100	41-98	0-44	NP-24
	50-60	Loam, very fine sandy loam, fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24
	60-70	Loam, fine sandy loam, very fine sandy loam, silt loam, silty clay loam	CL, SM, SC-SM	A-7-6, A-2-4, A-4	0	0	100	75-100	56-100	27-80	0-44	NP-24
Atherton, poorly drained-	0-6	Loam	OH, ML	A-6, A-7-5	0	0	100	73-100	68-98	56-83	36-52	11-14
	6-12	Loam, silty clay loam, fine sandy loam, silt loam, very fine sandy loam	SC-SM, CL	A-6, A-7-6, A-4	0	0	100	75-100	61-100	43-100	0-46	NP-24
	12-30	Fine sandy loam, loam, very fine sandy loam, silt loam, silty clay loam	SC-SM, CL	A-6, A-7-6, A-4	0	0	100	75-100	61-100	43-100	0-46	NP-24
	30-40	Fine sandy loam, loam, sandy clay loam, silt loam, silty clay loam, very fine sandy loam	SC-SM, CL	A-7-6, A-2-4, A-6	0	0	100	77-100	62-100	32-88	0-44	NP-24
	40-60	Fine sandy loam, loam, sandy clay loam, silt loam, silty clay loam, very fine sandy loam	SC-SM, CL	A-7-6, A-2-4, A-6	0	0	100	77-100	62-100	32-88	0-44	NP-24
1147471												
Catden----------	0-2	Mucky peat	PT	A-8	0	0	100	100	100	100	0	NP
	2-13	Muck	PT	A-8	0	0	100	100	100	100	0	NP
	13-20	Woody muck	PT	A-8	0	0	100	100	100	100	0	NP
	20-32	Muck	PT	A-8	0	0	100	100	100	100	0	NP
	32-60	Muck	PT	A-8	0	0	100	100	100	100	0	NP

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147474 Chippewa, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-4	Silt loam	CL	A-6	0	0	100	100	91-100	78-82	31-39	12-14
	4-8	Silty clay loam, loam, silt loam	CL	A-7-6, A-6	0	0	96-100	96-100	83-99	70-88	28-43	12-24
	8-13	Silty clay loam, clay loam, silt loam, loam	CL	A-7-6, A-6	0	0	92-100	92-100	79-99	67-88	28-43	12-24
	13-21	Loam, silty clay loam, fine sandy loam, silt loam, clay loam	CL, CL-ML	A-4, A-7-6, A-6	0	0	93-100	93-100	75-100	58-90	19-42	4-24
	21-29	Silty clay loam, clay loam, loam, silt loam, fine sandy loam	CL, CL-ML	A-4, A-7-6, A-6	0	0	93-100	93-100	75-100	58-90	19-42	4-24
	29-34	Loam, silty clay loam, fine sandy loam, silt loam, clay loam	GC-GM, CL	A-2-4, A-7-6, A-6	0	0	46-100	46-100	37-100	28-90	19-42	4-24
	34-60	Loam, silty clay loam, silt loam, fine sandy loam, clay loam	CL, SM, SC-SM	A-1-a, A-7-6, A-4	0	0	100	40-100	30-100	15-66	19-42	4-24
1147475 Colonie---------	0-2	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	2-11	Loamy fine sand	SM	A-4	0	0	95-100	90-100	88-100	40-47	0-14	NP
	11-24	Loamy fine sand, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	24-40	Loamy fine sand, fine sandy loam, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
	40-62	Loamy fine sand, fine sandy loam, fine sand	SM, SP-SM	A-2-4, A-3	0	0	96-100	91-100	71-100	6-27	0-14	NP
1147478 Delaware, rarely flooded-	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-4	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	80-100	33-53	0-36	NP-10
	4-11	Fine sandy loam	SC-SM, SM	A-4, A-2-4	0	0	95-100	91-100	79-100	28-48	0-30	NP-11
	11-20	Fine sandy loam	SM, SC-SM, CL	A-2-4, A-4	0	0	95-100	91-100	81-100	35-57	0-27	NP-11
	20-33	Fine sandy loam	CL-ML, SM, ML	A-4	0	0	96-100	91-100	81-100	37-60	0-27	NP-11
	33-41	Fine sandy loam	CL-ML, SM	A-2-4, A-4	0	0	95-100	90-100	79-100	34-57	0-27	NP-11
	41-56	Loamy sand, loam, fine sandy loam	CL-ML, SM, CL	A-2-4, A-4	0	0	95-100	90-100	77-100	35-61	0-27	NP-11
	56-60	Loamy sand, fine sandy loam, loam	SM, CL, CL-ML	A-4	0	0	95-100	91-100	79-100	47-74	0-27	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147482 Fredon, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-8	Silt loam	ML, CL	A-4	0	0	85-100	85-100	75-96	66-86	30-38	8-11
	8-14	Fine sandy loam, very fine sandy loam, silt loam, loam	CL, ML	A-4	0	0	100	86-100	68-100	54-94	0-29	NP-11
	14-18	Fine sandy loam, very fine sandy loam, loam, silt loam	SM, CL	A-4	0	0	86-100	86-100	64-100	41-78	0-29	NP-11
	18-23	Fine sandy loam, very fine sandy loam, loam, silt loam	SM, CL	A-4	0	0	86-100	86-100	64-100	41-78	0-29	NP-11
	23-31	Loamy fine sand, loamy sand, sand, extremely gravelly loamy coarse sand, coarse sand	SP, SP-SM	A-1-b, A-1-a	0	0	77-87	21-49	10-34	3-12	0-19	NP-4
	31-36	Loamy fine sand, loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SP-SM, SP	A-1-a	0	0	78-87	21-49	8-30	1-8	0-19	NP-4
	36-45	Loamy fine sand, loamy sand, sand, very gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	68-87	14-49	5-30	1-8	0-19	NP-4
	45-55	Loamy fine sand, loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	65-87	14-49	5-30	1-8	0-19	NP-4
	55-60	Loamy fine sand, loamy sand, sand, very gravelly coarse sand, loamy coarse sand	SP, SP-SM, SW	A-1-a	0	0	78-88	21-49	8-30	1-8	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147482 Halsey, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-5	Silt loam	ML, CL	A-4	0	0	100	92-100	82-96	72-86	30-38	8-11
	5-11	Silt loam	ML, CL	A-4	0	0	100	92-100	82-96	72-86	30-38	8-11
	11-20	Loam, very fine sandy loam, silt loam, fine sandy loam	ML, CL	A-4	0	0	100	86-100	68-100	54-94	0-30	NP-11
	20-25	Sand, loamy fine sand, coarse sand, loamy sand, loamy coarse sand	SP-SM, SM	A-1-b, A-2-4	0	0	100	54-92	32-76	8-24	0-19	NP-4
	25-35	Sand, loamy fine sand, loamy coarse sand, very gravelly coarse sand, loamy sand	SM, SW	A-1-b, A-1-a	0	0	66-85	25-78	10-48	1-13	0-19	NP-4
	35-49	Sand, loamy fine sand, loamy coarse sand, very gravelly coarse sand, loamy sand	SP-SM, SW	A-1-b, A-1-a	0	0	60-70	25-60	10-37	1-10	0-19	NP-4
	49-56	Sand, loamy fine sand, loamy coarse sand, extremely gravelly coarse sand, loamy sand	SP-SM, SW, SP	A-1-b, A-1-a	0	0	60-66	25-60	10-37	1-10	0-19	NP-4
	56-60	Sand, loamy fine sand, loamy coarse sand, extremely gravelly coarse sand, loamy sand	SP-SM, GP	A-1-b, A-1-a	0	0	43-66	25-60	10-37	1-10	0-19	NP-4
1147485 Hazen, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-10	Loam	ML, SC-SM, CL	A-6, A-4	0	0	86-100	86-100	71-90	49-66	24-38	6-11
	10-18	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-4, A-1-b, A-2-4	0	0	72-100	72-100	50-79	23-41	16-26	2-8
	18-29	Sand, loamy sand, very stony loamy coarse sand, coarse sand	SC-SM, GP, SM	A-2-4, A-1-a, A-1-b	0-61	0-51	14-92	14-92	6-64	2-23	0-19	NP-4
	29-41	Sand, loamy sand, very gravelly coarse sand, loamy coarse sand	SP-SC, GP, SP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
	41-60	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SP-SC, GP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147485 Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147490												
Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
Hazen, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-10	Loam	ML, SC-SM, CL	A-6, A-4	0	0	86-100	86-100	71-90	49-66	24-38	6-11
	10-18	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-4, A-1-b, A-2-4	0	0	72-100	72-100	50-79	23-41	16-26	2-8
	18-29	Sand, loamy sand, very stony loamy coarse sand, coarse sand	SC-SM, GP, SM	A-2-4, A-1-a, A-1-b	0-61	0-51	14-92	14-92	6-64	2-23	0-19	NP-4
	29-41	Sand, loamy sand, very gravelly coarse sand, loamy coarse sand	SP-SC, GP, SP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4
	41-60	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SP-SC, GP	A-1-b, A-1-a	0-61	0-51	37-79	5-66	2-40	0-11	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147491 Hoosic, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-9	Gravelly loam	ML, GC, GC-GM	A-6, A-4, A-2-4	0	0	57-97	45-97	37-87	26-64	24-38	6-11
	9-21	Loam, sandy loam, very gravelly coarse sandy loam	SC, GP, GM	A-6, A-1-a	0	0-21	38-85	7-85	4-61	2-39	16-29	2-11
	21-27	Sand, coarse sand, extremely gravelly loamy coarse sand, loamy sand	SC-SM, GP, GP-GM	A-2-4, A-1-b, A-1-a	0	0-51	41-85	6-78	3-54	1-19	0-19	NP-4
	27-37	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP	A-1-b, A-1-a	0-14	0-51	37-85	6-78	2-48	0-13	0-19	NP-4
	37-49	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	SC-SM, GP, SP	A-1-b, A-1-a	0	0-51	41-85	6-78	2-48	0-13	0-19	NP-4
	49-60	Loamy sand, sand, extremely gravelly coarse sand, loamy coarse sand	GP, SC-SM, SW	A-1-b, A-1-a	0-14	0-51	41-85	6-78	2-48	0-13	0-19	NP-4

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147491 Otisville, very stony----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Gravelly sandy loam	SC-SM, SM	A-2-4, A-1-b	0	0	64-92	51-84	37-66	17-34	23-35	5-8
	2-7	Sand, loamy fine sand, coarse sand, very gravelly loamy sand, loamy coarse sand	SM, SP-SM, SW-SM	A-1-b, A-1-a	0	0-7	60-73	41-60	25-49	6-16	0-19	NP-4
	7-11	Sand, loamy fine sand, coarse sand, very gravelly loamy coarse sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-1-a	0	0-7	53-85	18-78	9-54	2-19	0-19	NP-4
	11-19	Sand, loamy fine sand, coarse sand, very gravelly loamy coarse sand, loamy sand	SM, SP, SW-SM	A-2-4, A-1-a	0	0-14	51-93	7-78	3-54	1-19	0-19	NP-4
	19-31	Loamy sand, extremely gravelly coarse sand, loamy coarse sand, sand	SM, SP	A-1-b, A-1-a	0	0-22	51-93	7-78	3-48	0-13	0-19	NP-4
	31-43	Sand, loamy sand, extremely gravelly coarse sand, loamy coarse sand	SM, SP, SW	A-1-b, A-1-a	0	0-22	51-93	7-78	3-48	0-13	0-19	NP-4
	43-60	Sand, loamy sand, loamy coarse sand, stratified sand to loamy sand, coarse sand	SP, SM	A-3, A-2-4, A-1-b	0	0	100	92-100	48-74	3-15	0-19	NP-4
1147492 Lackawanna, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Cobbly fine sandy loam	GM, ML	A-2-4, A-4	5-23	13-23	59-100	59-100	48-100	26-67	0-39	NP-10
	3-7	Cobbly fine sandy loam	CL, SM, CL-ML	A-6, A-2-4, A-4	3-23	3-23	77-96	77-96	63-96	35-64	0-30	NP-11
	7-8	Cobbly fine sandy loam	GM, ML	A-1-b, A-4	3-23	3-30	56-96	56-96	46-96	25-64	0-39	NP-10
	8-16	Fine sandy loam, silt loam, stony loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	16-24	Stony loam, fine sandy loam, silt loam	CL, GM, CL-ML	A-6, A-2-4, A-4	3-23	3-30	56-96	56-96	43-96	29-79	0-31	NP-11
	24-29	Loam, sandy loam, stony fine sandy loam, silt loam	CL, SM, SC-SM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11
	29-60	Silt loam, loam, sandy loam, very cobbly fine sandy loam	CL, SM, GC-GM	A-6, A-2-4, A-4	2-17	2-22	66-98	66-98	51-98	28-73	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147500 Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Loam	SC-SM, ML, CL	A-6, A-4	0	0	87-100	74-100	61-90	42-66	24-38	6-11
	3-5	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	5-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-30	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	30-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, GP-GM, SC	A-6, A-2-4, A-1-a	0	0	33-87	33-87	22-75	10-45	0-28	NP-11
1147501 Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147501 Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	CL, GM, GC-GM	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
1147502 Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, SC, GP-GM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147502 Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	GM, GC-GM, CL	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
1147527 Udorthents------	0-12	Loam	ML, GW, CL	A-6, A-4, A-1-a	0-63	0	11-100	8-100	6-90	4-66	25-36	6-11
	12-72	Loam, sand, loamy sand, sandy loam, fine sandy loam	SM, SC, GW	A-6, A-2-4, A-1-a	0-62	0	12-100	8-100	5-91	1-42	0-29	NP-11
1147532 Udorthents------	0-12	Loam	ML, GW, CL	A-6, A-1-a, A-4	0-52	0	11-100	8-100	6-90	4-66	25-36	6-11
	12-72	Loam, sand, loamy sand, sandy loam, fine sandy loam	SC, GW, SM	A-6, A-1-a, A-2-4	0-52	0	12-100	8-100	5-91	1-42	0-29	NP-11

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1147533												
Wurtsboro, extremely stony	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	2-3	Fine sandy loam	ML, SM, SC-SM	A-2-4, A-4	0	0	87-100	74-100	59-93	28-55	0-37	NP-10
	3-4	Fine sandy loam, loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	87-100	73-100	57-95	28-57	0-29	NP-11
	4-6	Loam, fine sandy loam	CL, SM, SC-SM	A-6, A-2-4, A-4	0	0	73-100	73-100	57-95	28-57	0-31	NP-11
	6-18	Sandy loam, loam, fine sandy loam	SC-SM, GM, CL	A-6, A-1-b, A-2-4	0	0	50-100	50-100	33-87	15-51	0-29	NP-11
	18-24	Gravelly sandy loam, loam, fine sandy loam	CL, GP-GM, SC-SM	A-6, A-1-a, A-1-b	0	0	19-100	19-100	12-87	6-51	0-29	NP-11
	24-33	Gravelly sandy loam, loam, fine sandy loam	GC, GP-GM, SC-SM	A-6, A-1-a, A-2-4	0	0	24-75	24-75	16-65	7-38	0-28	NP-11
	33-60	Gravelly sandy loam, loam, fine sandy loam	SC-SM, SC, GP-GM	A-6, A-1-a, A-2-4	0	0	33-87	33-87	22-75	10-45	0-28	NP-11
Swartswood, extremely stony	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	100	100	0	NP
	1-2	Loam	ML, GC-GM, CL	A-6, A-2-4, A-4	0	0	57-97	57-97	47-87	33-63	24-38	6-11
	2-3	Sandy loam, fine sandy loam	CL, SC-SM, GM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-28	NP-11
	3-4	Sandy loam, gravelly fine sandy loam	CL, GM, SC-SM	A-6, A-1-b, A-4	0	0	59-97	59-97	46-92	22-53	0-30	NP-11
	4-21	Loam, sandy loam, gravelly fine sandy loam	GM, GC-GM, CL	A-6, A-1-b, A-2-4	0	0	54-92	54-92	41-89	20-53	0-29	NP-11
	21-32	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
	32-60	Loam, fine sandy loam, gravelly sandy loam	SC-SM, SC	A-6, A-1-b	0	0	61-88	61-88	42-77	20-45	19-28	4-11
1948749												
Arnot----------	0-8	Channery silt loam	SM, ML, GM	A-5, A-4, A-2	0	5-10	60-85	55-80	45-80	30-70	35-45	1-9
	8-16	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	16-26	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1948750												
Arnot----------	0-8	Channery silt loam	SM, ML, GM	A-5, A-4, A-2	0	5-10	60-85	55-80	45-80	30-70	35-45	1-9
	8-16	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	16-26	Bedrock	---	---	---	---	---	---	---	---	---	---
1948751												
Arnot----------	0-8	Channery silt loam	SM, ML, GM	A-5, A-4, A-2	0	5-10	60-85	55-80	45-80	30-70	35-45	1-9
	8-16	Very channery silt loam, very channery loam	GM	A-4, A-2, A-1	0	10-25	30-60	25-55	20-55	15-50	20-35	1-9
	16-26	Bedrock	---	---	---	---	---	---	---	---	---	---
1948774												
Conotton--------	0-9	Gravelly loam, gravelly sandy loam	SM, ML, GM	A-4, A-2	0	0-5	65-90	45-80	40-70	25-55	0-30	NP-6
	9-45	Very gravelly sandy loam, very gravelly loam, gravelly coarse sandy loam	SC-SM, SM, GC-GM, GM	A-2	0	0-10	35-70	25-50	25-40	25-30	0-25	NP-6
	45-80	Stratified very gravelly sand to very gravelly loamy coarse sand	SM, SW-SM, GM, GW-GM	A-1	0	0-10	25-65	15-60	15-40	10-20	0-14	NP
1948775												
Conotton--------	0-9	Gravelly loam, gravelly sandy loam	SM, ML, GM	A-4, A-2	0	0-5	65-90	45-80	40-70	25-55	0-30	NP-6
	9-45	Very gravelly sandy loam, very gravelly loam, gravelly coarse sandy loam	SC-SM, SM, GC-GM, GM	A-2	0	0-10	35-70	25-50	25-40	25-30	0-25	NP-6
	45-80	Stratified very gravelly sand to very gravelly loamy coarse sand	SM, SW-SM, GM, GW-GM	A-1	0	0-10	25-65	15-60	15-40	10-20	0-14	NP

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1948776												
Conotton--------	0-9	Gravelly loam, gravelly sandy loam	SM, ML, GM	A-4, A-2	0	0-5	65-90	45-80	40-70	25-55	0-30	NP-6
	9-45	Very gravelly sandy loam, very gravelly loam, gravelly coarse sandy loam	SC-SM, SM, GC-GM, GM	A-2	0	0-10	35-70	25-50	25-40	25-30	0-25	NP-6
	45-80	Stratified very gravelly sand to very gravelly loamy coarse sand	SM, SW-SM, GM, GW-GM	A-1	0	0-10	25-65	15-60	15-40	10-20	0-14	NP
1948777												
Conotton--------	0-9	Gravelly loam, gravelly sandy loam	SM, ML, GM	A-4, A-2	0	0-5	65-90	45-80	40-70	25-55	0-30	NP-6
	9-45	Very gravelly sandy loam, very gravelly loam, gravelly coarse sandy loam	SC-SM, SM, GC-GM, GM	A-2	0	0-10	35-70	25-50	25-40	25-30	0-25	NP-6
	45-80	Stratified very gravelly sand to very gravelly loamy coarse sand	SM, SW-SM, GM, GW-GM	A-1	0	0-10	25-65	15-60	15-40	10-20	0-14	NP
1948797												
Manlius---------	0-8	Channery silt loam	ML, SM, CL-ML, GM	A-4, A-2	0	5-25	55-80	50-75	35-75	25-70	25-35	4-10
	8-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-32	Very channery silt loam, channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	32-40	Bedrock	---	---	---	---	---	---	---	---	---	---
1948802												
Manlius---------	0-8	Channery silt loam	ML, SM, CL-ML, GM	A-4, A-2	0	5-25	55-80	50-75	35-75	25-70	25-35	4-10
	8-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-32	Very channery silt loam, channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	32-40	Bedrock	---	---	---	---	---	---	---	---	---	---

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 in	Fragments: 3-10 in	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				*Pct*	*Pct*					*Pct*	
1948818												
Manlius---------	0-8	Channery silt loam	ML, SM, CL-ML, GM	A-4, A-2	0	5-25	55-80	50-75	35-75	25-70	25-35	4-10
	8-24	Very channery silt loam, very channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0	10-25	25-60	20-55	15-55	10-50	25-35	4-10
	24-32	Very channery silt loam, channery loam	GW-GM, GM, GC-GM	A-4, A-2, A-1	0-1	10-25	15-60	10-55	5-55	5-50	25-35	4-10
	32-40	Bedrock	---	---	---	---	---	---	---	---	---	---
1948832												
Penargyl--------	0-12	Channery silt loam	SM, SC-SM, ML, CL, GM	A-4, A-2	0-1	0-3	65-85	65-80	40-75	30-65	20-35	2-10
	12-74	Cobbly silty clay loam, cobbly clay loam, cobbly loam	SC, CL-ML, CL	A-6, A-4, A-2-4	0-1	0-1	65-90	65-90	25-75	20-65	25-45	4-20
	74-80	Very channery loam, channery silt loam, channery silty clay loam	GM, GC-GM	A-4, A-7, A-1, A-2	0-1	0-25	20-50	20-45	15-45	15-45	20-45	2-15
	80-90	Bedrock	---	---	---	---	---	---	---	---	---	---
1948846												
Phelps----------	0-10	Gravelly silt loam	SM, GC-GM, SC-SM, CL-ML, ML	A-4, A-2, A-1	0	0-25	50-95	45-80	25-75	15-70	20-35	2-10
	10-22	Gravelly loam, gravelly clay loam, silt loam	SM, GC-GM, SC-SM, CL-ML, GM, ML	A-4, A-2	0	0-25	50-95	45-95	35-90	25-70	20-35	2-10
	22-30	Gravelly loam, gravelly clay loam, gravelly silt loam	SM, GC-GM, SC-SM, CL-ML, GM, ML	A-4, A-2	0	0-25	50-95	45-95	35-90	25-70	20-35	2-10
	30-79	Stratified very gravelly sand to loamy sand	GW, GW-GM, GM, GP	A-1	0	5-30	15-55	10-50	5-40	0-15	0-20	NP-2
1948855												
Udorthents, loamy----------	0-5	Loam	SC, SM, CL, ML	A-6, A-4, A-2	0	0-5	80-100	75-100	55-100	30-95	0-45	NP-15
	5-40	Gravelly loam, loam, very gravelly loam	SC, SM, CL, ML	A-6, A-4, A-2	0	0-5	80-100	75-100	55-100	30-95	0-45	NP-15
	40-70	Very gravelly sandy loam, loam, silty clay loam	ML, SC, CL, GM	A-4, A-6, A-1, A-2	0-2	0-10	35-100	30-100	20-100	10-95	0-45	NP-15

Table 14.--Engineering Properties--Continued

Map unit symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 in	3-10 in	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
1948989												
Delaware--------	0-10	Fine sandy loam, loam	SM, ML	A-4	0	0	100	95-100	75-95	45-55	10-15	NP
	10-40	Fine sandy loam, very fine sandy loam	SM, ML	A-4	0	0-1	99-100	95-100	70-90	40-55	10-15	NP
	40-87	Loamy fine sand, fine sandy loam, loamy sand	SM, ML	A-4, A-2	0	0-5	95-100	95-100	80-95	20-55	10-15	NP

Table 15.--Physical Soil Properties

[Sand, silt, and clay values are shown either as a range or as a representative value. Absence of an entry indicates that data were not estimated. Soil properties are measured or inferred from direct observations in the field or laboratory]

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
290836									
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
Otisville, very stony----------	0-1	0-76	0-26	0-14	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	61-76	15-26	9-14	1.24-1.68	5.9-20.0	0.09-0.12	0.0-0.5	1.8-5.2
	2-7	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.09-0.12	0.0-0.3	0.0-0.5
	7-11	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.09-0.12	0.0-0.1	0.0-0.5
	11-19	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.05	0.0-0.1	0.0-0.5
	19-31	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
	31-43	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
	43-60	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
296265									
Alden----------	0-9	26	53	15-27	1.10-1.40	0.6-2.0	0.16-0.22	0.0-2.9	10-25
	9-35	18	54	18-35	1.20-1.50	0.2-0.6	0.14-0.20	0.0-2.9	0.0-1.9
	35-60	38	36	18-35	1.50-1.80	0.0-0.6	0.08-0.15	0.0-2.9	0.0-0.5
296269									
Fluvents, (alluvial land)	0-6	67	23	5-15	1.00-1.40	0.6-2.0	0.10-0.15	0.0-2.9	0.5-2.0
	6-42	68	20	5-20	1.00-1.45	0.6-6.0	0.06-0.12	0.0-2.9	0.0-0.3
	42-60	19	54	18-35	1.20-1.40	0.6-2.0	0.08-0.14	0.0-2.9	0.0-0.3
296271									
Alvira----------	0-10	44	41	10-20	1.40-1.60	0.6-2.0	0.14-0.20	0.0-2.9	1.0-2.0
	10-21	19	54	18-35	1.40-1.60	0.6-2.0	0.14-0.18	0.0-2.9	0.0-0.5
	21-60	19	54	18-35	1.55-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
Watson----------	0-10	42	38	12-27	1.20-1.40	0.6-2.0	0.12-0.18	0.0-2.9	0.0-4.0
	10-27	18	54	17-35	1.40-1.60	0.6-2.0	0.12-0.16	3.0-5.9	0.0-0.3
	27-60	34	36	15-35	1.60-1.80	0.1-0.2	0.08-0.12	3.0-5.9	0.0-0.3
296272									
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	3.0-6.0
	8-27	32	56	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.4
	27-60	32	56	5-18	1.50-1.90	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4
	60-64	46	44	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4
296273									
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	3.0-6.0
	8-27	32	56	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.4
	27-60	32	56	5-18	1.50-1.90	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4
	60-64	46	44	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4
296274									
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	3.0-6.0
	8-27	32	56	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.4
	27-60	32	56	5-18	1.50-1.90	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4
	60-64	46	44	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.0-0.4

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296275									
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	1.0-6.0
	8-27	45	43	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.1-2.0
	27-60	45	43	5-18	1.50-1.90	0.0-0.2	0.01-0.09	0.0-2.9	0.1-0.5
	60-64	46	44	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.1-0.5
296276									
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	1.0-6.0
	8-27	45	43	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.1-2.0
	27-60	45	43	5-18	1.50-1.90	0.0-0.2	0.01-0.09	0.0-2.9	0.1-0.5
	60-64	46	44	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.1-0.5
296277									
Benson----------	0-8	26	54	10-30	1.40-1.60	0.6-2.0	0.14-0.20	0.0-2.9	2.0-6.0
	8-18	26	54	10-30	1.40-1.70	0.6-2.0	0.06-0.16	0.0-2.9	0.0-0.3
	18-22	---	---	---	---	---	---	---	---
296278									
Benson----------	0-8	26	54	10-30	1.40-1.60	0.6-2.0	0.14-0.20	0.0-2.9	2.0-6.0
	8-18	26	54	10-30	1.40-1.70	0.6-2.0	0.06-0.16	0.0-2.9	0.0-0.3
	18-22	---	---	---	---	---	---	---	---
296279									
Benson----------	0-8	26	54	10-30	1.40-1.60	0.6-2.0	0.14-0.20	0.0-2.9	2.0-6.0
	8-18	26	54	10-30	1.40-1.70	0.6-2.0	0.06-0.16	0.0-2.9	0.0-0.3
	18-22	---	---	---	---	---	---	---	---
296280									
Braceville------	0-3	43	40	10-25	1.20-1.40	0.2-2.0	0.08-0.12	0.0-2.9	1.0-3.0
	3-30	29	53	10-25	1.20-1.50	0.2-2.0	0.08-0.12	0.0-2.9	0.0-0.5
	30-55	43	40	10-25	1.30-1.60	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
	55-60	91	5	1-10	1.20-1.40	2.0-20.0	0.03-0.06	0.0-2.9	0.0-0.5
296281									
Braceville------	0-3	43	40	10-25	1.20-1.40	0.2-2.0	0.08-0.12	0.0-2.9	1.0-3.0
	3-30	29	53	10-25	1.20-1.50	0.2-2.0	0.08-0.12	0.0-2.9	0.0-0.5
	30-55	43	40	10-25	1.30-1.60	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
	55-60	91	5	1-10	1.20-1.40	2.0-20.0	0.03-0.06	0.0-2.9	0.0-0.5
296283									
Buchanan--------	0-4	43	38	10-27	1.20-1.40	0.6-2.0	0.11-0.16	0.0-2.9	1.5-7.0
	4-25	39	37	18-30	1.30-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.1-3.0
	25-60	38	36	18-35	1.50-1.80	0.1-0.2	0.06-0.10	0.0-2.9	0.1-0.5
296288									
Chippewa--------	0-8	27	54	10-27	1.10-1.40	0.6-2.0	0.14-0.21	0.0-2.9	3.0-10
	8-16	19	54	18-35	1.20-1.50	0.6-2.0	0.10-0.17	0.0-2.9	0.5-5.0
	16-48	22	55	10-35	1.55-2.05	0.1-0.2	0.01-0.02	0.0-2.9	0.2-1.0
	48-80	40	38	10-35	1.50-1.80	0.1-0.2	0.01-0.02	0.0-2.9	0.2-1.0
Norwich---------	0-8	27	54	10-27	1.10-1.40	0.6-2.0	0.14-0.20	0.0-2.9	3.0-10
	8-16	22	55	18-27	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.5-5.0
	16-48	27	54	10-27	1.55-2.05	0.0-0.1	0.02-0.04	0.0-2.9	0.2-1.0
	48-80	25	53	10-35	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
296289									
Chippewa--------	0-8	27	54	10-27	1.10-1.40	0.6-2.0	0.11-0.18	0.0-2.9	3.0-10
	8-16	19	54	18-35	1.20-1.50	0.6-2.0	0.10-0.17	0.0-2.9	0.5-5.0
	16-48	22	55	10-35	1.55-2.05	0.1-0.2	0.01-0.02	0.0-2.9	0.2-1.0
	48-80	40	38	10-35	1.50-1.80	0.1-0.2	0.01-0.02	0.0-2.9	0.2-1.0

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296289									
Norwich---------	0-8	27	54	10-27	1.10-1.40	0.6-2.0	0.12-0.18	0.0-2.9	3.0-10
	8-16	22	55	18-27	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.5-5.0
	16-48	27	54	10-27	1.55-2.05	0.0-0.1	0.02-0.04	0.0-2.9	0.2-1.0
	48-80	25	53	10-35	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
296295									
Udorthents, cut and fill.									
296297									
Dekalb----------	0-7	44	41	10-20	1.20-1.50	6.0-20.0	0.08-0.12	0.0-2.9	2.0-4.0
	7-24	68	20	7-18	1.20-1.50	6.0-20.0	0.06-0.12	0.0-2.9	0.0-1.0
	24-32	67	23	5-15	1.20-1.50	6.0-20.0	0.05-0.10	0.0-2.9	0.0-1.0
	32-36	---	---	---	---	---	---	---	---
296298									
Dekalb----------	0-7	44	41	10-20	1.20-1.50	6.0-20.0	0.08-0.12	0.0-2.9	2.0-4.0
	7-24	68	20	7-18	1.20-1.50	6.0-20.0	0.06-0.12	0.0-2.9	0.0-1.0
	24-32	67	23	5-15	1.20-1.50	6.0-20.0	0.05-0.10	0.0-2.9	0.0-1.0
	32-36	---	---	---	---	---	---	---	---
296303									
Hazleton--------	0-5	68	20	7-18	1.20-1.40	2.0-6.0	0.10-0.16	0.0-2.9	2.0-4.0
	5-31	68	20	7-18	1.20-1.40	2.0-20.0	0.08-0.12	0.0-2.9	0.0-0.4
	31-58	68	22	5-15	1.20-1.40	2.0-20.0	0.06-0.12	0.0-2.9	0.0-0.4
	58-69	---	---	---	---	---	---	---	---
296304									
Holly----------	0-8	20-45	40-60	15-27	1.20-1.40	0.6-2.0	0.20-0.24	0.0-2.9	2.0-5.0
	8-28	15-80	10-60	18-30	1.20-1.50	0.6-2.0	0.17-0.21	0.0-2.9	0.0-1.0
	28-41	15-80	10-60	10-27	1.20-1.45	0.6-6.0	0.10-0.20	0.0-2.9	0.0-1.0
	41-60	35-95	1-50	0-27	1.20-1.40	0.6-6.0	0.07-0.18	0.0-2.9	0.0-2.0
296311									
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	25-60	32	56	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.0-0.5
Bath----------	0-8	32	56	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	3.0-6.0
	8-27	30	55	5-18	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.1-0.3
	27-60	30	55	5-18	1.50-1.90	0.0-0.2	0.01-0.09	0.0-2.9	0.1-0.3
	60-64	44	41	3-18	1.50-1.80	0.0-0.2	0.01-0.06	0.0-2.9	0.1-0.3
296312									
Lackawanna------	0-8	20-50	20-60	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	8-25	20-75	20-60	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	25-60	20-75	20-60	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.0-0.5
296313									
Lackawanna------	0-8	20-50	20-60	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	8-25	20-75	20-60	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	25-60	20-75	20-60	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.0-0.5
296315									
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	25-60	32	56	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.0-0.5
296316									
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	25-60	32	56	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296317									
Laidig----------	0-6	43	40	7-27	1.20-1.40	0.6-6.0	0.08-0.12	0.0-2.9	1.0-5.0
	6-33	38	36	18-35	1.30-1.50	0.6-6.0	0.08-0.12	0.0-2.9	0.0-0.5
	33-65	38	36	18-35	1.45-1.80	0.0-0.6	0.06-0.10	0.0-2.9	0.0-0.3
296326									
Lordstown-------	0-7	31	56	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	1.0-6.0
	7-26	31	56	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	0.1-2.0
	26-30	32	56	5-18	1.20-1.50	0.6-2.0	0.05-0.14	0.0-2.9	0.0-1.0
	30-42	---	---	---	---	---	---	---	---
296327									
Lordstown-------	0-7	31	56	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	1.0-6.0
	7-26	31	56	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	0.1-2.0
	26-30	32	56	5-18	1.20-1.50	0.6-2.0	0.05-0.14	0.0-2.9	0.0-1.0
	30-42	---	---	---	---	---	---	---	---
296328									
Lordstown-------	0-7	31	56	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	1.0-6.0
	7-26	44	40	5-26	1.20-1.50	0.6-2.0	0.10-0.16	0.0-2.9	0.1-2.0
	26-30	32	56	5-18	1.20-1.50	0.6-2.0	0.05-0.14	0.0-2.9	0.0-1.0
	30-42	---	---	---	---	---	---	---	---
Oquaga----------	0-7	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	1.0-6.0
	7-30	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.1-2.0
	30-42	---	---	---	---	---	---	---	---
296329									
Mardin----------	0-8	15-45	35-70	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	1.5-7.0
	8-17	15-45	35-70	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-0.4
	17-21	15-45	35-70	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-0.4
	21-60	15-45	35-70	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.0-0.4
	60-80	15-45	35-70	10-18	1.50-1.80	0.0-0.2	0.01-0.03	0.0-2.9	0.0-0.4
296330									
Mardin----------	0-8	15-45	35-70	5-18	1.10-1.40	0.6-2.0	0.10-0.20	0.0-2.9	1.5-7.0
	8-17	15-45	35-70	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-0.4
	17-21	15-45	35-70	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-0.4
	21-60	15-45	35-70	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.0-0.4
	60-80	15-45	35-70	10-18	1.50-1.80	0.0-0.2	0.01-0.03	0.0-2.9	0.0-0.4
296331									
Mardin----------	0-8	37	51	8-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.5-7.0
	8-17	30	56	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	30	56	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-60	30	56	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
	60-80	30	56	10-18	1.50-1.80	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
296332									
Mardin----------	0-8	37	51	8-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.5-7.0
	8-17	30	56	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	30	56	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-60	30	56	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
	60-80	30	56	10-18	1.50-1.80	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
296335									
Meckesville-----	0-9	43	38	10-27	1.10-1.30	0.6-2.0	0.12-0.16	0.0-2.9	1.0-4.0
	9-36	38	36	18-35	1.20-1.40	0.6-2.0	0.12-0.16	0.0-2.9	0.0-0.5
	36-60	38	36	18-35	1.45-1.85	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.3
	60-64	40	38	10-35	1.20-1.40	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.3

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296337									
Meckesville-----	0-9	43	38	10-27	1.10-1.30	0.6-2.0	0.12-0.16	0.0-2.9	1.0-4.0
	9-36	38	36	18-35	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.5
	36-60	38	36	18-35	1.45-1.85	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.5
	60-64	40	38	10-35	1.20-1.40	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.5
296338									
Morris----------	0-8	26	54	15-25	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	2.0-8.0
	8-17	29	54	10-30	1.10-1.70	0.0-0.2	0.06-0.08	0.0-2.9	0.2-4.0
	17-70	29	54	10-30	1.60-2.05	0.0-0.2	0.06-0.08	0.0-2.9	0.1-0.6
	70-80	29	54	10-30	1.50-1.80	0.0-0.2	0.06-0.08	0.0-2.9	0.0-0.3
296339									
Morris----------	0-8	26	54	15-25	1.20-1.40	0.6-2.0	0.12-0.16	0.0-2.9	2.0-8.0
	8-17	26	54	15-25	1.10-1.70	0.6-2.0	0.12-0.16	0.0-2.9	0.2-4.0
	17-70	39	37	15-32	1.60-2.05	0.0-0.1	0.06-0.08	0.0-2.9	0.1-0.6
	70-80	39	37	15-32	1.50-1.80	0.0-0.1	0.06-0.08	0.0-2.9	0.1-0.6
296340									
Morris----------	0-8	26	54	15-25	1.20-1.40	0.6-2.0	0.12-0.16	0.0-2.9	2.0-8.0
	8-17	26	54	15-25	1.10-1.70	0.6-2.0	0.12-0.16	0.0-2.9	0.2-4.0
	17-70	39	37	15-32	1.60-2.05	0.0-0.1	0.06-0.08	0.0-2.9	0.1-0.6
	70-80	39	37	15-32	1.50-1.80	0.0-0.1	0.06-0.08	0.0-2.9	0.1-0.6
296341									
Freetown, mucky peat----------	0-6	---	---	0	0.10-0.30	0.6-6.0	0.35-0.45	0.0-2.9	50-99
	6-72	---	---	0	0.15-0.30	0.6-6.0	0.35-0.45	0.0-2.9	50-95
296342									
Paupack, mucky peat (shallow)-	0-3	---	---	0	0.15-0.40	0.2-6.0	0.35-0.45	0.0-2.9	30-50
	3-26	---	---	0	0.80-0.90	0.2-6.0	0.35-0.45	0.0-2.9	30-50
	26-36	---	---	0	1.00-1.20	0.2-2.0	0.20-0.40	0.0-2.9	2.0-10
	36-70	66	23	5-18	1.40-1.60	0.2-2.0	0.11-0.20	0.0-2.9	0.0-2.0
296343									
Oquaga----------	0-7	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	1.0-6.0
	7-30	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.1-2.0
	30-42	---	---	---	---	---	---	---	---
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	1.0-6.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.1-2.0
	25-60	45	43	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.1-0.5
296344									
Oquaga----------	0-7	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	1.0-6.0
	7-30	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.1-2.0
	30-42	---	---	---	---	---	---	---	---
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	1.0-6.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.1-2.0
	25-60	45	43	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.1-0.5
296346									
Oquaga----------	0-7	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	1.0-6.0
	7-30	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.1-2.0
	30-42	---	---	---	---	---	---	---	---
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-6.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.1-2.0
	25-60	45	43	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.1-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296347									
Oquaga----------	0-7	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	1.0-6.0
	7-30	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.1-2.0
	30-42	---	---	---	---	---	---	---	---
Lackawanna------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-6.0
	8-25	45	43	5-18	1.40-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.1-2.0
	25-60	45	43	5-18	1.50-1.90	0.1-0.2	0.06-0.12	0.0-2.9	0.1-0.5
296348									
Philo----------	0-10	30	56	10-18	1.20-1.40	0.6-2.0	0.14-0.20	0.0-2.9	2.0-4.0
	10-40	70	16	10-18	1.20-1.40	0.6-2.0	0.10-0.20	0.0-2.9	0.0-2.0
	40-60	68	21	5-18	1.20-1.40	2.0-6.0	0.06-0.10	0.0-2.9	0.0-2.0
296349									
Pope----------	0-10	33	57	5-15	1.20-1.40	0.6-2.0	0.14-0.23	0.0-2.9	1.0-4.0
	10-30	32	56	5-18	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.0-0.5
	30-60	81	9	5-20	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.0-0.3
296350									
Pope----------	0-10	33	57	5-15	1.20-1.40	0.6-2.0	0.14-0.23	0.0-2.9	1.0-4.0
	10-30	32	56	5-18	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.0-0.5
	30-60	81	9	5-20	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.0-0.3
296351									
Rexford, somewhat poorly drained-	0-8	30	55	10-20	1.20-1.40	0.6-2.0	0.14-0.18	0.0-2.9	2.0-8.0
	8-18	30	56	10-18	1.20-1.50	0.1-0.2	0.04-0.08	0.0-2.9	0.2-4.0
	18-40	45	41	10-18	1.50-1.90	0.1-0.2	0.04-0.08	0.0-2.9	0.1-0.6
	40-63	68	22	5-15	1.20-1.40	2.0-20.0	0.03-0.06	0.0-2.9	0.0-0.6
Rexford, poorly drained--------	0-8	30	55	10-20	1.20-1.40	0.6-2.0	0.14-0.18	0.0-2.9	2.0-8.0
	8-18	30	56	10-18	1.20-1.50	0.1-0.2	0.04-0.08	0.0-2.9	0.2-4.0
	18-40	45	41	10-18	1.50-1.90	0.1-0.2	0.04-0.08	0.0-2.9	0.1-0.6
	40-63	68	22	5-15	1.20-1.40	2.0-20.0	0.03-0.06	0.0-2.9	0.0-0.6
296355									
Sheffield-------	0-7	7	70	18-27	1.30-1.50	0.6-2.0	0.16-0.20	0.0-2.9	3.0-5.0
	7-19	7	63	25-35	1.45-1.70	0.2-0.6	0.13-0.17	0.0-2.9	0.0-1.0
	19-38	7	63	25-35	1.60-1.90	0.0-0.1	0.08-0.12	0.0-2.9	0.0-0.5
	38-66	7	65	15-32	1.55-1.85	0.2-0.6	0.10-0.14	0.0-2.9	0.0-0.3
296363									
Dystrochrepts, very stony-----	0-6	42	45	7-18	1.20-1.40	2.0-6.0	0.10-0.16	0.0-2.9	2.0-4.0
	6-32	42	45	7-18	1.20-1.40	2.0-20.0	0.08-0.12	0.0-2.9	0.0-0.4
	32-56	47	43	5-15	1.20-1.40	2.0-20.0	0.06-0.12	0.0-2.9	0.0-0.4
	56-60	---	---	---	---	---	---	---	---
296369									
Wayland---------	0-9	7	64	15-35	1.05-1.40	0.2-2.0	0.17-0.22	0.0-2.9	4.0-8.0
	9-41	7	64	18-35	1.10-1.60	0.1-0.2	0.16-0.20	0.0-2.9	0.0-1.0
	41-60	37	43	15-25	1.25-1.55	0.1-0.2	0.08-0.19	0.0-2.9	0.0-1.0
296376									
Wellsboro-------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.5-7.0
	8-17	43	40	10-27	1.30-1.50	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.4
	17-21	43	40	10-27	1.30-1.50	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.4
	21-60	29	54	10-27	1.50-1.90	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.4
	60-80	29	54	10-27	1.30-1.60	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.4

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
296379									
Wellsboro--------	0-8	43	38	10-27	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.5-7.0
	8-17	43	40	10-27	1.30-1.50	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.4
	17-21	43	40	10-27	1.30-1.50	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.4
	21-60	29	54	10-27	1.50-1.90	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.4
	60-80	29	54	10-27	1.30-1.60	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.4
296385									
Wyoming---------	0-7	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	7-25	67	23	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.4
	25-60	85	9	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.4
296386									
Wyoming---------	0-7	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	7-25	67	23	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.4
	25-60	85	9	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.4
296387									
Wyoming---------	0-7	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	7-25	67	23	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.4
	25-60	85	9	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.4
296388									
Wyoming---------	0-7	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	7-25	67	23	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.4
	25-60	85	9	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.4
296389									
Wyoming---------	0-8	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	8-26	67	23	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.3
	26-60	---	---	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.3
297185									
Edgemere--------	0-2	---	---	0	0.50-0.90	0.6-2.0	0.23-0.45	0.0-2.9	4.0-20
	2-5	45	43	8-15	1.10-1.40	0.6-2.0	0.12-0.18	0.0-2.9	2.0-8.0
	5-24	45	43	8-15	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.0-1.0
	24-66	67	20	8-18	1.70-2.00	0.1-0.2	0.02-0.04	0.0-2.9	0.0-1.0
Shohola---------	0-3	45	43	8-15	1.10-1.40	0.6-2.0	0.08-0.18	0.0-2.9	2.0-4.0
	3-24	45	43	8-15	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.5
	24-72	68	21	8-15	1.70-2.00	0.0-0.2	0.02-0.04	0.0-2.9	0.0-0.5
297186									
Edgemere--------	0-2	---	---	0	0.50-0.90	0.6-2.0	0.23-0.45	0.0-2.9	4.0-20
	2-5	45	43	8-15	1.10-1.40	0.6-2.0	0.12-0.18	0.0-2.9	2.0-8.0
	5-24	45	43	8-15	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.0-1.0
	24-66	67	20	8-18	1.70-2.00	0.1-0.2	0.02-0.04	0.0-2.9	0.0-1.0
297188									
Manlius---------	0-5	32	56	6-18	1.10-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-8.0
	5-24	45	43	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-30	45	43	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.4
	30-40	---	---	0	---	0.0-0.2	0.00-0.00	---	---
Arnot----------	0-3	45	42	8-18	1.10-1.40	0.6-2.0	0.10-0.15	0.0-2.9	2.0-8.0
	3-14	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	14-24	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
297189									
Manlius---------	0-5	32	56	6-18	1.10-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-8.0
	5-24	45	43	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-30	45	43	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.4
	30-40	---	---	0	---	0.0-0.2	0.00-0.00	---	---
Arnot----------	0-3	45	42	8-18	1.10-1.40	0.6-2.0	0.10-0.15	0.0-2.9	2.0-8.0
	3-14	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	14-24	---	---	---	---	---	---	---	0.0-0.0
297190									
Braceville------	0-11	68	22	5-15	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-8.0
	11-27	70	22	5-10	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.5-4.0
	27-48	70	22	5-10	1.40-1.70	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
	48-70	79	17	2-7	1.20-1.35	2.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5
297191									
Wyalusing-------	0-6	69	16	15-30	1.15-1.40	6.0-20.0	0.14-0.20	0.0-2.9	2.0-6.0
	6-31	67	14	10-30	1.40-1.65	6.0-20.0	0.10-0.16	0.0-2.9	0.1-1.0
	31-70	80	17	2-9	---	6.0-20.0	0.02-0.10	0.0-2.9	0.1-0.5
297192									
Pope----------	0-6	68	22	5-15	1.20-1.40	2.0-6.0	0.10-0.16	0.0-2.9	1.0-4.0
	6-33	68	21	5-18	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.2-0.5
	33-70	68	20	5-20	1.30-1.60	0.6-6.0	0.10-0.18	0.0-2.9	0.1-0.8
297193									
Paupack---------	0-3	---	---	0	0.15-0.40	0.2-6.0	0.35-0.45	0.0-2.9	30-50
	3-26	---	---	0	0.80-0.90	0.2-6.0	0.35-0.45	0.0-2.9	30-50
	26-36	---	---	0	1.00-1.20	0.2-2.0	0.20-0.40	0.0-2.9	2.0-10
	36-70	66	23	5-18	1.40-1.60	0.2-2.0	0.11-0.20	0.0-2.9	0.0-2.0
297196									
Freetown--------	0-6	---	---	0	0.10-0.30	0.6-6.0	0.35-0.45	0.0-2.9	50-99
	6-72	---	---	0	0.15-0.30	0.6-6.0	0.35-0.45	0.0-2.9	50-95
297197									
Manlius---------	0-5	32	56	6-18	1.10-1.40	0.6-2.0	0.10-0.18	0.0-2.9	2.0-8.0
	5-24	45	43	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-30	45	43	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.4
	30-40	---	---	0	---	0.0-0.2	0.00-0.00	---	---
297198									
Manlius---------	0-5	32	56	6-18	1.10-1.40	0.6-2.0	0.10-0.18	0.0-2.9	2.0-8.0
	5-24	45	43	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-30	45	43	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.4
	30-40	---	---	0	---	0.0-0.2	0.00-0.00	---	---
297201									
Oquaga----------	0-2	43	40	7-27	1.10-1.40	0.6-2.0	0.08-0.17	0.0-2.9	2.0-8.0
	2-26	43	40	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.0-2.0
	26-32	64	19	7-27	1.20-1.50	0.6-2.0	0.04-0.12	0.0-2.9	0.0-2.0
	32-42	---	---	---	---	---	---	---	---
297203									
Delaware--------	0-14	45-70	10-50	2-10	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-4.0
	14-48	45-90	0-40	2-7	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.0-0.5
	48-72	45-90	0-40	2-7	1.25-1.55	6.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5
297204									
Delaware--------	0-14	64	30	2-10	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-4.0
	14-48	65	31	2-7	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.0-0.5
	48-72	65	31	2-7	1.25-1.55	6.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
297205									
Delaware--------	0-14	64	30	2-10	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-4.0
	14-48	65	31	2-7	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.0-0.5
	48-72	65	31	2-7	1.25-1.55	6.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5
297209									
Philo----------	0-6	45	41	10-18	1.20-1.40	0.6-2.0	0.14-0.20	0.0-2.9	2.0-4.0
	6-36	70	16	10-18	1.20-1.40	0.6-2.0	0.10-0.20	0.0-2.9	0.0-0.5
	36-70	---	---	5-18	1.20-1.40	2.0-6.0	0.06-0.10	0.0-2.9	0.0-0.5
297210									
Barbour---------	0-10	71	17	6-18	1.15-1.40	0.6-2.0	0.16-0.21	0.0-2.9	1.0-5.0
	10-38	71	17	6-18	1.15-1.45	2.0-6.0	0.10-0.19	0.0-2.9	0.0-0.5
	38-72	94	1	1-8	1.25-1.55	6.0-20.0	0.02-0.07	0.0-2.9	0.0-0.2
297216									
Wurtsboro-------	0-4	70	16	10-18	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	2.0-4.0
	4-22	70	16	10-18	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.0-2.0
	22-70	70	16	10-18	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
297217									
Wurtsboro-------	0-4	68	21	5-18	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	2.0-4.0
	4-22	68	21	5-18	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.1-2.0
	22-70	68	21	5-18	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
297227									
Arnot----------	0-3	45	42	8-18	1.10-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-8.0
	3-10	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	10-14	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-2.0
	14-24	---	---	---	---	---	0.00-0.00	---	---
297228									
Arnot----------	0-3	45	42	8-18	1.10-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-8.0
	3-10	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	10-14	45	42	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-2.0
	14-24	---	---	---	---	---	0.00-0.00	---	---
297229									
Wyoming---------	0-3	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	3-33	68	22	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.5
	33-72	83	11	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.5
297230									
Wyoming---------	0-3	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	3-33	68	22	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.5
	33-72	83	11	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.5
297231									
Wyoming---------	0-3	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	3-33	68	22	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.5
	33-72	83	11	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.5
297236									
Suncook---------	0-10	81	17	1-3	1.10-1.30	6.0-20.0	0.07-0.12	0.0-2.9	2.0-5.0
	10-70	97	2	0-3	1.20-1.50	6.0-20.0	0.01-0.10	0.0-2.9	0.1-0.2
297237									
Mardin----------	0-8	30	56	10-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	3.0-7.0
	8-17	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-30	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	30-60	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	60-80	45	41	10-18	1.65-1.95	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
297238									
Mardin----------	0-8	30	56	10-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	3.0-7.0
	8-17	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-30	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	30-60	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	60-80	45	41	10-18	1.65-1.95	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
297239									
Mardin----------	0-8	45	41	10-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	3.0-7.0
	8-17	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-30	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	30-60	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	60-80	45	41	10-18	1.65-1.95	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
297240									
Mardin----------	0-8	45	41	10-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	3.0-7.0
	8-17	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	17-21	45	41	10-18	1.20-1.50	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	21-30	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	30-60	45	41	10-18	1.50-1.90	0.0-0.2	0.01-0.03	0.0-2.9	0.1-0.5
	60-80	45	41	10-18	1.65-1.95	0.0-0.2	0.01-0.03	0.0-2.9	0.0-1.0
297241									
Unadilla--------	0-13	21	69	5-15	1.20-1.50	0.6-2.0	0.18-0.21	0.0-2.9	2.0-8.0
	13-49	21	70	3-15	1.20-1.50	0.6-2.0	0.17-0.20	0.0-2.9	0.0-1.0
	49-80	29	68	1-5	1.20-1.50	0.6-2.0	0.15-0.18	0.0-2.9	0.0-1.0
297242									
Shohola---------	0-3	45	43	8-15	1.10-1.40	0.6-2.0	0.08-0.18	0.0-2.9	2.0-4.0
	3-24	45	43	8-15	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.5
	24-72	68	21	8-15	1.70-2.00	0.0-0.2	0.02-0.04	0.0-2.9	0.0-0.5
Edgemere--------	0-2	---	---	0	0.50-0.90	0.6-2.0	0.23-0.45	0.0-2.9	4.0-20
	2-5	45	43	8-15	1.10-1.40	0.6-2.0	0.12-0.18	0.0-2.9	2.0-8.0
	5-24	66	23	8-15	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.0-1.0
	24-66	67	20	8-18	1.70-2.00	0.1-0.2	0.02-0.04	0.0-2.9	0.0-1.0
297243									
Shohola---------	0-3	45	43	8-15	1.10-1.40	0.6-2.0	0.08-0.18	0.0-2.9	2.0-4.0
	3-24	45	43	8-15	1.20-1.50	0.6-2.0	0.08-0.18	0.0-2.9	0.0-0.5
	24-72	68	21	8-15	1.70-2.00	0.0-0.2	0.02-0.04	0.0-2.9	0.0-0.5
Edgemere--------	0-2	---	---	0	0.50-0.90	0.6-2.0	0.23-0.45	0.0-2.9	4.0-20
	2-5	45	43	8-15	1.10-1.40	0.6-2.0	0.12-0.18	0.0-2.9	2.0-8.0
	5-24	66	23	8-15	1.20-1.50	0.6-2.0	0.11-0.18	0.0-2.9	0.0-1.0
	24-66	67	20	8-18	1.70-2.00	0.1-0.2	0.02-0.04	0.0-2.9	0.0-1.0
297244									
Lordstown-------	0-3	45	42	8-18	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	3.0-8.0
	3-28	68	16	5-26	1.20-1.50	0.6-2.0	0.10-0.16	0.0-2.9	0.1-2.0
	28-30	66	23	5-18	1.20-1.50	0.6-2.0	0.05-0.14	0.0-2.9	0.0-1.0
	30-40	---	---	---	---	---	---	---	---
Swartswood------	0-4	68	16	12-20	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	5.0-10
	4-32	69	16	10-20	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	32-70	70	16	8-20	1.40-1.80	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
297247									
Chenango--------	0-10	70	22	5-12	1.10-1.30	0.6-6.0	0.08-0.16	0.0-2.9	2.0-6.0
	10-29	70	22	5-12	1.10-1.50	0.6-6.0	0.07-0.15	0.0-2.9	0.0-1.0
	29-70	78	18	1-6	1.30-1.60	6.0-20.0	0.01-0.05	0.0-2.9	0.0-1.0

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
297248									
Chenango--------	0-10	70	22	5-12	1.10-1.30	0.6-6.0	0.08-0.16	0.0-2.9	2.0-6.0
	10-29	70	22	5-12	1.10-1.50	0.6-6.0	0.07-0.15	0.0-2.9	0.0-1.0
	29-70	78	18	1-6	1.30-1.60	6.0-20.0	0.01-0.05	0.0-2.9	0.0-1.0
297249									
Chenango--------	0-10	70	22	5-12	1.10-1.30	0.6-6.0	0.08-0.16	0.0-2.9	2.0-6.0
	10-29	70	22	5-12	1.10-1.50	0.6-6.0	0.07-0.15	0.0-2.9	0.0-1.0
	29-70	78	18	1-6	1.30-1.60	6.0-20.0	0.01-0.05	0.0-2.9	0.0-1.0
297253									
Craigsville-----	0-5	46	44	5-15	1.20-1.40	2.0-20.0	0.07-0.15	0.0-2.9	2.0-5.0
	5-27	67	23	5-15	1.30-1.60	2.0-20.0	0.06-0.15	0.0-2.9	0.0-0.5
	27-77	84	9	5-10	1.35-1.55	6.0-20.0	0.04-0.09	0.0-2.9	0.0-0.5
Wyoming---------	0-3	67	20	8-18	1.10-1.40	6.0-20.0	0.06-0.14	0.0-2.9	2.0-4.0
	3-33	68	22	5-15	1.10-1.50	6.0-20.0	0.06-0.09	0.0-2.9	0.0-0.5
	33-72	83	11	1-11	1.30-1.60	6.0-20.0	0.02-0.04	0.0-2.9	0.0-0.5
298049									
Wurtsboro, extremely stony	0-2	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	35-47	35-50	10-18	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-5	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	5-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-30	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	30-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
298050									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
298051									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
298050									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
298075									
Colonie---------	0-2	76-79	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	2-11	76-95	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	11-24	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	24-40	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	40-62	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
298188									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
298189									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
298221									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
298222									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
298223									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
298255									
Delaware, rarely flooded	0-1	0-73	0-44	0-17	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	1-4	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	2.0-4.5
	4-11	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	0.5-2.0
	11-20	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	20-33	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	33-41	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	41-56	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.07-0.20	0.0-0.1	0.0-0.5
	56-60	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.05-0.15	0.0-0.1	0.0-0.5
298256									
Delaware, rarely flooded	0-1	0-73	0-44	0-17	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	1-4	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	2.0-4.5
	4-11	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	0.5-2.0
	11-20	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	20-33	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	33-41	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	41-56	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.07-0.20	0.0-0.1	0.0-0.5
	56-60	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.05-0.15	0.0-0.1	0.0-0.5
298257									
Wallpack	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2
298258									
Wallpack	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2
298259									
Wallpack, extremely stony	0-1	0-32	0-65	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.18-0.23	0.0-0.1	1.0-20
	2-5	16-76	15-65	9-17	1.16-1.50	0.6-5.9	0.14-0.20	0.0-0.1	0.5-2.5
	5-18	11-76	15-65	9-17	1.29-1.73	0.6-5.9	0.14-0.18	0.0-0.1	0.0-0.5
	18-24	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.16	0.0-1.5	0.0-0.3
	24-42	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
	42-60	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
298260									
Wallpack,									
extremely stony	0-1	0-32	0-65	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.18-0.23	0.0-0.1	1.0-20
	2-5	16-76	15-65	9-17	1.16-1.50	0.6-5.9	0.14-0.20	0.0-0.1	0.5-2.5
	5-18	11-76	15-65	9-17	1.29-1.73	0.6-5.9	0.14-0.18	0.0-0.1	0.0-0.5
	18-24	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.16	0.0-1.5	0.0-0.3
	24-42	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
	42-60	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
298261									
Wallpack--------	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2
298262									
Wallpack,									
extremely stony	0-1	0-32	0-65	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.18-0.23	0.0-0.1	1.0-20
	2-5	16-76	15-65	9-17	1.16-1.50	0.6-5.9	0.14-0.20	0.0-0.1	0.5-2.5
	5-18	11-76	15-65	9-17	1.29-1.73	0.6-5.9	0.14-0.18	0.0-0.1	0.0-0.5
	18-24	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.16	0.0-1.5	0.0-0.3
	24-42	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
	42-60	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
298265									
Venango,									
extremely stony	0-1	0-28	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-6	23-28	51-55	21-22	1.03-1.54	0.6-2.0	0.17-0.20	0.0-0.2	2.0-4.0
	6-16	5-38	44-59	18-30	1.29-1.62	0.6-2.0	0.16-0.18	0.0-0.1	0.3-0.5
	16-22	5-38	44-59	18-35	1.64-1.86	0.0-0.2	0.06-0.09	0.0-0.1	0.2-0.4
	22-34	5-38	44-59	18-35	1.64-1.86	0.0-0.2	0.06-0.09	0.0-0.1	0.2-0.4
	34-60	5-38	44-59	18-35	1.64-1.86	0.0-0.2	0.08-0.12	0.0-0.1	0.1-0.3
298266									
Venango,									
extremely stony	0-1	0-28	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-6	23-28	51-55	21-22	1.03-1.54	0.6-2.0	0.17-0.20	0.0-0.2	2.0-4.0
	6-16	5-38	44-59	18-30	1.29-1.62	0.6-2.0	0.16-0.18	0.0-0.1	0.3-0.5
	16-22	5-38	44-59	18-39	1.64-1.86	0.0-0.2	0.06-0.09	0.0-0.1	0.2-0.4
	22-34	5-38	44-59	18-39	1.64-1.86	0.0-0.2	0.06-0.09	0.0-0.1	0.2-0.4
	34-60	5-38	44-59	18-39	1.64-1.86	0.0-0.2	0.08-0.12	0.0-0.1	0.1-0.3
298409									
Swartswood,									
extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
298411									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
298413									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
318498									
Hazen, very stony-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-10	35-47	35-50	10-18	1.30-1.52	0.6-5.9	0.12-0.18	0.0-0.2	1.8-5.2
	10-18	61-76	15-26	5-14	1.50-1.57	0.6-5.9	0.10-0.14	0.0-0.1	0.2-1.0
	18-29	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.1-0.5
	29-41	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
	41-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
318533									
Hazen, very stony-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-10	35-47	35-50	10-18	1.30-1.52	0.6-5.9	0.12-0.18	0.0-0.2	1.8-5.2
	10-18	61-76	15-26	5-14	1.50-1.57	0.6-5.9	0.10-0.14	0.0-0.1	0.2-1.0
	18-29	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.1-0.5
	29-41	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
	41-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
319783									
Catden----------	0-2	0-30	0-55	0-22	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	2-13	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	13-20	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	20-32	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	32-60	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
319784									
Fredon, very stony----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-8	16-32	51-65	13-18	1.34-1.54	0.2-2.0	0.16-0.20	0.0-0.1	3.0-5.0
	8-14	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	14-18	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	18-23	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	23-31	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	31-36	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	36-45	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	45-55	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	55-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
Halsey, very stony----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-5	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.14-0.24	0.0-0.1	3.0-5.0
	5-11	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.14-0.24	0.0-0.1	3.0-5.0
	11-20	16-71	17-65	2-18	1.42-1.59	0.6-5.9	0.12-0.18	0.0-0.1	0.5-1.5
	20-25	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	25-35	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	35-49	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	49-56	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	56-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
543222									
Andover, extremely stony	0-8	43	38	10-30	1.20-1.40	0.6-2.0	0.08-0.20	0.0-2.9	1.0-4.0
	8-17	34	38	18-35	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	0.0-0.5
	17-53	34	37	18-35	1.30-1.60	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.5
	53-65	38	36	18-40	1.40-1.70	0.1-0.6	0.08-0.12	0.0-2.9	0.0-0.5
Buchanan, extremely stony	0-6	43	38	10-27	1.20-1.40	0.6-2.0	0.11-0.16	0.0-2.9	2.0-4.0
	6-23	39	37	18-30	1.30-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	23-47	38	36	18-45	1.40-1.70	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.5
	47-61	38	36	18-45	1.40-1.70	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.1
543243									
Berks----------	0-10	45	41	5-23	1.20-1.50	0.6-6.0	0.08-0.12	0.0-2.9	2.0-4.0
	10-26	27	54	5-32	1.20-1.60	0.6-6.0	0.04-0.10	0.0-2.9	0.0-0.5
	26-33	46	42	5-20	1.20-1.60	2.0-6.0	0.04-0.10	0.0-2.9	0.0-0.5
	33-43	---	---	---	---	0.2-20.0	0.00-0.00	---	---
Weikert---------	0-8	26	53	15-27	1.20-1.40	2.0-6.0	0.08-0.14	0.0-2.9	1.0-4.0
	8-15	26	53	15-27	1.20-1.40	2.0-6.0	0.04-0.08	0.0-2.9	0.0-0.5
	15-18	26	53	15-27	1.20-1.40	2.0-6.0	0.04-0.08	0.0-2.9	0.0-0.5
	18-20	---	---	---	---	0.6-20.0	---	---	---
543246									
Buchanan--------	0-7	20-50	30-60	10-27	1.20-1.40	0.6-2.0	0.12-0.18	0.0-2.9	1.0-3.0
	7-21	20-50	30-60	15-32	1.30-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	21-65	20-50	30-60	15-32	1.40-1.70	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.1
543247									
Buchanan, extremely stony	0-3	20-50	30-60	10-27	1.20-1.40	0.6-2.0	0.12-0.18	0.0-2.9	1.0-3.0
	3-21	20-50	30-60	15-32	1.30-1.60	0.6-2.0	0.10-0.16	0.0-2.9	0.0-0.5
	21-65	20-50	30-60	15-32	1.40-1.70	0.1-0.2	0.06-0.10	0.0-2.9	0.0-0.1

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
543257									
Chippewa--------	0-8	27	54	10-27	1.00-1.30	0.6-2.0	0.18-0.22	0.0-2.9	3.0-10
	8-16	19	54	18-35	1.20-1.50	0.6-2.0	0.10-0.17	0.0-2.9	0.5-5.0
	16-48	40	38	10-35	1.55-2.05	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
	48-80	40	38	10-35	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
543258									
Chippewa--------	0-8	27	54	10-27	1.00-1.30	0.6-2.0	0.18-0.22	0.0-2.9	3.0-10
	8-16	19	54	18-35	1.20-1.50	0.6-2.0	0.10-0.17	0.0-2.9	0.5-5.0
	16-48	40	38	10-35	1.55-2.05	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
	48-80	40	38	10-35	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
543259									
Chippewa, extremely stony	0-8	27	54	10-27	1.10-1.40	0.6-2.0	0.11-0.18	0.0-2.9	3.0-10
	8-16	19	54	18-35	1.20-1.50	0.6-2.0	0.10-0.17	0.0-2.9	0.5-5.0
	16-48	40	38	10-35	1.55-2.05	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
	48-80	40	38	10-35	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.2-1.0
543271									
Delaware--------	0-10	68	21	2-20	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-4.0
	10-40	62	34	2-7	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.0-0.5
	40-87	79	16	2-7	1.25-1.55	6.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5
543276									
Fluvaquents-----	0-6	30	54	5-27	1.00-1.40	0.2-6.0	0.06-0.17	0.0-2.9	1.0-4.0
	6-62	29	30	5-60	1.00-1.50	0.1-0.6	0.03-0.17	0.0-2.9	0.0-3.0
543292									
Hazleton, extremely stony	0-6	46	42	7-18	1.20-1.40	2.0-6.0	0.10-0.16	0.0-2.9	2.0-4.0
	6-43	45	43	7-18	1.20-1.40	2.0-20.0	0.08-0.12	0.0-2.9	0.0-0.5
	43-55	46	44	5-15	1.20-1.40	2.0-20.0	0.06-0.12	0.0-2.9	0.0-0.5
	55-80	---	---	---	---	2.0-6.0	---	---	---
543293									
Hazleton, extremely stony	0-6	46	42	7-18	1.20-1.40	2.0-6.0	0.10-0.16	0.0-2.9	2.0-4.0
	6-43	45	43	7-18	1.20-1.40	2.0-20.0	0.08-0.12	0.0-2.9	0.0-0.5
	43-60	46	44	5-15	1.20-1.40	2.0-20.0	0.06-0.12	0.0-2.9	0.0-0.5
	60-80	---	---	---	---	2.0-6.0	---	---	---
543299									
Laidig, extremely stony	0-3	43	40	7-27	1.20-1.40	0.6-6.0	0.08-0.12	0.0-2.9	2.0-4.0
	3-38	38	36	18-35	1.30-1.50	0.6-6.0	0.08-0.12	0.0-2.9	0.0-0.5
	38-62	42	38	18-35	1.40-1.70	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
543300									
Laidig, extremely stony	0-3	43	40	7-27	1.20-1.40	0.6-6.0	0.08-0.12	0.0-2.9	2.0-4.0
	3-38	38	36	18-35	1.30-1.50	0.6-6.0	0.08-0.12	0.0-2.9	0.0-0.5
	38-62	42	38	18-35	1.40-1.70	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
543304									
Laidig----------	0-3	43	40	7-27	1.20-1.40	0.6-6.0	0.08-0.12	0.0-2.9	2.0-4.0
	3-38	38	36	18-35	1.30-1.50	0.6-6.0	0.08-0.12	0.0-2.9	0.0-0.5
	38-62	42	38	18-35	1.40-1.70	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
543327									
Swartswood------	0-11	44	40	12-20	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-4.0
	11-34	45	41	10-20	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-0.5
	34-47	70	16	8-20	1.40-1.80	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
543328									
Swartswood------	0-11	44	40	12-20	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	2.0-4.0
	11-34	45	41	10-20	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-0.5
	34-47	70	16	8-20	1.40-1.80	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
543330									
Swartswood, extremely stony	0-11	44	40	12-20	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	5.0-10
	11-34	44	41	10-20	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	34-47	70	16	8-20	1.40-1.80	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
Wurtsboro, extremely stony	0-10	44	41	10-20	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	10-20	46	44	5-20	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.5
	20-64	44	41	10-20	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
543331									
Swartswood, extremely stony	0-11	44	40	12-20	1.20-1.40	0.6-2.0	0.08-0.12	0.0-2.9	5.0-10
	11-34	44	41	10-20	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	34-47	70	16	8-20	1.40-1.80	0.1-0.6	0.06-0.10	0.0-2.9	0.0-0.5
Wurtsboro, extremely stony	0-10	44	41	10-20	1.20-1.40	0.6-2.0	0.10-0.16	0.0-2.9	1.0-3.0
	10-20	45	41	10-20	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.5
	20-64	44	41	10-20	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
543359									
Volusia---------	0-8	22	55	18-27	1.10-1.40	0.6-2.0	0.09-0.14	0.0-2.9	2.0-8.0
	8-15	40	38	18-27	1.30-1.60	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	15-70	43	39	15-35	1.60-2.05	0.0-0.2	0.01-0.02	0.0-2.9	0.1-0.5
	70-80	42	37	15-27	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.1-0.6
543360									
Volusia, extremely stony	0-8	22	55	18-27	1.10-1.40	0.6-2.0	0.11-0.17	0.0-2.9	2.0-8.0
	8-15	40	38	18-27	1.30-1.60	0.6-2.0	0.09-0.16	0.0-2.9	0.0-1.0
	15-70	43	39	15-35	1.60-2.05	0.0-0.2	0.01-0.02	0.0-2.9	0.1-0.5
	70-80	42	37	15-27	1.50-1.80	0.0-0.2	0.01-0.02	0.0-2.9	0.1-0.6
543374									
Wurtsboro-------	0-10	30	55	10-20	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	1.0-3.0
	10-20	45	41	10-20	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.5
	20-64	44	41	10-20	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
543375									
Wurtsboro-------	0-10	30	55	10-20	1.20-1.40	0.6-2.0	0.10-0.14	0.0-2.9	1.0-3.0
	10-20	45	41	10-20	1.40-1.60	0.6-2.0	0.10-0.14	0.0-2.9	0.0-0.5
	20-64	44	41	10-20	1.60-1.80	0.1-0.2	0.08-0.12	0.0-2.9	0.0-0.5
612280									
Scio----------	0-6	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-2.9	2.0-8.0
	6-13	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-2.9	2.0-8.0
	13-23	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.5-2.0
	23-28	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.1-1.0
	28-50	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.0-0.8
	50-59	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.10-0.19	0.0-2.9	0.0-0.5
	59-72	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.10-0.19	0.0-2.9	0.0-0.5
612666									
Colonie---------	0-2	76-79	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	2-11	76-95	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	11-24	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	24-40	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	40-62	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
612668									
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
Hazen, very stony-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-10	35-47	35-50	10-18	1.30-1.52	0.6-5.9	0.12-0.18	0.0-0.2	1.8-5.2
	10-18	61-76	15-26	5-14	1.50-1.57	0.6-5.9	0.10-0.14	0.0-0.1	0.2-1.0
	18-29	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.1-0.5
	29-41	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
	41-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
612724									
Lordstown, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
Wallpack, very rocky----------	0-1	0-32	0-65	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.18-0.23	0.0-0.1	1.0-20
	2-5	16-76	15-65	9-17	1.16-1.50	0.6-5.9	0.14-0.20	0.0-0.1	0.5-2.5
	5-18	11-76	15-65	9-17	1.29-1.73	0.6-5.9	0.14-0.18	0.0-0.1	0.0-0.5
	18-24	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.16	0.0-1.5	0.0-0.3
	24-42	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
	42-60	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
612732									
Atherton, very poorly drained-	0-2	0-30	0-55	0-25	0.13-0.23	5.9-20.0	0.45-0.55	0.0-0.0	70-100
	2-4	0-30	0-55	0-25	0.13-0.23	2.0-5.9	0.45-0.55	0.0-0.0	70-100
	4-8	20-30	50-55	21-25	1.34-1.54	0.2-2.0	0.16-0.21	0.0-0.1	10-25
	8-10	5-71	17-59	2-35	1.34-1.54	0.2-2.0	0.10-0.19	0.0-0.1	1.0-8.0
	10-18	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	18-29	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	29-32	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	32-41	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	41-45	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	45-50	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	50-60	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	60-70	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
Atherton, poorly drained-	0-6	32-42	39-49	18-22	1.10-1.40	0.2-2.0	0.16-0.21	0.0-0.1	4.0-10
	6-12	5-71	17-59	2-35	1.25-1.55	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	12-30	5-71	17-59	2-35	1.25-1.55	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	30-40	5-76	10-59	2-35	1.45-1.65	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	40-60	5-76	10-59	2-35	1.45-1.65	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
612738									
Fluvaquents, occasionally flooded--------	0-5	20-50	50-80	12-27	1.20-1.40	0.6-2.0	0.16-0.20	0.0-2.9	2.0-4.0
	5-12	20-50	50-80	12-27	1.30-1.50	0.6-2.0	0.16-0.20	0.0-2.9	0.0-0.5
	12-18	20-80	5-80	7-35	1.20-1.50	0.6-2.0	0.12-0.18	0.0-2.9	0.0-0.5
	18-24	20-80	5-80	7-35	1.20-1.50	0.6-2.0	0.12-0.18	0.0-2.9	0.0-0.5
	24-60	20-85	10-80	7-35	1.20-1.70	2.0-20.0	0.04-0.08	0.0-2.9	0.0-0.5
612753									
Wallpack, aeolian mantle, very stony----------	0-1	0-73	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	2.0-4.5
	2-8	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	0.5-2.0
	8-14	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	14-21	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	21-26	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	26-31	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	31-36	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	36-60	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
612756									
Wallpack, aeolian mantle, very stony----------	0-1	0-73	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	2.0-4.5
	2-8	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	0.5-2.0
	8-14	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	14-21	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	21-26	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	26-31	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	31-36	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	36-60	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
612757									
Wallpack, aeolian mantle, very stony----------	0-1	0-73	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	2.0-4.5
	2-8	53-73	17-44	2-17	1.24-1.52	0.6-2.0	0.15-0.21	0.0-0.2	0.5-2.0
	8-14	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	14-21	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	21-26	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	26-31	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	31-36	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
	36-60	16-68	17-65	2-18	1.29-1.42	0.6-2.0	0.07-0.20	0.0-0.1	0.0-0.5
612767									
Wellsboro, extremely stony	0-8	16-47	51-65	13-18	1.34-1.54	0.6-2.0	0.35-0.45	0.0-0.1	3.0-5.0
	8-15	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.2-2.5
	15-24	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	24-29	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	29-37	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	37-60	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
612768									
Wellsboro, extremely stony	0-8	16-47	51-65	13-18	1.34-1.54	0.6-2.0	0.35-0.45	0.0-0.1	3.0-5.0
	8-15	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.2-2.5
	15-24	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	24-29	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	29-37	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	37-60	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
613393									
Alden, extremely stony----------	0-2	0-30	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-7	23-30	50-55	18-22	1.34-1.54	0.6-2.0	0.16-0.22	0.0-0.1	4.0-10
	7-14	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.5-1.0
	14-28	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.5-1.0
	28-43	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.0-0.5
	43-60	5-68	17-59	8-35	1.29-1.62	0.1-0.6	0.08-0.15	0.0-0.1	0.0-0.5
613447									
Unadilla--------	0-8	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	2.0-7.0
	8-14	16-71	26-65	2-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	0.5-4.0
	14-25	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	25-39	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	39-60	16-79	21-65	0-18	1.44-1.59	2.0-20.0	0.01-0.15	0.0-0.2	0.0-0.5
613448									
Unadilla--------	0-8	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	2.0-7.0
	8-14	16-71	26-65	2-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	0.5-4.0
	14-25	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	25-39	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	39-60	16-79	21-65	0-18	1.44-1.59	2.0-20.0	0.01-0.15	0.0-0.2	0.0-0.5
614075									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
620179									
Arnot, very rocky-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
620179									
Lordstown, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
620180									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
620181									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
623089									
Chippewa, extremely stony	0-2	0-30	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-4	23-30	50-55	18-22	1.03-1.54	0.6-2.0	0.18-0.22	0.0-0.2	2.0-4.0
	4-8	5-42	39-59	18-35	1.16-1.50	0.6-2.0	0.10-0.17	0.0-0.1	0.3-0.5
	8-13	5-42	39-59	18-35	1.16-1.62	0.6-2.0	0.10-0.17	0.0-0.1	0.3-0.5
	13-21	5-68	17-59	8-35	1.71-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.2-0.4
	21-29	5-68	17-59	8-35	1.71-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.2-0.4
	29-34	5-68	17-59	8-35	1.42-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.1-0.3
	34-60	5-68	17-59	8-35	1.42-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.1-0.3

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
623109									
Farmington------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-3	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.12-0.22	0.0-0.1	2.0-5.0
	3-9	16-71	17-65	2-18	1.29-1.58	0.6-5.9	0.08-0.20	0.0-0.1	0.5-1.5
	9-15	16-71	17-65	2-18	1.29-1.58	0.6-5.9	0.05-0.15	0.0-0.1	0.0-1.0
	15-80	---	---	---	---	---	---	---	---
624811									
Galway, very rocky----------	0-2	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	0-47	0-50	0-18	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	3-5	35-47	35-50	10-18	1.12-1.30	0.6-2.0	0.15-0.21	0.0-0.1	2.0-6.0
	5-15	16-68	17-65	2-18	1.29-1.58	0.6-2.0	0.08-0.19	0.0-0.1	0.0-1.0
	15-24	16-68	17-65	2-18	1.29-1.58	0.6-2.0	0.04-0.14	0.0-0.1	0.0-1.0
	24-80	---	---	---	---	---	---	---	---
624813									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
624816									
Lordstown, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
Wallpack, very rocky----------	0-1	0-32	0-65	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.18-0.23	0.0-0.1	1.0-20
	2-5	16-76	15-65	9-17	1.16-1.50	0.6-5.9	0.14-0.20	0.0-0.1	0.5-2.5
	5-18	11-76	15-65	9-17	1.29-1.73	0.6-5.9	0.14-0.18	0.0-0.1	0.0-0.5
	18-24	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.16	0.0-1.5	0.0-0.3
	24-42	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
	42-60	11-76	15-65	9-20	1.64-1.98	0.0-0.6	0.08-0.14	0.0-1.5	0.0-0.3
624822									
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
Wallpack--------	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
624823									
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
Wallpack--------	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2
624824									
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
Wallpack--------	0-3	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.16-0.20	0.0-0.1	1.3-3.3
	3-9	16-32	51-65	13-17	1.34-1.54	0.6-5.9	0.12-0.20	0.0-0.1	0.8-2.3
	9-16	11-76	15-65	2-17	1.29-1.73	0.6-5.9	0.12-0.16	0.0-0.1	0.0-0.5
	16-25	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.12	0.0-0.1	0.0-0.3
	25-65	11-76	15-65	2-20	1.71-1.98	0.0-0.6	0.07-0.14	0.0-0.1	0.0-0.2
624826									
Manlius, very rocky----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	2-18	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	18-27	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	27-80	---	---	---	---	---	---	---	---
Nassau, very rocky----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	2-15	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	15-80	---	---	---	---	---	---	---	---
624827									
Nassau, very rocky----------	0-7	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	7-13	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	13-80	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	9-20	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	20-29	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	29-80	---	---	---	---	---	---	---	---
624828									
Nassau, very rocky----------	0-7	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	7-13	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	13-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
624828									
Manlius, very rocky----------	0-9	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	9-20	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	20-29	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	29-80	---	---	---	---	---	---	---	---
624829									
Nassau, very rocky----------	0-7	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	7-13	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	13-80	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	9-20	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	20-29	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	29-80	---	---	---	---	---	---	---	---
624832									
Nassau----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	2-15	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	15-80	---	---	---	---	---	---	---	---
624841									
Oquaga----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
624845									
Farmington------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-3	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.12-0.22	0.0-0.1	2.0-5.0
	3-9	16-71	17-65	2-18	1.29-1.58	0.6-5.9	0.08-0.20	0.0-0.1	0.5-1.5
	9-15	16-71	17-65	2-18	1.29-1.58	0.6-5.9	0.05-0.15	0.0-0.1	0.0-1.0
	15-80	---	---	---	---	---	---	---	---
Galway----------	0-2	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	0-47	0-50	0-18	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	3-5	35-47	35-50	10-18	1.12-1.30	0.6-2.0	0.15-0.21	0.0-0.1	2.0-6.0
	5-15	16-68	17-65	2-18	1.29-1.58	0.6-2.0	0.08-0.19	0.0-0.1	0.0-1.0
	15-24	16-68	17-65	2-18	1.29-1.58	0.6-2.0	0.04-0.14	0.0-0.1	0.0-1.0
	24-80	---	---	---	---	---	---	---	---
624846									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
626816									
Udifluvents, occasionally flooded--------	0-3	43-85	5-45	2-12	1.30-1.50	5.9-20.0	0.11-0.17	0.0-2.9	3.0-5.0
	3-16	43-85	5-45	2-12	1.25-1.55	5.9-20.0	0.02-0.08	0.0-2.9	0.0-3.0
	16-22	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	22-27	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	27-32	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	32-60	43-85	5-45	2-12	1.25-1.55	5.9-20.0	0.02-0.08	0.0-2.9	0.0-3.0
635458									
Oquaga, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
635459									
Oquaga, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
740953									
Delaware, rarely flooded-	0-1	0-73	0-44	0-17	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	1-4	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	2.0-4.5
	4-11	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	0.5-2.0
	11-20	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	20-33	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	33-41	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	41-56	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.07-0.20	0.0-0.1	0.0-0.5
	56-60	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.05-0.15	0.0-0.1	0.0-0.5
740968									
Nassau, very rocky----------	0-7	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	7-13	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	13-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
740968									
Manlius, very rocky----------	0-9	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	9-20	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	20-29	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	29-80	---	---	---	---	---	---	---	---
740969									
Nassau, very rocky----------	0-7	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.13-0.17	0.0-0.1	3.0-5.0
	7-13	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.07-0.12	0.0-0.1	0.0-1.0
	13-80	---	---	---	---	---	---	---	---
Manlius, very rocky----------	0-9	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.10-0.18	0.0-0.1	2.0-8.0
	9-20	16-47	35-65	10-18	1.29-1.55	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	20-29	16-47	35-65	10-18	1.42-1.70	0.6-5.9	0.03-0.09	0.0-0.1	0.0-0.0
	29-80	---	---	---	---	---	---	---	---
740971									
Oquaga, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
740972									
Oquaga, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
Lackawanna, very rocky-----	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
740974									
Oquaga----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
740975									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---
740987									
Scio----------	0-6	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-2.9	2.0-8.0
	6-13	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-2.9	2.0-8.0
	13-23	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.5-2.0
	23-28	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.1-1.0
	28-50	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-2.9	0.0-0.8
	50-59	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.10-0.19	0.0-2.9	0.0-0.5
	59-72	16-71	26-65	7-18	1.44-1.59	0.6-2.0	0.10-0.19	0.0-2.9	0.0-0.5
740988									
Udifluvents, occasionally flooded--------	0-3	43-85	5-45	2-12	1.30-1.50	5.9-20.0	0.11-0.17	0.0-2.9	3.0-5.0
	3-16	43-85	5-45	2-12	1.25-1.55	5.9-20.0	0.02-0.08	0.0-2.9	0.0-3.0
	16-22	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	22-27	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	27-32	65-90	2-25	2-18	1.25-1.55	2.0-5.9	0.02-0.08	0.0-2.9	0.0-3.0
	32-60	43-85	5-45	2-12	1.25-1.55	5.9-20.0	0.02-0.08	0.0-2.9	0.0-3.0
740991									
Unadilla--------	0-8	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	2.0-7.0
	8-14	16-71	26-65	2-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	0.5-4.0
	14-25	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	25-39	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	39-60	16-79	21-65	0-18	1.44-1.59	2.0-20.0	0.01-0.15	0.0-0.2	0.0-0.5
740992									
Unadilla--------	0-8	16-32	51-65	13-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	2.0-7.0
	8-14	16-71	26-65	2-18	1.46-1.59	0.6-2.0	0.18-0.21	0.0-0.2	0.5-4.0
	14-25	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	25-39	16-71	26-65	2-18	1.44-1.59	0.6-2.0	0.17-0.20	0.0-0.2	0.0-1.0
	39-60	16-79	21-65	0-18	1.44-1.59	2.0-20.0	0.01-0.15	0.0-0.2	0.0-0.5
740995									
Wellsboro, extremely stony	0-8	16-47	51-65	13-18	1.34-1.54	0.6-2.0	0.35-0.45	0.0-0.1	3.0-5.0
	8-15	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.2-2.5
	15-24	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	24-29	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	29-37	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	37-60	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
740996									
Wellsboro, extremely stony	0-8	16-47	51-65	13-18	1.34-1.54	0.6-2.0	0.35-0.45	0.0-0.1	3.0-5.0
	8-15	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.2-2.5
	15-24	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	24-29	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-0.5
	29-37	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	37-60	16-76	15-65	9-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
741149									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
741150									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
801114									
Oquaga----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
810906									
Oquaga----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-4	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.08-0.17	0.0-0.1	2.0-8.0
	4-20	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.04-0.12	0.0-0.1	0.0-2.0
	20-25	16-76	15-65	2-18	1.29-1.70	0.6-2.0	0.04-0.12	0.0-0.1	0.0-1.0
	25-80	---	---	---	---	---	---	---	---
1147465									
Alden, extremely stony	0-2	0-30	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-7	23-30	50-55	18-22	1.34-1.54	0.6-2.0	0.16-0.22	0.0-0.1	4.0-10
	7-14	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.5-1.0
	14-28	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.5-1.0
	28-43	5-71	26-59	2-35	1.29-1.62	0.2-0.6	0.14-0.20	0.0-0.1	0.0-0.5
	43-60	5-68	17-59	8-35	1.29-1.62	0.1-0.6	0.08-0.15	0.0-0.1	0.0-0.5
1147467									
Arnot, very rocky-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1147467									
Lordstown, very rocky----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
1147468									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
1147469									
Arnot----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.42	0.6-5.9	0.10-0.15	0.0-0.2	3.0-6.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	3-4	53-68	17-44	2-17	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	4-12	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	12-17	16-47	35-65	10-18	1.29-1.59	0.6-5.9	0.08-0.12	0.0-0.1	0.0-0.5
	17-80	---	---	---	---	---	---	---	---
Lordstown-------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.30-1.52	0.6-2.0	0.11-0.17	0.0-0.2	3.0-8.0
	2-3	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	3-5	16-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	5-17	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	17-22	21-47	35-65	10-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.5-1.0
	22-36	16-68	17-65	2-18	1.29-1.70	0.6-2.0	0.05-0.14	0.0-0.1	0.0-0.5
	36-80	---	---	---	---	---	---	---	---
1147470									
Atherton, very poorly drained-	0-2	0-30	0-55	0-25	0.13-0.23	5.9-20.0	0.45-0.55	0.0-0.0	70-100
	2-4	0-30	0-55	0-25	0.13-0.23	2.0-5.9	0.45-0.55	0.0-0.0	70-100
	4-8	20-30	50-55	21-25	1.34-1.54	0.2-2.0	0.16-0.21	0.0-0.1	10-25
	8-10	5-71	17-59	2-35	1.34-1.54	0.2-2.0	0.10-0.19	0.0-0.1	1.0-8.0
	10-18	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	18-29	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	29-32	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	32-41	5-71	17-59	2-35	1.56-1.73	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	41-45	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	45-50	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	50-60	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	60-70	5-71	17-59	2-35	1.42-1.70	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1147470									
Atherton,									
poorly drained-	0-6	32-42	39-49	18-22	1.10-1.40	0.2-2.0	0.16-0.21	0.0-0.1	4.0-10
	6-12	5-71	17-59	2-35	1.25-1.55	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	12-30	5-71	17-59	2-35	1.25-1.55	0.2-2.0	0.10-0.19	0.0-0.1	0.0-2.0
	30-40	5-76	10-59	2-35	1.45-1.65	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
	40-60	5-76	10-59	2-35	1.45-1.65	0.6-5.9	0.05-0.12	0.0-0.1	0.0-1.0
1147471									
Catden----------	0-2	0-30	0-55	0-22	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	2-13	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	13-20	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	20-32	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
	32-60	0-30	0-55	0-22	0.13-0.23	0.2-5.9	0.35-0.45	0.0-0.0	70-100
1147474									
Chippewa,									
extremely stony	0-2	0-30	0-55	0-22	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-4	23-30	50-55	18-22	1.03-1.54	0.6-2.0	0.18-0.22	0.0-0.2	2.0-4.0
	4-8	5-42	39-59	18-35	1.16-1.50	0.6-2.0	0.10-0.17	0.0-0.1	0.3-0.5
	8-13	5-42	39-59	18-35	1.16-1.62	0.6-2.0	0.10-0.17	0.0-0.1	0.3-0.5
	13-21	5-68	17-59	8-35	1.71-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.2-0.4
	21-29	5-68	17-59	8-35	1.71-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.2-0.4
	29-34	5-68	17-59	8-35	1.42-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.1-0.3
	34-60	5-68	17-59	8-35	1.42-1.98	0.0-0.2	0.01-0.02	0.0-0.1	0.1-0.3
1147475									
Colonie---------	0-2	76-79	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	2-11	76-95	21-24	0-1	1.24-1.45	2.0-20.0	0.09-0.10	0.0-0.1	1.0-2.0
	11-24	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	24-40	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
	40-62	76-98	2-24	0-1	1.29-1.51	2.0-20.0	0.06-0.08	0.0-0.1	0.0-0.5
1147478									
Delaware,									
rarely flooded-	0-1	0-73	0-44	0-17	0.13-0.23	2.0-5.9	0.35-0.45	0.0-0.0	70-100
	1-4	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	2.0-4.5
	4-11	53-73	17-44	2-17	1.24-1.52	2.0-5.9	0.15-0.21	0.0-0.2	0.5-2.0
	11-20	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	20-33	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	33-41	53-68	17-44	2-17	1.29-1.42	2.0-5.9	0.07-0.20	0.0-0.1	0.0-0.5
	41-56	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.07-0.20	0.0-0.1	0.0-0.5
	56-60	35-85	12-49	2-17	1.29-1.42	5.9-20.0	0.05-0.15	0.0-0.1	0.0-0.5
1147482									
Fredon, very									
stony----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-8	16-32	51-65	13-18	1.34-1.54	0.2-2.0	0.16-0.20	0.0-0.1	3.0-5.0
	8-14	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	14-18	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	18-23	16-71	17-65	2-18	1.42-1.59	0.2-2.0	0.12-0.20	0.0-0.1	0.5-1.0
	23-31	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	31-36	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	36-45	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	45-55	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5
	55-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.06	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1147482									
Halsey, very stony----------	0-1	0-32	0-65	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-5	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.14-0.24	0.0-0.1	3.0-5.0
	5-11	16-32	51-65	13-18	1.34-1.54	0.6-5.9	0.14-0.24	0.0-0.1	3.0-5.0
	11-20	16-71	17-65	2-18	1.42-1.59	0.6-5.9	0.12-0.18	0.0-0.1	0.5-1.5
	20-25	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	25-35	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	35-49	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	49-56	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
	56-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.07	0.0-0.1	0.0-0.5
1147485									
Hazen, very stony-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-10	35-47	35-50	10-18	1.30-1.52	0.6-5.9	0.12-0.18	0.0-0.2	1.8-5.2
	10-18	61-76	15-26	5-14	1.50-1.57	0.6-5.9	0.10-0.14	0.0-0.1	0.2-1.0
	18-29	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.1-0.5
	29-41	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
	41-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
1147490									
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
Hazen, very stony-----	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-10	35-47	35-50	10-18	1.30-1.52	0.6-5.9	0.12-0.18	0.0-0.2	1.8-5.2
	10-18	61-76	15-26	5-14	1.50-1.57	0.6-5.9	0.10-0.14	0.0-0.1	0.2-1.0
	18-29	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.1-0.5
	29-41	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
	41-60	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.08	0.0-0.1	0.0-0.5
1147491									
Hoosic, very stony----------	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-9	35-47	35-50	10-18	1.30-1.52	2.0-20.0	0.11-0.16	0.0-0.2	1.8-5.2
	9-21	35-76	15-50	5-18	1.45-1.57	2.0-20.0	0.05-0.14	0.0-0.1	0.2-1.0
	21-27	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	27-37	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	37-49	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5
	49-60	82-98	2-13	0-7	0.67-1.58	20.0-99.9	0.01-0.05	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1147491									
Otisville, very stony----------	0-1	0-76	0-26	0-14	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	61-76	15-26	9-14	1.24-1.68	5.9-20.0	0.09-0.12	0.0-0.5	1.8-5.2
	2-7	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.09-0.12	0.0-0.3	0.0-0.5
	7-11	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.09-0.12	0.0-0.1	0.0-0.5
	11-19	82-98	2-13	0-7	0.67-1.58	5.9-20.0	0.02-0.05	0.0-0.1	0.0-0.5
	19-31	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
	31-43	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
	43-60	82-98	2-13	0-7	0.67-1.58	5.9-99.9	0.01-0.02	0.0-0.1	0.0-0.5
1147492									
Lackawanna, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.30-1.52	0.6-2.0	0.10-0.16	0.0-0.1	3.0-6.0
	3-7	53-68	17-44	2-17	1.29-1.42	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	7-8	53-68	17-44	2-17	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	2.0-6.0
	8-16	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	16-24	16-68	17-65	2-18	1.29-1.59	0.6-2.0	0.10-0.16	0.0-0.1	0.0-2.0
	24-29	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
	29-60	16-76	15-65	2-18	1.64-1.98	0.1-0.2	0.06-0.12	0.0-0.1	0.0-0.5
1147500									
Wurtsboro, extremely stony	0-2	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	35-47	35-50	10-18	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-5	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	5-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-30	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	30-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
1147501									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
1147502									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1147502									
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
1147527									
Udorthents------	0-12	35-47	35-50	10-18	1.30-1.52	0.1-0.2	0.00-0.00	0.0-0.2	2.0-4.0
	12-72	35-98	2-50	0-18	0.67-1.58	0.2-20.0	0.08-0.19	0.0-0.1	0.5-1.0
1147532									
Udorthents------	0-12	35-47	35-50	10-18	1.30-1.52	0.1-0.2	0.00-0.00	0.0-0.2	2.0-4.0
	12-72	35-98	2-50	0-18	0.67-1.58	0.2-20.0	0.08-0.19	0.0-0.1	0.5-1.0
1147533									
Wurtsboro, extremely stony	0-2	0-68	0-44	0-17	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	2-3	53-68	17-44	2-17	1.24-1.68	0.6-5.9	0.10-0.16	0.0-0.2	1.8-5.2
	3-4	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.0-1.0
	4-6	35-68	17-50	2-18	1.29-1.42	0.6-5.9	0.10-0.16	0.0-0.1	0.5-2.0
	6-18	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	18-24	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.10-0.14	0.0-0.1	0.0-1.0
	24-33	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
	33-60	35-76	15-50	2-18	1.64-1.98	0.1-0.2	0.08-0.12	0.0-0.1	0.0-0.5
Swartswood, extremely stony	0-1	0-47	0-50	0-18	0.13-0.23	5.9-20.0	0.35-0.45	0.0-0.0	70-100
	1-2	35-47	35-50	10-18	1.29-1.52	0.6-5.9	0.08-0.12	0.0-0.2	1.8-5.2
	2-3	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	3-4	53-76	15-44	2-17	1.29-1.51	0.6-5.9	0.08-0.12	0.0-0.1	0.5-2.0
	4-21	35-76	15-50	2-18	1.29-1.70	0.6-5.9	0.08-0.12	0.0-0.1	0.0-1.0
	21-32	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
	32-60	35-76	15-50	8-18	1.64-1.98	0.1-0.6	0.06-0.10	0.0-0.1	0.0-0.5
1948749									
Arnot----------	0-8	31	56	8-18	1.10-1.40	0.6-2.0	0.10-0.15	0.0-2.9	3.0-6.0
	8-16	31	56	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	16-26	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948750									
Arnot----------	0-8	31	56	8-18	1.10-1.40	0.6-2.0	0.10-0.15	0.0-2.9	3.0-6.0
	8-16	31	56	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	16-26	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948751									
Arnot----------	0-8	31	56	8-18	1.10-1.40	0.6-2.0	0.10-0.15	0.0-2.9	3.0-6.0
	8-16	31	56	8-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.1-3.0
	16-26	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948774									
Conotton--------	0-9	43	38	8-25	1.30-1.50	2.0-6.0	0.10-0.14	0.0-2.9	0.5-3.0
	9-45	41	37	6-25	1.25-1.60	6.0-20.0	0.06-0.10	0.0-2.9	0.5-1.0
	45-80	84	11	2-9	1.20-1.50	6.0-20.0	0.02-0.06	0.0-2.9	0.1-0.5
1948775									
Conotton--------	0-9	42	38	8-25	1.30-1.50	2.0-6.0	0.10-0.14	0.0-2.9	0.5-3.0
	9-45	40	38	6-25	1.25-1.60	6.0-20.0	0.06-0.10	0.0-2.9	0.5-1.0
	45-80	84	11	2-9	1.20-1.50	6.0-20.0	0.02-0.06	0.0-2.9	0.1-0.5

Table 15.--Physical Soil Properties--Continued

Map unit symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Shrink-swell potential	Organic matter
	In	*Pct*	*Pct*	*Pct*	*g/cc*	*In/hr*	*In/in*	*Pct*	*Pct*
1948776									
Conotton--------	0-9	42	38	8-25	1.30-1.50	2.0-6.0	0.10-0.14	0.0-2.9	0.5-3.0
	9-45	40	38	6-25	1.25-1.60	6.0-20.0	0.06-0.10	0.0-2.9	0.5-1.0
	45-80	84	11	2-9	1.20-1.50	6.0-20.0	0.02-0.06	0.0-2.9	0.1-0.5
1948777									
Conotton--------	0-9	42	38	8-25	1.30-1.50	2.0-6.0	0.10-0.14	0.0-2.9	0.5-3.0
	9-45	40	38	6-25	1.25-1.60	6.0-20.0	0.06-0.10	0.0-2.9	0.5-1.0
	45-80	84	11	2-9	1.20-1.50	6.0-20.0	0.02-0.06	0.0-2.9	0.1-0.5
1948797									
Manlius---------	0-8	32	56	6-18	1.10-1.40	0.6-2.0	0.10-0.18	0.0-2.9	1.0-5.0
	8-24	32	56	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-32	32	56	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.0
	32-40	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948802									
Manlius---------	0-8	32	56	6-18	1.10-1.40	0.6-2.0	0.10-0.18	0.0-2.9	1.0-5.0
	8-24	32	56	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-32	32	56	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.0
	32-40	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948818									
Manlius---------	0-8	32	56	6-18	1.10-1.40	0.6-2.0	0.10-0.18	0.0-2.9	1.0-5.0
	8-24	32	56	6-18	1.20-1.50	0.6-2.0	0.08-0.12	0.0-2.9	0.0-1.0
	24-32	32	56	6-18	1.70-1.95	0.6-2.0	0.03-0.09	0.0-2.9	0.0-0.0
	32-40	---	---	---	---	0.2-2.0	0.00-0.00	---	---
1948832									
Penargyl--------	0-12	26	54	15-25	1.20-1.50	0.6-2.0	0.10-0.14	0.0-2.9	1.0-3.0
	12-74	18	55	20-34	1.20-1.50	0.6-2.0	0.12-0.16	0.0-2.9	0.0-0.5
	74-80	38	36	18-32	1.30-1.50	0.2-6.0	0.08-0.11	0.0-2.9	0.0-0.5
	80-90	---	---	---	---	0.6-2.0	---	---	---
1948846									
Phelps----------	0-10	27	54	10-28	1.10-1.40	0.6-2.0	0.13-0.20	0.0-2.9	3.0-6.0
	10-22	38	36	18-35	1.25-1.55	0.6-2.0	0.08-0.13	0.0-2.9	0.0-0.5
	22-30	34	38	18-35	1.25-1.55	0.6-2.0	0.09-0.18	0.0-2.9	0.0-0.5
	30-79	92	5	1-5	1.45-1.65	2.0-20.0	0.01-0.04	0.0-2.9	0.0-0.5
1948855									
Udorthents, loamy----------	0-5	42	38	5-35	1.20-1.80	0.1-20.0	0.06-0.15	0.0-2.9	0.0-5.0
	5-40	42	38	5-35	1.20-1.80	0.1-20.0	0.06-0.15	0.0-2.9	0.0-5.0
	40-70	42	38	5-35	1.30-1.90	0.1-6.0	0.04-0.13	0.0-2.9	0.0-0.2
1948989									
Delaware--------	0-10	47	45	2-10	1.15-1.40	2.0-6.0	0.15-0.21	0.0-2.9	2.0-4.0
	10-40	62	34	2-7	1.15-1.45	2.0-6.0	0.07-0.20	0.0-2.9	0.0-0.5
	40-87	79	16	2-7	1.25-1.55	6.0-20.0	0.04-0.10	0.0-2.9	0.0-0.5

Table 16.--Erosion Properties

[Entries under "Erosion factors" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer]

Map unit symbol and soil name	Depth	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In					
290836						
Hoosic, very stony-----	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			
Otisville, very stony--	0-1	---	---	5	5	56
	1-2	.05	.10			
	2-7	.05	.20			
	7-11	.05	.10			
	11-19	.05	.10			
	19-31	.02	.05			
	31-43	.02	.05			
	43-60	.05	.05			
296265						
Alden----------	0-9	.37	.37	5	8	0
	9-35	.37	.37			
	35-60	.28	.32			
296269						
Fluvents, (alluvial land)----------	0-6	.43	.49	5	3	86
	6-42	.37	.43			
	42-60	.32	.32			
296271						
Alvira----------	0-10	.24	.32	3	8	0
	10-21	.28	.32			
	21-60	.28	.32			
Watson----------	0-10	.28	.37	3	8	0
	10-27	.17	.20			
	27-60	.17	.20			
296272						
Bath----------	0-8	.24	.32	3	5	56
	8-27	.24	.28			
	27-60	.24	.32			
	60-64	.24	.32			
296273						
Bath----------	0-8	.24	.32	3	5	56
	8-27	.24	.28			
	27-60	.24	.32			
	60-64	.24	.32			
296274						
Bath----------	0-8	.24	.32	3	5	56
	8-27	.24	.28			
	27-60	.24	.32			
	60-64	.24	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296275						
Bath	0-8	.24	.32	3	8	0
	8-27	.24	.28			
	27-60	.24	.32			
	60-64	.24	.32			
296276						
Bath	0-8	.24	.32	3	8	0
	8-27	.24	.28			
	27-60	.24	.32			
	60-64	.24	.32			
296277						
Benson	0-8	.20	.28	2	6	48
	8-18	.17	.24			
	18-22	---	---			
296278						
Benson	0-8	.20	.28	2	6	48
	8-18	.17	.24			
	18-22	---	---			
Rock outcrop.						
296279						
Benson	0-8	.20	.28	2	6	48
	8-18	.17	.24			
	18-22	---	---			
Rock outcrop.						
296280						
Braceville	0-3	.20	.24	3	5	56
	3-30	.20	.24			
	30-55	.20	.24			
	55-60	.20	.24			
296281						
Braceville	0-3	.20	.24	3	5	56
	3-30	.20	.24			
	30-55	.20	.24			
	55-60	.20	.24			
296283						
Buchanan	0-4	.24	.32	3	8	0
	4-25	.24	.28			
	25-60	.17	.24			
296288						
Chippewa	0-8	.32	.28	3	8	0
	8-16	.32	.37			
	16-48	.24	.28			
	48-80	.24	.32			
Norwich	0-8	.32	.32	3	8	0
	8-16	.24	.28			
	16-48	.24	.28			
	48-80	.24	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296289						
Chippewa	0-8	.24	.28	3	8	0
	8-16	.32	.37			
	16-48	.24	.32			
	48-80	.24	.32			
Norwich	0-8	.24	.32	3	8	0
	8-16	.24	.28			
	16-48	.24	.32			
	48-80	.24	.32			
296295						
Udorthents, cut and fill.						
296297						
Dekalb	0-7	.17	.24	3	8	0
	7-24	.17	.24			
	24-32	.17	.24			
	32-36	---	---			
296298						
Dekalb	0-7	.17	.24	3	8	0
	7-24	.17	.24			
	24-32	.17	.24			
	32-36	---	---			
296303						
Hazleton	0-5	.15	.17	3	8	0
	5-31	.15	.20			
	31-58	.15	.20			
	58-69	---	---			
296304						
Holly	0-8	.28	.28	5	8	0
	8-28	.28	.32			
	28-41	.28	.32			
	41-60	.28	.37			
296311						
Lackawanna	0-8	.24	.32	3	6	48
	8-25	.20	.28			
	25-60	.20	.24			
Bath	0-8	.24	.32	3	8	0
	8-27	.24	.28			
	27-60	.24	.28			
	60-64	.24	.28			
296312						
Lackawanna	0-8	.24	.32	3	6	48
	8-25	.20	.28			
	25-60	.20	.24			
296313						
Lackawanna	0-8	.24	.32	3	6	48
	8-25	.20	.28			
	25-60	.20	.24			
296315						
Lackawanna	0-8	.24	.32	3	6	48
	8-25	.20	.28			
	25-60	.20	.24			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296316						
Lackawanna----------	0-8	.24	.32	3	6	48
	8-25	.20	.28			
	25-60	.20	.24			
296317						
Laidig----------	0-6	.24	.32	4	8	0
	6-33	.24	.28			
	33-65	.17	.20			
296326						
Lordstown----------	0-7	.20	.28	3	8	0
	7-26	.20	.28			
	26-30	.28	.37			
	30-42	---	---			
296327						
Lordstown----------	0-7	.20	.28	3	8	0
	7-26	.20	.28			
	26-30	.28	.37			
	30-42	---	---			
296328						
Lordstown----------	0-7	.20	.28	3	8	0
	7-26	.28	.32			
	26-30	.28	.37			
	30-42	---	---			
Oquaga----------	0-7	.20	.37	3	8	0
	7-30	.20	.28			
	30-42	---	---			
296329						
Mardin----------	0-8	.24	.32	3	5	56
	8-17	.24	.28			
	17-21	.24	.28			
	21-60	.24	.32			
	60-80	.24	.32			
296330						
Mardin----------	0-8	.24	.32	3	5	56
	8-17	.24	.28			
	17-21	.24	.28			
	21-60	.24	.32			
	60-80	.24	.32			
296331						
Mardin----------	0-8	.24	.32	3	8	0
	8-17	.24	.37			
	17-21	.24	.37			
	21-60	.24	.64			
	60-80	.24	.64			
296332						
Mardin----------	0-8	.24	.32	3	8	0
	8-17	.24	.37			
	17-21	.24	.37			
	21-60	.24	.64			
	60-80	.24	.64			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296335						
Meckesville----------	0-9	.28	.32	4	6	48
	9-36	.24	.28			
	36-60	.24	.28			
	60-64	.24	.32			
296337						
Meckesville----------	0-9	.24	.32	4	8	0
	9-36	.24	.28			
	36-60	.24	.28			
	60-64	.24	.32			
296338						
Morris----------	0-8	.28	.55	3	5	56
	8-17	.24	.49			
	17-70	.24	.49			
	70-80	.24	.49			
296339						
Morris----------	0-8	.24	.32	3	8	0
	8-17	.24	.32			
	17-70	.24	.28			
	70-80	.24	.28			
296340						
Morris----------	0-8	.24	.32	3	8	0
	8-17	.24	.32			
	17-70	.24	.28			
	70-80	.24	.28			
296341						
Freetown, mucky peat---	0-6	.05	.05	3	8	0
	6-72	.05	.05			
296342						
Paupack, mucky peat (shallow)----------	0-3	.05	.05	2	8	0
	3-26	.05	.05			
	26-36	.10	.24			
	36-70	.17	.28			
296343						
Oquaga----------	0-7	.28	.37	3	6	48
	7-30	.20	.32			
	30-42	---	---			
Lackawanna----------	0-8	.28	.32	3	6	48
	8-25	.20	.24			
	25-60	.20	.24			
296344						
Oquaga----------	0-7	.28	.37	3	6	48
	7-30	.20	.32			
	30-42	---	---			
Lackawanna----------	0-8	.28	.32	3	6	48
	8-25	.20	.24			
	25-60	.20	.24			
296346						
Oquaga----------	0-7	.20	.37	3	8	0
	7-30	.20	.28			
	30-42	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296346						
Lackawanna----------	0-8	.24	.32	3	7	38
	8-25	.20	.28			
	25-60	.20	.24			
296347						
Oquaga----------	0-7	.20	.37	3	8	0
	7-30	.20	.28			
	30-42	---	---			
Lackawanna----------	0-8	.24	.32	3	7	38
	8-25	.20	.28			
	25-60	.20	.24			
296348						
Philo----------	0-10	.37	.37	5	5	56
	10-40	.32	.32			
	40-60	.24	.28			
296349						
Pope----------	0-10	.37	.37	5	5	56
	10-30	.28	.28			
	30-60	.28	.20			
296350						
Pope----------	0-10	.37	.37	5	5	56
	10-30	.28	.28			
	30-60	.28	.20			
296351						
Rexford, somewhat poorly drained--------	0-8	.24	.28	3	8	0
	8-18	.20	.32			
	18-40	.20	.32			
	40-63	.20	.32			
Rexford, poorly drained	0-8	.24	.28	3	8	0
	8-18	.20	.32			
	18-40	.20	.32			
	40-63	.20	.32			
296355						
Sheffield----------	0-7	.37	.37	4	8	0
	7-19	.37	.43			
	19-38	.37	.43			
	38-66	.37	.43			
296363						
Dystrochrepts, very stony----------	0-6	.15	.24	3	8	0
	6-32	.15	.24			
	32-56	.15	.24			
	56-60	---	---			
296369						
Wayland----------	0-9	.43	.43	5	8	0
	9-41	.43	.43			
	41-60	.43	.43			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
296376						
Wellsboro	0-8	.24	.32	3	6	48
	8-17	.28	.43			
	17-21	.28	.43			
	21-60	.28	.32			
	60-80	.28	.32			
296379						
Wellsboro	0-8	.24	.32	3	8	0
	8-17	.28	.43			
	17-21	.28	.43			
	21-60	.28	.32			
	60-80	.28	.32			
296385						
Wyoming	0-7	.17	.20	3	6	48
	7-25	.17	.24			
	25-60	.17	.24			
296386						
Wyoming	0-7	.17	.20	3	6	48
	7-25	.17	.24			
	25-60	.17	.24			
296387						
Wyoming	0-7	.17	.20	3	6	48
	7-25	.17	.24			
	25-60	.17	.24			
296388						
Wyoming	0-7	.17	.20	3	6	48
	7-25	.17	.24			
	25-60	.17	.24			
296389						
Wyoming	0-8	.17	.20	3	6	48
	8-26	.17	.24			
	26-60	.17	.24			
296390						
Water.						
297185						
Edgemere	0-2	.10	.10	3	8	0
	2-5	.20	.43			
	5-24	.24	.37			
	24-66	.24	.55			
Shohola	0-3	.20	.37	3	8	0
	3-24	.24	.37			
	24-72	.24	.28			
297186						
Edgemere	0-2	.10	.10	3	8	0
	2-5	.20	.43			
	5-24	.24	.37			
	24-66	.24	.55			
297188						
Manlius	0-5	.20	.32	2	8	0
	5-24	.20	.28			
	24-30	.20	.32			
	30-40	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
297188						
Arnot	0-3	.24	.28	1	8	0
	3-14	.17	.24			
	14-24	---	---			
Rock outcrop.						
297189						
Manlius	0-5	.20	.32	2	8	0
	5-24	.20	.28			
	24-30	.20	.32			
	30-40	---	---			
Arnot	0-3	.24	.28	1	8	0
	3-14	.17	.24			
	14-24	---	---			
Rock outcrop.						
297190						
Braceville	0-11	.32	.37	4	3	86
	11-27	.32	.43			
	27-48	.28	.43			
	48-70	.20	.28			
297191						
Wyalusing	0-6	.37	.37	5	8	0
	6-31	.28	.32			
	31-70	.10	.17			
297192						
Pope	0-6	.28	.28	5	3	86
	6-33	.28	.28			
	33-70	.28	.20			
297193						
Paupack	0-3	.05	.05	2	8	0
	3-26	.05	.05			
	26-36	.10	.24			
	36-70	.17	.28			
297196						
Freetown	0-6	.05	.05	3	8	0
	6-72	.05	.05			
297197						
Manlius	0-5	.28	.32	2	8	0
	5-24	.20	.28			
	24-30	.20	.32			
	30-40	---	---			
297198						
Manlius	0-5	.28	.32	2	8	0
	5-24	.20	.28			
	24-30	.20	.32			
	30-40	---	---			
297201						
Oquaga	0-2	.20	.37	2	8	0
	2-26	.20	.28			
	26-32	.20	.28			
	32-42	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
297203						
Delaware	0-14	.28	.28	4	3	86
	14-48	.28	.28			
	48-72	.28	.28			
297204						
Delaware	0-14	.28	.28	4	3	86
	14-48	.28	.28			
	48-72	.28	.28			
297205						
Delaware	0-14	.28	.28	4	3	86
	14-48	.28	.28			
	48-72	.28	.28			
297209						
Philo	0-6	.37	.37	4	5	56
	6-36	.32	.32			
	36-70	.10	.24			
297210						
Barbour	0-10	.32	.32	3	5	56
	10-38	.32	.37			
	38-72	.17	.20			
297216						
Wurtsboro	0-4	.24	.32	4	8	0
	4-22	.28	.32			
	22-70	.28	.32			
297217						
Wurtsboro	0-4	.24	.32	4	8	0
	4-22	.28	.32			
	22-70	.28	.32			
297227						
Arnot	0-3	.17	.28	1	8	0
	3-10	.17	.24			
	10-14	.17	.24			
	14-24	---	---			
297228						
Arnot	0-3	.17	.28	1	8	0
	3-10	.17	.24			
	10-14	.17	.24			
	14-24	---	---			
297229						
Wyoming	0-3	.17	.20	5	6	48
	3-33	.17	.24			
	33-72	.17	.24			
297230						
Wyoming	0-3	.17	.20	5	6	48
	3-33	.17	.24			
	33-72	.17	.24			
297231						
Wyoming	0-3	.17	.20	5	6	48
	3-33	.17	.24			
	33-72	.17	.24			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
297236						
Suncook	0-10	.17	.17	5	2	134
	10-70	.10	.15			
297237						
Mardin	0-8	.24	.32	3	8	0
	8-17	.24	.28			
	17-21	.24	.28			
	21-30	.24	.32			
	30-60	.24	.32			
	60-80	.24	.32			
297238						
Mardin	0-8	.24	.32	3	8	0
	8-17	.24	.28			
	17-21	.24	.28			
	21-30	.24	.32			
	30-60	.24	.32			
	60-80	.24	.32			
297239						
Mardin	0-8	.24	.32	3	8	0
	8-17	.24	.28			
	17-21	.24	.28			
	21-30	.24	.32			
	30-60	.24	.32			
	60-80	.24	.32			
297240						
Mardin	0-8	.24	.32	3	8	0
	8-17	.24	.28			
	17-21	.24	.28			
	21-30	.24	.32			
	30-60	.24	.32			
	60-80	.24	.32			
297241						
Unadilla	0-13	.49	.49	3	5	56
	13-49	.64	.64			
	49-80	.64	.64			
297242						
Shohola	0-3	.20	.37	3	8	0
	3-24	.24	.37			
	24-72	.24	.28			
Edgemere	0-2	.10	.10	3	8	0
	2-5	.20	.43			
	5-24	.24	.37			
	24-66	.24	.55			
297243						
Shohola	0-3	.20	.37	3	8	0
	3-24	.24	.37			
	24-72	.24	.28			
Edgemere	0-2	.10	.10	3	8	0
	2-5	.20	.43			
	5-24	.24	.37			
	24-66	.24	.55			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
297244						
Lordstown	0-3	.20	.28	2	8	0
	3-28	.28	.32			
	28-30	.28	.37			
	30-40	---	---			
Swartswood	0-4	.17	.28	4	8	0
	4-32	.20	.24			
	32-70	.20	.28			
297247						
Chenango	0-10	.28	.43	3	5	56
	10-29	.17	.28			
	29-70	.10	.20			
297248						
Chenango	0-10	.28	.43	3	5	56
	10-29	.17	.28			
	29-70	.10	.20			
297249						
Chenango	0-10	.28	.43	3	5	56
	10-29	.17	.28			
	29-70	.10	.20			
297253						
Craigsville	0-5	.17	.28	5	8	0
	5-27	.17	.28			
	27-77	.17	.28			
Wyoming	0-3	.17	.20	5	8	0
	3-33	.17	.24			
	33-72	.17	.24			
297254						
Pits, shale	0-1	---	---	---	8	0
	1-2	---	---			
Pits, gravel	---	---	---	---	8	0
298049						
Wurtsboro, extremely stony	0-2	---	---	3	5	56
	2-3	.24	.24			
	3-5	.32	.32			
	5-6	.37	.37			
	6-18	.32	.32			
	18-24	.17	.32			
	24-30	.17	.32			
	30-60	.17	.32			
298050						
Wurtsboro, extremely stony	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
298050						
Swartswood, extremely stony	33-60	.17	.32			
	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298051						
Wurtsboro, extremely stony	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298075						
Colonie	0-2	.43	.43	2	2	134
	2-11	.43	.43			
	11-24	.10	.10			
	24-40	.10	.10			
	40-62	.10	.10			
298188						
Lackawanna, extremely stony	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
298189						
Lackawanna, extremely stony	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
298221						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298222						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298223						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298255						
Delaware, rarely flooded	0-1	---	---	5	3	86
	1-4	.28	.28			
	4-11	.24	.24			
	11-20	.43	.43			
	20-33	.49	.49			
	33-41	.43	.43			
	41-56	.43	.43			
	56-60	.55	.55			
298256						
Delaware, rarely flooded	0-1	---	---	5	3	86
	1-4	.28	.28			
	4-11	.24	.24			
	11-20	.43	.43			
	20-33	.49	.49			
	33-41	.43	.43			
	41-56	.43	.43			
	56-60	.55	.55			
298257						
Wallpack	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
298258						
Wallpack	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			
298259						
Wallpack, extremely stony	0-1	---	---	3	6	48
	1-2	.24	.37			
	2-5	.37	.49			
	5-18	.37	.55			
	18-24	.24	.49			
	24-42	.32	.49			
	42-60	.32	.49			
298260						
Wallpack, extremely stony	0-1	---	---	3	6	48
	1-2	.24	.37			
	2-5	.37	.49			
	5-18	.37	.55			
	18-24	.24	.49			
	24-42	.32	.49			
	42-60	.32	.49			
298261						
Wallpack	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			
298262						
Wallpack, extremely stony	0-1	---	---	3	6	48
	1-2	.24	.37			
	2-5	.37	.49			
	5-18	.37	.55			
	18-24	.24	.49			
	24-42	.32	.49			
	42-60	.32	.49			
298265						
Venango, extremely stony	0-1	---	---	3	6	48
	1-6	.37	.37			
	6-16	.49	.49			
	16-22	.32	.43			
	22-34	.32	.43			
	34-60	.24	.43			
298266						
Venango, extremely stony	0-1	---	---	3	6	48
	1-6	.37	.37			
	6-16	.49	.49			
	16-22	.32	.43			
	22-34	.32	.43			
	34-60	.24	.43			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
298409						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298411						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
298413						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
318498						
Hazen, very stony	0-1	---	---	2	5	56
	1-10	.24	.24			
	10-18	.24	.24			
	18-29	.02	.10			
	29-41	.02	.05			
	41-60	.02	.05			
Hoosic, very stony	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			
318533						
Hazen, very stony	0-1	---	---	2	5	56
	1-10	.24	.24			
	10-18	.24	.24			
	18-29	.02	.10			
	29-41	.02	.05			
	41-60	.02	.05			
Hoosic, very stony	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
319783						
Catden	0-2	---	---	2	5	56
	2-13	---	---			
	13-20	---	---			
	20-32	---	---			
	32-60	---	---			
319784						
Fredon, very stony	0-1	---	---	3	5	56
	1-8	.32	.32			
	8-14	.55	.55			
	14-18	.37	.37			
	18-23	.37	.37			
	23-31	.02	.10			
	31-36	.02	.05			
	36-45	.02	.05			
	45-55	.02	.05			
	55-60	.02	.05			
Halsey, very stony	0-1	---	---	3	5	56
	1-5	.32	.32			
	5-11	.32	.32			
	11-20	.55	.55			
	20-25	.20	.20			
	25-35	.02	.05			
	35-49	.02	.05			
	49-56	.02	.05			
	56-60	.02	.05			
543222						
Andover, extremely stony	0-8	.17	.28	3	8	0
	8-17	.17	.20			
	17-53	.17	.20			
	53-65	.17	.20			
Buchanan, extremely stony	0-6	.24	.32	4	8	0
	6-23	.24	.28			
	23-47	.17	.24			
	47-61	.17	.24			
543243						
Berks	0-10	.17	.32	3	6	48
	10-26	.17	.24			
	26-33	.17	.24			
	33-43	---	---			
Weikert	0-8	.20	.32	2	6	48
	8-15	.20	.32			
	15-18	.20	.32			
	18-20	.20	.28			
543246						
Buchanan	0-7	.24	.32	4	6	48
	7-21	.24	.28			
	21-65	.17	.24			
543247						
Buchanan, extremely stony	0-3	.24	.32	4	8	0
	3-21	.24	.28			
	21-65	.17	.24			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
543257						
Chippewa	0-8	.28	.28	2	8	0
	8-16	.32	.37			
	16-48	.24	.28			
	48-80	.24	.32			
543258						
Chippewa	0-8	.28	.28	2	8	0
	8-16	.32	.37			
	16-48	.24	.28			
	48-80	.24	.32			
543259						
Chippewa, extremely stony	0-8	.20	.32	2	8	0
	8-16	.28	.32			
	16-48	.24	.32			
	48-80	.24	.32			
543271						
Delaware	0-10	.28	.28	5	3	86
	10-40	.28	.28			
	40-87	.28	.28			
543276						
Fluvaquents	0-6	.32	.37	5	5	56
	6-62	.20	.32			
543292						
Hazleton, extremely stony	0-6	.24	.32	3	8	0
	6-43	.24	.32			
	43-55	.24	.20			
	55-80	---	---			
543293						
Hazleton, extremely stony	0-6	.24	.32	3	8	0
	6-43	.24	.32			
	43-60	.24	.20			
	60-80	---	---			
543299						
Laidig, extremely stony	0-3	.24	.32	4	5	56
	3-38	.24	.28			
	38-62	.17	.20			
543300						
Laidig, extremely stony	0-3	.24	.32	4	5	56
	3-38	.24	.28			
	38-62	.17	.20			
543304						
Laidig	0-3	.24	.32	4	5	56
	3-38	.24	.28			
	38-62	.17	.20			
Rubble land	0-60	---	---	---	8	0
543318						
Rubble land	0-60	.02	.24	5	8	0

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
543327						
Swartswood----------	0-11	.20	.28	4	6	48
	11-34	.20	.24			
	34-47	.20	.28			
543328						
Swartswood----------	0-11	.20	.28	4	6	48
	11-34	.20	.24			
	34-47	.20	.28			
543330						
Swartswood, extremely stony----------	0-11	.17	.28	4	8	0
	11-34	.20	.24			
	34-47	.20	.28			
Wurtsboro, extremely stony----------	34-47	.20	.28			
	0-10	.24	.32	4	8	0
	10-20	.28	.32			
	20-64	.28	.32			
543331						
Swartswood, extremely stony----------	0-11	.17	.28	4	8	0
	11-34	.20	.24			
	34-47	.20	.28			
Wurtsboro, extremely stony----------	11-34	.20	.24			
	0-10	.24	.32	4	8	0
	10-20	.28	.32			
	20-64	.28	.32			
543359						
Volusia----------	0-8	.24	.37	2	5	56
	8-15	.24	.28			
	15-70	.24	.28			
	70-80	.24	.32			
543360						
Volusia, extremely stony----------	0-8	.24	.37	2	8	0
	8-15	.24	.28			
	15-70	.24	.28			
	70-80	.24	.32			
Wurtsboro----------	0-10	.28	.32	4	6	48
	10-20	.28	.32			
	20-64	.28	.32			
543375						
Wurtsboro----------	0-10	.28	.32	4	6	48
	10-20	.28	.32			
	20-64	.28	.32			
612280						
Scio----------	0-6	.37	.37	5	5	56
	6-13	.37	.37			
	13-23	.55	.55			
	23-28	.55	.55			
	28-50	.55	.55			
	50-59	.55	.55			
	59-72	.55	.55			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
612666						
Colonie----------	0-2	.43	.43	2	2	134
	2-11	.43	.43			
	11-24	.10	.10			
	24-40	.10	.10			
	40-62	.10	.10			
612668						
Hoosic, very stony-----	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			
Hazen, very stony------	0-1	---	---	2	5	56
	1-10	.24	.24			
	10-18	.24	.24			
	18-29	.02	.10			
	29-41	.02	.05			
	41-60	.02	.05			
612724						
Lordstown, very rocky--	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Wallpack, very rocky---	0-1	---	---	3	6	48
	1-2	.24	.37			
	2-5	.37	.49			
	5-18	.37	.55			
	18-24	.24	.49			
	24-42	.32	.49			
	42-60	.32	.49			
612732						
Atherton, very poorly drained----------	0-2	---	---	5	6	48
	2-4	---	---			
	4-8	.24	.24			
	8-10	.37	.37			
	10-18	.43	.43			
	18-29	.43	.43			
	29-32	.43	.43			
	32-41	.43	.43			
	41-45	.32	.32			
	45-50	.37	.37			
	50-60	.32	.32			
	60-70	.32	.32			
Atherton, poorly drained----------	0-6	.32	.32	5	6	48
	6-12	.49	.49			
	12-30	.49	.49			
	30-40	.43	.43			
	40-60	.43	.43			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
612738						
Fluvaquents,						
occasionally flooded--	0-5	.37	.37	5	5	56
	5-12	.43	.43			
	12-18	.20	.20			
	18-24	.20	.20			
	24-60	.32	.32			
612753						
Wallpack, aeolian						
mantle, very stony----	0-1	---	---	5	3	86
	1-2	.32	.32			
	2-8	.28	.28			
	8-14	.43	.43			
	14-21	.49	.49			
	21-26	.32	.49			
	26-31	.15	.43			
	31-36	.17	.43			
	36-60	.28	.43			
612756						
Wallpack, aeolian						
mantle, very stony----	0-1	---	---	5	3	86
	1-2	.32	.32			
	2-8	.28	.28			
	8-14	.43	.43			
	14-21	.49	.49			
	21-26	.32	.49			
	26-31	.15	.43			
	31-36	.17	.43			
	36-60	.28	.43			
612757						
Wallpack, aeolian						
mantle, very stony----	0-1	---	---	5	3	86
	1-2	.32	.32			
	2-8	.28	.28			
	8-14	.43	.43			
	14-21	.49	.49			
	21-26	.32	.49			
	26-31	.15	.43			
	31-36	.17	.43			
	36-60	.28	.43			
612767						
Wellsboro, extremely						
stony----------	0-8	.37	.37	3	5	56
	8-15	.32	.55			
	15-24	.32	.55			
	24-29	.28	.55			
	29-37	.15	.32			
	37-60	.15	.32			
612768						
Wellsboro, extremely						
stony----------	0-8	.37	.37	3	5	56
	8-15	.32	.55			
	15-24	.32	.55			
	24-29	.28	.55			
	29-37	.15	.32			
	37-60	.15	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
613393						
Alden, extremely stony-	0-2	---	---	3	6	48
	2-7	.28	.28			
	7-14	.49	.49			
	14-28	.43	.43			
	28-43	.43	.43			
	43-60	.49	.49			
613447						
Unadilla----------	0-8	.32	.32	5	5	56
	8-14	.43	.43			
	14-25	.55	.55			
	25-39	.55	.55			
	39-60	.64	.64			
613448						
Unadilla----------	0-8	.32	.32	5	5	56
	8-14	.43	.43			
	14-25	.55	.55			
	25-39	.55	.55			
	39-60	.64	.64			
614075						
Wurtsboro, extremely stony----------	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			
Swartswood, extremely stony----------	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
620179						
Arnot, very rocky------	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown, very rocky--	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
620180						
Arnot	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Rock outcrop.						
620181						
Arnot	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Rock outcrop.						
623089						
Chippewa, extremely stony	0-2	---	---	3	6	48
	2-4	.37	.37			
	4-8	.43	.43			
	8-13	.49	.49			
	13-21	.49	.49			
	21-29	.49	.49			
	29-34	.49	.49			
	34-60	.43	.43			
623109						
Farmington	0-1	---	---	1	5	56
	1-3	.43	.43			
	3-9	.64	.64			
	9-15	.64	.64			
	15-80	---	---			
Rock outcrop.						

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
624811						
Galway, very rocky-----	0-2	---	---	2	5	56
	2-3	---	---			
	3-5	.24	.24			
	5-15	.32	.49			
	15-24	.24	.49			
	24-80	---	---			
624813						
Lackawanna, extremely stony----------	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
624816						
Lordstown, very rocky--	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Wallpack, very rocky---	0-1	---	---	3	6	48
	1-2	.24	.37			
	2-5	.37	.49			
	5-18	.37	.55			
	18-24	.24	.49			
	24-42	.32	.49			
	42-60	.32	.49			
624822						
Lordstown----------	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Wallpack----------	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			
624823						
Lordstown----------	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
624823						
Wallpack----------	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			
624824						
Lordstown----------	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Wallpack----------	0-3	.43	.43	3	5	56
	3-9	.32	.49			
	9-16	.32	.55			
	16-25	.28	.49			
	25-65	.20	.49			
624826						
Manlius, very rocky----	0-1	---	---	2	7	38
	1-2	.10	.32			
	2-18	.10	.55			
	18-27	.10	.64			
	27-80	---	---			
Nassau, very rocky-----	0-1	---	---	1	7	38
	1-2	.17	.43			
	2-15	.10	.64			
	15-80	---	---			
624827						
Nassau, very rocky-----	0-7	.17	.43	1	7	38
	7-13	.10	.64			
	13-80	---	---			
Manlius, very rocky----	0-9	.10	.32	2	7	38
	9-20	.10	.55			
	20-29	.10	.64			
	29-80	---	---			
624828						
Nassau, very rocky-----	0-7	.17	.43	1	7	38
	7-13	.10	.64			
	13-80	---	---			
Manlius, very rocky----	0-9	.10	.32	2	7	38
	9-20	.10	.55			
	20-29	.10	.64			
	29-80	---	---			
624829						
Nassau, very rocky-----	0-7	.17	.43	1	7	38
	7-13	.10	.64			
	13-80	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
624829						
Manlius, very rocky----	0-9	.10	.32	2	7	38
	9-20	.10	.55			
	20-29	.10	.64			
	29-80	---	---			
624832						
Nassau----------	0-1	---	---	1	7	38
	1-2	.17	.43			
	2-15	.10	.64			
	15-80	---	---			
Rock outcrop.						
624841						
Oquaga----------	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Rock outcrop.						
624845						
Rock outcrop.						
Farmington----------	0-1	---	---	1	5	56
	1-3	.43	.43			
	3-9	.64	.64			
	9-15	.64	.64			
	15-80	---	---			
Galway----------	0-2	---	---	2	5	56
	2-3	---	---			
	3-5	.24	.24			
	5-15	.32	.49			
	15-24	.24	.49			
	24-80	---	---			
624846						
Rock outcrop.						
Arnot----------	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Rubble land----------	0-60	---	---	---	---	---
626816						
Udifluvents, occasionally flooded--	0-3	.05	.05	5	2	134
	3-16	.17	.17			
	16-22	.28	.28			
	22-27	.28	.28			
	27-32	.28	.28			
	32-60	.15	.15			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
635458						
Oquaga, very rocky-----	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Lackawanna, very rocky-	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
635459						
Oquaga, very rocky-----	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Lackawanna, very rocky-	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
740953						
Delaware, rarely flooded----------	0-1	---	---	5	3	86
	1-4	.28	.28			
	4-11	.24	.24			
	11-20	.43	.43			
	20-33	.49	.49			
	33-41	.43	.43			
	41-56	.43	.43			
	56-60	.55	.55			
740968						
Nassau, very rocky-----	0-7	.17	.43	1	7	38
	7-13	.10	.64			
	13-80	---	---			
Manlius, very rocky----	0-9	.10	.32	2	7	38
	9-20	.10	.55			
	20-29	.10	.64			
	29-80	---	---			
740969						
Nassau, very rocky-----	0-7	.17	.43	1	7	38
	7-13	.10	.64			
	13-80	---	---			
Manlius, very rocky----	0-9	.10	.32	2	7	38
	9-20	.10	.55			
	20-29	.10	.64			
	29-80	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
740971						
Oquaga, very rocky-----	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Lackawanna, very rocky-	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
740972						
Oquaga, very rocky-----	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Lackawanna, very rocky-	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
740974						
Oquaga----------	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Rock outcrop.						
740975						
Rock outcrop----------	0-80	---	---	---	---	---
Arnot----------	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Rubble land----------	0-60	---	---	---	---	---
740987						
Scio----------	0-6	.37	.37	5	5	56
	6-13	.37	.37			
	13-23	.55	.55			
	23-28	.55	.55			
	28-50	.55	.55			
	50-59	.55	.55			
	59-72	.55	.55			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
740988						
Udifluvents,						
occasionally flooded--	0-3	.05	.05	5	2	134
	3-16	.17	.17			
	16-22	.28	.28			
	22-27	.28	.28			
	27-32	.28	.28			
	32-60	.15	.15			
740991						
Unadilla----------	0-8	.32	.32	5	5	56
	8-14	.43	.43			
	14-25	.55	.55			
	25-39	.55	.55			
	39-60	.64	.64			
740992						
Unadilla----------	0-8	.32	.32	5	5	56
	8-14	.43	.43			
	14-25	.55	.55			
	25-39	.55	.55			
	39-60	.64	.64			
740995						
Wellsboro, extremely						
stony----------	0-8	.37	.37	3	5	56
	8-15	.32	.55			
	15-24	.32	.55			
	24-29	.28	.55			
	29-37	.15	.32			
	37-60	.15	.32			
740996						
Wellsboro, extremely						
stony----------	0-8	.37	.37	3	5	56
	8-15	.32	.55			
	15-24	.32	.55			
	24-29	.28	.55			
	29-37	.15	.32			
	37-60	.15	.32			
741149						
Lackawanna, extremely						
stony----------	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
741150						
Lackawanna, extremely						
stony----------	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
801114						
Oquaga	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Rock outcrop.						
810906						
Oquaga	0-1	---	---	2	6	48
	1-4	.20	.28			
	4-20	.20	.49			
	20-25	.10	.55			
	25-80	---	---			
Rock outcrop.						
1147465						
Alden, extremely stony	0-2	---	---	3	6	48
	2-7	.28	.28			
	7-14	.49	.49			
	14-28	.43	.43			
	28-43	.43	.43			
	43-60	.49	.49			
1147467						
Arnot, very rocky	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown, very rocky	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
1147468						
Arnot	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Rock outcrop.						

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1147469						
Arnot	0-1	---	---	1	5	56
	1-2	.32	.32			
	2-3	.43	.43			
	3-4	.43	.43			
	4-12	.17	.49			
	12-17	.10	.49			
	17-80	---	---			
Lordstown	0-1	---	---	2	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-5	.37	.37			
	5-17	.24	.37			
	17-22	.24	.49			
	22-36	.15	.43			
	36-80	---	---			
Rock outcrop.						
1147470						
Atherton, very poorly drained	0-2	---	---	5	6	48
	2-4	---	---			
	4-8	.24	.24			
	8-10	.37	.37			
	10-18	.43	.43			
	18-29	.43	.43			
	29-32	.43	.43			
	32-41	.43	.43			
	41-45	.32	.32			
	45-50	.37	.37			
	50-60	.32	.32			
	60-70	.32	.32			
Atherton, poorly drained	0-6	.32	.32	5	6	48
	6-12	.49	.49			
	12-30	.49	.49			
	30-40	.43	.43			
	40-60	.43	.43			
1147471						
Catden	0-2	---	---	2	5	56
	2-13	---	---			
	13-20	---	---			
	20-32	---	---			
	32-60	---	---			
1147474						
Chippewa, extremely stony	0-2	---	---	3	6	48
	2-4	.37	.37			
	4-8	.43	.43			
	8-13	.49	.49			
	13-21	.49	.49			
	21-29	.49	.49			
	29-34	.49	.49			
	34-60	.43	.43			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1147475						
Colonie----------	0-2	.43	.43	2	2	134
	2-11	.43	.43			
	11-24	.10	.10			
	24-40	.10	.10			
	40-62	.10	.10			
1147478						
Delaware, rarely flooded----------	0-1	---	---	5	3	86
	1-4	.28	.28			
	4-11	.24	.24			
	11-20	.43	.43			
	20-33	.49	.49			
	33-41	.43	.43			
	41-56	.43	.43			
	56-60	.55	.55			
1147482						
Fredon, very stony-----	0-1	---	---	3	5	56
	1-8	.32	.32			
	8-14	.55	.55			
	14-18	.37	.37			
	18-23	.37	.37			
	23-31	.02	.10			
	31-36	.02	.05			
	36-45	.02	.05			
	45-55	.02	.05			
	55-60	.02	.05			
Halsey, very stony-----	0-1	---	---	3	5	56
	1-5	.32	.32			
	5-11	.32	.32			
	11-20	.55	.55			
	20-25	.20	.20			
	25-35	.02	.05			
	35-49	.02	.05			
	49-56	.02	.05			
	56-60	.02	.05			
1147485						
Hazen, very stony------	0-1	---	---	2	5	56
	1-10	.24	.24			
	10-18	.24	.24			
	18-29	.02	.10			
	29-41	.02	.05			
	41-60	.02	.05			
Hoosic, very stony-----	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1147490						
Hoosic, very stony-----	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			
Hazen, very stony------	0-1	---	---	2	5	56
	1-10	.24	.24			
	10-18	.24	.24			
	18-29	.02	.10			
	29-41	.02	.05			
	41-60	.02	.05			
1147491						
Hoosic, very stony-----	0-1	---	---	3	6	48
	1-9	.10	.24			
	9-21	.05	.20			
	21-27	.02	.10			
	27-37	.02	.05			
	37-49	.02	.05			
	49-60	.02	.05			
Otisville, very stony--	0-1	---	---	5	5	56
	1-2	.05	.10			
	2-7	.05	.20			
	7-11	.05	.10			
	11-19	.05	.10			
	19-31	.02	.05			
	31-43	.02	.05			
	43-60	.05	.05			
1147492						
Lackawanna, extremely stony----------	0-2	---	---	3	5	56
	2-3	.20	.32			
	3-7	.28	.49			
	7-8	.24	.43			
	8-16	.32	.55			
	16-24	.32	.55			
	24-29	.28	.55			
	29-60	.20	.55			
1147500						
Wurtsboro, extremely stony----------	0-2	---	---	3	5	56
	2-3	.24	.24			
	3-5	.32	.32			
	5-6	.37	.37			
	6-18	.32	.32			
	18-24	.17	.32			
	24-30	.17	.32			
	30-60	.17	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1147501						
Wurtsboro, extremely stony	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
1147502						
Wurtsboro, extremely stony	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
1147527						
Udorthents	0-12	.32	.32	5	5	56
	12-72	.20	.20			
Urban land.						
1147532						
Udorthents	0-12	.32	.32	5	5	56
	12-72	.20	.20			
1147533						
Wurtsboro, extremely stony	0-2	---	---	3	3	86
	2-3	.20	.20			
	3-4	.32	.32			
	4-6	.32	.32			
	6-18	.32	.32			
	18-24	.17	.32			
	24-33	.17	.32			
	33-60	.17	.32			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1147533						
Swartswood, extremely stony	0-1	---	---	3	5	56
	1-2	.24	.24			
	2-3	.37	.37			
	3-4	.24	.37			
	4-21	.17	.37			
	21-32	.15	.28			
	32-60	.15	.28			
1948749						
Arnot	0-8	.24	.28	1	5	56
	8-16	.17	.24			
	16-26	---	---			
1948750						
Arnot	0-8	.24	.28	1	5	56
	8-16	.17	.24			
	16-26	---	---			
1948751						
Arnot	0-8	.24	.28	1	5	56
	8-16	.17	.24			
	16-26	---	---			
1948774						
Conotton	0-9	.24	.43	4	8	0
	9-45	.24	.64			
	45-80	.10	.37			
1948775						
Conotton	0-9	.24	.43	4	8	0
	9-45	.24	.64			
	45-80	.10	.37			
1948776						
Conotton	0-9	.24	.43	4	8	0
	9-45	.24	.64			
	45-80	.10	.37			
1948777						
Conotton	0-9	.24	.43	4	8	0
	9-45	.24	.64			
	45-80	.10	.37			
1948797						
Manlius	0-8	.28	.32	2	8	0
	8-24	.20	.28			
	24-32	.20	.32			
	32-40	---	---			
1948802						
Manlius	0-8	.28	.32	2	8	0
	8-24	.20	.28			
	24-32	.20	.32			
	32-40	---	---			
1948818						
Manlius	0-8	.28	.32	2	8	0
	8-24	.20	.28			
	24-32	.20	.32			
	32-40	---	---			

Table 16.--Erosion Properties--Continued

Map unit symbol and soil name	Depth	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In					
1948832						
Penargyl	0-12	.17	.32	5	5	56
	12-74	.15	.24			
	74-80	.28	.24			
	80-90	---	---			
1948846						
Phelps	0-10	.37	.37	5	5	56
	10-22	.24	.28			
	22-30	.24	.28			
	30-79	.17	.28			
1948855						
Udorthents, loamy	0-5	.37	.37	5	5	56
	5-40	.37	.37			
	40-70	.32	.37			
1948989						
Urban land	0-6	---	---	---	8	0
Delaware	0-10	.28	.28	5	3	86
	10-40	.28	.28			
	40-87	.28	.28			

Table 17.--Total Soil Carbon

[This table displays soil organic carbon (SOC) and soil inorganic carbon (SIC) in kilograms per square meter to a depth of 2 meters or to the representative top depth of any kind of bedrock or any cemented soil horizon. SOC and SIC are reported on a volumetric whole-soil basis, corrected for representative rock fragments indicated in the database. SOC is converted from soil organic matter by horizon for the fraction of the soil less than 2 millimeters in diameter. If soil organic matter is indicated in the database as null, SOC is assumed to be zero. SIC is converted from the content of calcium carbonate by horizon in the fraction of the soil less than 2 millimeters in diameter. If the content of calcium carbonate is indicated in the database as null, SIC is assumed to be zero. A weighted average of all horizons is used in the calculations. Only major components of a map unit are displayed in this table]

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m^2	kg/m^2
290836		
Hoosic, very stony (50 percent)	7	0
Otisville, very stony (40 percent)	4	0
296265		
Alden (100 percent)	33	0
296269		
Fluvents, (alluvial land) (70 percent)	3	0
296271		
Alvira (55 percent)	5	0
Watson (35 percent)	4	0
296272		
Bath (85 percent)	6	0
296273		
Bath (85 percent)	6	0
296274		
Bath (85 percent)	6	0
296275		
Bath (90 percent)	4	0
296276		
Bath (90 percent)	4	0
296277		
Benson (55 percent)	5	0
296278		
Benson (60 percent)	5	0
Rock outcrop (20 percent)	0	0
296279		
Benson (60 percent)	5	0
Rock outcrop (25 percent)	0	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
296280		
Braceville (90 percent)	3	0
296281		
Braceville (90 percent)	2	0
296283		
Buchanan (90 percent)	5	0
296288		
Chippewa (48 percent)	13	0
Norwich (48 percent)	13	0
296289		
Chippewa (47 percent)	11	0
Norwich (47 percent)	11	0
296295		
Udorthents, cut and fill (90 percent)	0	0
296297		
Dekalb (100 percent)	4	0
296298		
Dekalb (100 percent)	4	0
296303		
Hazleton (100 percent)	3	0
296304		
Holly (100 percent)	12	0
296311		
Lackawanna (40 percent)	4	0
Bath (30 percent)	6	0
296312		
Lackawanna (80 percent)	4	0
296313		
Lackawanna (80 percent)	4	0
296315		
Lackawanna (80 percent)	4	0
296316		
Lackawanna (80 percent)	4	0
296317		
Laidig (100 percent)	3	0
296326		
Lordstown (85 percent)	3	0
296327		
Lordstown (85 percent)	4	0
296328		
Lordstown (40 percent)	3	0
Oquaga (35 percent)	3	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
296329		
Mardin (85 percent)	6	0
296330		
Mardin (85 percent)	5	0
296331		
Mardin (85 percent)	10	0
296332		
Mardin (87 percent)	8	0
296335		
Meckesville (100 percent)	5	0
296337		
Meckesville (100 percent)	6	0
296338		
Morris (80 percent)	8	0
296339		
Morris (75 percent)	7	0
296340		
Morris (80 percent)	7	0
296341		
Freetown, mucky peat (100 percent)	170	0
296342		
Paupack, mucky peat (shallow) (100 percent)	90	0
296343		
Oquaga (50 percent)	3	0
Lackawanna (35 percent)	4	0
296344		
Oquaga (55 percent)	3	0
Lackawanna (30 percent)	4	0
296346		
Oquaga (50 percent)	3	0
Lackawanna (35 percent)	4	0
296347		
Oquaga (60 percent)	3	0
Lackawanna (30 percent)	4	0
296348		
Philo (85 percent)	15	0
296349		
Pope (90 percent)	5	0
296350		
Pope (90 percent)	5	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	*kg/m²*
296351		
Rexford, somewhat poorly drained (40 percent)	8	0
Rexford, poorly drained (35 percent)	9	0
296355		
Sheffield (100 percent)	9	0
296363		
Dystrochrepts, very stony (85 percent)	3	0
296369		
Wayland (100 percent)	14	0
296376		
Wellsboro (80 percent)	6	0
296379		
Wellsboro (85 percent)	5	0
296385		
Wyoming (85 percent)	4	0
296386		
Wyoming (85 percent)	4	0
296387		
Wyoming (85 percent)	4	0
296388		
Wyoming (85 percent)	4	0
296389		
Wyoming (100 percent)	4	0
296390		
Water (100 percent)	0	0
297185		
Edgemere (42 percent)	9	0
Shohola (42 percent)	4	0
297186		
Edgemere (75 percent)	9	0
297188		
Manlius (40 percent)	4	0
Arnot (35 percent)	3	0
Rock outcrop (15 percent)	0	0
297189		
Manlius (40 percent)	6	0
Arnot (35 percent)	1	0
Rock outcrop (15 percent)	0	0
297190		
Braceville (82 percent)	14	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m^2	kg/m^2
297191		
Wyalusing (85 percent)	6	0
297192		
Pope (95 percent)	8	0
297193		
Paupack (90 percent)	90	0
297196		
Freetown (94 percent)	170	0
297197		
Manlius (90 percent)	4	0
297198		
Manlius (86 percent)	4	0
297201		
Oquaga (75 percent)	5	0
297203		
Delaware (93 percent)	11	0
297204		
Delaware (82 percent)	11	0
297205		
Delaware (80 percent)	11	0
297209		
Philo (85 percent)	6	0
297210		
Barbour (85 percent)	7	0
297216		
Wurtsboro (92 percent)	4	0
297217		
Wurtsboro (88 percent)	4	0
297227		
Arnot (88 percent)	2	0
297228		
Arnot (85 percent)	3	0
297229		
Wyoming (90 percent)	2	0
297230		
Wyoming (90 percent)	2	0
297231		
Wyoming (90 percent)	2	0
297236		
Suncook (91 percent)	7	0
297237		
Mardin (85 percent)	9	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
297238		
Mardin (85 percent)	9	0
297239		
Mardin (85 percent)	9	0
297240		
Mardin (85 percent)	9	0
297241		
Unadilla (90 percent)	19	0
297242		
Shohola (62 percent)	4	0
Edgemere (29 percent)	9	0
297243		
Shohola (62 percent)	4	0
Edgemere (29 percent)	9	0
297244		
Lordstown (40 percent)	5	0
Swartswood (35 percent)	7	0
297247		
Chenango (86 percent)	8	0
297248		
Chenango (85 percent)	8	0
297249		
Chenango (90 percent)	8	0
297253		
Craigsville (50 percent)	3	0
Wyoming (40 percent)	3	0
297254		
Pits, shale (40 percent)	0	0
Pits, gravel (40 percent).		
298049		
Wurtsboro, extremely stony (90 percent)	9	0
298050		
Wurtsboro, extremely stony (60 percent)	9	0
Swartswood, extremely stony (40 percent)	7	0
298051		
Wurtsboro, extremely stony (60 percent)	9	0
Swartswood, extremely stony (40 percent)	7	0
298075		
Colonie (80 percent)	5	0
298188		
Lackawanna, extremely stony (85 percent)	10	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
298189		
Lackawanna, extremely stony (85 percent)	10	0
298221		
Swartswood, extremely stony (90 percent)	7	0
298222		
Swartswood, extremely stony (90 percent)	7	0
298223		
Swartswood, extremely stony (85 percent)	7	0
298255		
Delaware, rarely flooded (80 percent)	6	0
298256		
Delaware, rarely flooded (80 percent)	6	0
298257		
Wallpack (85 percent)	4	0
298258		
Wallpack (85 percent)	4	0
298259		
Wallpack, extremely stony (85 percent)	6	0
298260		
Wallpack, extremely stony (85 percent)	6	0
298261		
Wallpack (85 percent)	4	0
298262		
Wallpack, extremely stony (85 percent)	6	0
298265		
Venango, extremely stony (90 percent)	9	0
298266		
Venango, extremely stony (85 percent)	9	0
298409		
Swartswood, extremely stony (90 percent)	7	0
298411		
Swartswood, extremely stony (90 percent)	7	0
298413		
Swartswood, extremely stony (85 percent)	7	0
318498		
Hazen, very stony (60 percent)	10	0
Hoosic, very stony (35 percent)	7	0
318533		
Hazen, very stony (50 percent)	10	0
Hoosic, very stony (40 percent)	4	0
319783		
Catden (85 percent)	135	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
319784		
Fredon, very stony (50 percent)	11	0
Halsey, very stony (40 percent)	13	0
543222		
Andover, extremely stony (55 percent)	5	0
Buchanan, extremely stony (40 percent)	3	0
543243		
Berks (65 percent)	5	0
Weikert (25 percent)	3	0
543246		
Buchanan (75 percent)	3	0
543247		
Buchanan, extremely stony (80 percent)	2	0
543257		
Chippewa (90 percent)	13	0
543258		
Chippewa (90 percent)	13	0
543259		
Chippewa, extremely stony (90 percent)	12	0
543271		
Delaware (90 percent)	9	0
543276		
Fluvaquents (85 percent)	16	0
543292		
Hazleton, extremely stony (90 percent)	3	0
543293		
Hazleton, extremely stony (90 percent)	3	0
543299		
Laidig, extremely stony (90 percent)	3	0
543300		
Laidig, extremely stony (90 percent)	3	0
543304		
Laidig (50 percent)	3	0
Rubble land (40 percent)	0	0
543318		
Rubble land (75 percent)	0	0
543327		
Swartswood (90 percent)	6	0
543328		
Swartswood (90 percent)	6	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
543330		
Swartswood, extremely stony (50 percent)	14	0
Wurtsboro, extremely stony (30 percent)	5	0
543331		
Swartswood, extremely stony (50 percent)	14	0
Wurtsboro, extremely stony (30 percent)	5	0
543359		
Volusia (85 percent)	8	0
543360		
Volusia, extremely stony (85 percent)	7	0
543374		
Wurtsboro (90 percent)	5	0
543375		
Wurtsboro (90 percent)	5	0
612280		
Scio (80 percent)	13	0
612666		
Colonie (80 percent)	5	0
612668		
Hoosic, very stony (60 percent)	7	0
Hazen, very stony (30 percent)	10	0
612724		
Lordstown, very rocky (50 percent)	6	0
Wallpack, very rocky (40 percent)	6	0
612732		
Atherton, very poorly drained (60 percent)	33	0
Atherton, poorly drained (30 percent)	16	0
612738		
Fluvaquents, occasionally flooded (90 percent)	6	0
612753		
Wallpack, aeolian mantle, very stony (85 percent)	5	0
612756		
Wallpack, aeolian mantle, very stony (85 percent)	5	0
612757		
Wallpack, aeolian mantle, very stony (85 percent)	5	0
612767		
Wellsboro, extremely stony (85 percent)	8	0
612768		
Wellsboro, extremely stony (85 percent)	8	0
613393		
Alden, extremely stony (90 percent)	16	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	*kg/m²*
613447		
Unadilla (85 percent)	14	0
613448		
Unadilla (85 percent)	14	0
614075		
Wurtsboro, extremely stony (80 percent)	9	0
Swartswood, extremely stony (20 percent)	7	0
620179		
Arnot, very rocky (55 percent)	4	0
Lordstown, very rocky (40 percent)	7	0
620180		
Arnot (45 percent)	4	0
Lordstown (40 percent)	6	0
Rock outcrop (15 percent)	0	0
620181		
Arnot (60 percent)	4	0
Lordstown (25 percent)	6	0
Rock outcrop (15 percent)	0	0
623089		
Chippewa, extremely stony (80 percent)	9	0
623109		
Farmington (50 percent)	6	0
Rock outcrop (40 percent)	0	0
624811		
Galway, very rocky (80 percent)	10	0
624813		
Lackawanna, extremely stony (85 percent)	10	0
624816		
Lordstown, very rocky (50 percent)	6	0
Wallpack, very rocky (35 percent)	6	0
624822		
Lordstown (50 percent)	6	0
Wallpack (35 percent)	4	0
624823		
Lordstown (50 percent)	6	0
Wallpack (35 percent)	4	0
624824		
Lordstown (50 percent)	6	0
Wallpack (35 percent)	4	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
624826		
Manlius, very rocky (60 percent)	4	0
Nassau, very rocky (25 percent)	4	0
624827		
Nassau, very rocky (55 percent)	4	0
Manlius, very rocky (44 percent)	4	0
624828		
Nassau, very rocky (55 percent)	4	0
Manlius, very rocky (44 percent)	6	0
624829		
Nassau, very rocky (55 percent)	4	0
Manlius, very rocky (44 percent)	6	0
624832		
Nassau (50 percent)	4	0
Rock outcrop (45 percent)	0	0
624841		
Oquaga (60 percent)	6	0
Rock outcrop (25 percent)	0	0
624845		
Rock outcrop (45 percent)	0	0
Farmington (35 percent)	6	0
Galway (20 percent)	10	0
624846		
Rock outcrop (40 percent)	0	0
Arnot (30 percent)	4	0
Rubble land (20 percent)	0	0
626816		
Udifluvents, occasionally flooded (90 percent)	10	0
635458		
Oquaga, very rocky (55 percent)	6	0
Lackawanna, very rocky (30 percent)	10	0
635459		
Oquaga, very rocky (50 percent)	6	0
Lackawanna, very rocky (35 percent)	10	0
740953		
Delaware, rarely flooded (80 percent)	6	0
740968		
Nassau, very rocky (55 percent)	4	0
Manlius, very rocky (44 percent)	6	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	*kg/m²*
740969		
Nassau, very rocky (55 percent)	4	0
Manlius, very rocky (44 percent)	6	0
740971		
Oquaga, very rocky (55 percent)	6	0
Lackawanna, very rocky (30 percent)	10	0
740972		
Oquaga, very rocky (50 percent)	6	0
Lackawanna, very rocky (35 percent)	10	0
740974		
Oquaga (60 percent)	6	0
Rock outcrop (25 percent)	0	0
740975		
Rock outcrop (40 percent)	0	0
Arnot (30 percent)	4	0
Rubble land (20 percent)	0	0
740987		
Scio (80 percent)	13	0
740988		
Udifluvents, occasionally flooded (90 percent)	10	0
740991		
Unadilla (85 percent)	14	0
740992		
Unadilla (85 percent)	14	0
740995		
Wellsboro, extremely stony (85 percent)	8	0
740996		
Wellsboro, extremely stony (85 percent)	8	0
741149		
Lackawanna, extremely stony (85 percent)	10	0
741150		
Lackawanna, extremely stony (85 percent)	10	0
801114		
Oquaga (75 percent)	6	0
Rock outcrop (15 percent)	0	0
810906		
Oquaga (75 percent)	6	0
Rock outcrop (15 percent)	0	0
1147465		
Alden, extremely stony (90 percent)	16	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
1147467		
Arnot, very rocky (55 percent)	4	0
Lordstown, very rocky (40 percent)	7	0
1147468		
Arnot (45 percent)	4	0
Lordstown (40 percent)	6	0
Rock outcrop (15 percent)	0	0
1147469		
Arnot (60 percent)	4	0
Lordstown (25 percent)	6	0
Rock outcrop (15 percent)	0	0
1147470		
Atherton, very poorly drained (60 percent)	33	0
Atherton, poorly drained (30 percent)	16	0
1147471		
Catden (85 percent)	135	0
1147474		
Chippewa, extremely stony (80 percent)	9	0
1147475		
Colonie (80 percent)	5	0
1147478		
Delaware, rarely flooded (80 percent)	6	0
1147482		
Fredon, very stony (50 percent)	11	0
Halsey, very stony (40 percent)	13	0
1147485		
Hazen, very stony (60 percent)	10	0
Hoosic, very stony (35 percent)	7	0
1147490		
Hoosic, very stony (60 percent)	7	0
Hazen, very stony (30 percent)	10	0
1147491		
Hoosic, very stony (50 percent)	7	0
Otisville, very stony (40 percent)	4	0
1147492		
Lackawanna, extremely stony (85 percent)	10	0
1147500		
Wurtsboro, extremely stony (90 percent)	9	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m²	kg/m²
1147501		
Wurtsboro, extremely stony (60 percent)	9	0
Swartswood, extremely stony (40 percent)	7	0
1147502		
Wurtsboro, extremely stony (60 percent)	9	0
Swartswood, extremely stony (40 percent)	7	0
1147527		
Udorthents (60 percent)	18	0
Urban land (40 percent)	0	0
1147532		
Udorthents (100 percent)	18	0
1147533		
Wurtsboro, extremely stony (80 percent)	9	0
Swartswood, extremely stony (20 percent)	7	0
1948749		
Arnot (90 percent)	6	0
1948750		
Arnot (90 percent)	6	0
1948751		
Arnot (90 percent)	6	0
1948774		
Conotton (90 percent)	6	4
1948775		
Conotton (95 percent)	6	4
1948776		
Conotton (95 percent)	6	4
1948777		
Conotton (95 percent)	6	4
1948797		
Manlius (90 percent)	4	0
1948802		
Manlius (90 percent)	4	0
1948818		
Manlius (90 percent)	4	0
1948832		
Penargyl (90 percent)	7	0
1948846		
Phelps (90 percent)	8	0
1948855		
Udorthents, loamy (95 percent)	8	0

Table 17.--Total Soil Carbon--Continued

Map unit symbol, component name, and component percent	SOC	SIC
	kg/m^2	kg/m^2
1948989		
Urban land (65 percent)	0	0
Delaware (25 percent)	9	0

Table 18.--Chemical Soil Properties

[Absence of an entry indicates that data were not estimated]

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
290836					
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0
Otisville, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.7-9.1	2.7-9.2	3.5-6.5	0
	2-7	0.6-3.8	0.0-3.2	3.5-6.5	0
	7-11	0.6-3.6	0.0-3.2	3.5-6.5	0
	11-19	0.6-3.6	0.0-3.2	3.5-6.5	0
	19-31	0.6-3.6	0.0-3.2	4.5-6.0	0
	31-43	0.6-3.6	0.0-3.2	4.5-6.0	0
	43-60	0.6-3.6	0.0-3.2	4.5-6.0	0
296265					
Alden----------	0-9	32.1-52.8	---	5.1-7.3	0
	9-35	6.8-21.7	---	5.6-7.3	0
	35-60	6.8-18.1	---	6.1-8.4	0-10
296269					
Fluvents, (alluvial land)----------	0-6	4.0-11.7	---	3.6-7.3	0
	6-42	3.1-13.0	---	3.6-7.3	0
	42-60	9.5-21.1	---	4.5-6.5	0
296271					
Alvira----------	0-10	---	2.8-5.5	3.6-5.5	0
	10-21	---	3.6-7.0	3.6-5.5	0
	21-60	---	3.6-7.0	3.6-5.5	0
Watson----------	0-10	---	2.4-5.4	4.5-5.5	0
	10-27	---	3.4-7.0	4.5-5.5	0
	27-60	---	3.0-6.0	4.5-5.5	0
296272					
Bath----------	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.0-9.0	---	4.5-6.5	0
	60-64	1.0-7.0	---	5.1-8.4	0
296273					
Bath----------	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.0-9.0	---	4.5-6.5	0
	60-64	1.0-7.0	---	5.1-8.4	0
296274					
Bath----------	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.0-9.0	---	4.5-6.5	0
	60-64	1.0-7.0	---	5.1-8.4	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296275					
Bath	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.1-10.7	---	4.5-6.5	0
	60-64	2.1-10.7	---	5.1-8.4	0
296276					
Bath	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.1-10.7	---	4.5-6.5	0
	60-64	2.1-10.7	---	5.1-8.4	0
296277					
Benson	0-8	8.1-22.4	---	5.6-7.8	0
	8-18	4.3-15.0	---	6.1-7.8	0
	18-22	---	---	---	0
296278					
Benson	0-8	8.1-22.4	---	5.6-7.8	0
	8-18	4.3-15.0	---	6.1-7.8	0
	18-22	---	---	---	0
296279					
Benson	0-8	8.1-22.4	---	5.6-7.8	0
	8-18	4.3-15.0	---	6.1-7.8	0
	18-22	---	---	---	0
296280					
Braceville	0-3	---	2.8-7.3	4.5-6.0	0
	3-30	---	2.0-5.0	4.5-6.0	0
	30-55	4.0-13.9	---	5.1-6.5	0
	55-60	0.6-6.7	---	5.1-6.5	0
296281					
Braceville	0-3	---	2.8-7.3	4.5-6.0	0
	3-30	---	2.0-5.0	4.5-6.0	0
	30-55	4.0-13.9	---	5.1-6.5	0
	55-60	0.6-6.7	---	5.1-6.5	0
296283					
Buchanan	0-4	---	2.4-6.9	3.6-5.5	0
	4-25	---	3.6-6.0	3.6-5.5	0
	25-60	---	3.6-7.0	3.6-5.5	0
296288					
Chippewa	0-8	8.5-22.0	---	4.5-6.5	0
	8-16	10.7-24.7	---	4.5-6.5	0
	16-48	5.9-19.9	---	5.1-7.3	0
	48-80	5.9-19.9	---	5.6-8.4	0
Norwich	0-8	8.5-22.0	---	5.1-6.5	0
	8-16	10.7-20.1	---	5.1-6.5	0
	16-48	5.9-16.2	---	5.1-7.3	0
	48-80	6.0-20.0	---	5.6-8.4	0
296289					
Chippewa	0-8	8.5-22.0	---	4.5-6.5	0
	8-16	10.7-24.7	---	4.5-6.5	0
	16-48	5.9-19.9	---	5.1-7.3	0
	48-80	5.9-19.9	---	5.6-8.4	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296289					
Norwich	0-8	8.5-22.0	---	5.1-6.5	0
	8-16	10.7-20.1	---	5.1-6.5	0
	16-48	5.9-16.2	---	5.1-7.3	0
	48-80	6.0-20.0	---	5.6-8.4	0
296295					
Udorthents, cut and fill.					
296297					
Dekalb	0-7	---	3.5-7.0	3.6-6.5	0
	7-24	---	1.4-3.6	3.6-5.5	0
	24-32	---	1.0-3.0	3.6-5.5	0
	32-36	---	---	---	0
296298					
Dekalb	0-7	---	3.5-7.0	3.6-6.5	0
	7-24	---	1.4-3.6	3.6-5.5	0
	24-32	---	1.0-3.0	3.6-5.5	0
	32-36	---	---	---	0
296303					
Hazleton	0-5	---	2.9-6.6	3.6-5.5	0
	5-31	---	1.4-3.6	3.6-5.5	0
	31-58	---	1.0-3.0	3.6-5.5	0
	58-69	---	---	---	0
296304					
Holly	0-8	11.7-21.0	---	5.6-7.3	0
	8-28	9.5-20.3	---	5.1-7.3	0
	28-41	5.7-18.5	---	5.6-7.8	0
	41-60	0.0-19.6	---	5.6-7.8	0
296311					
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
Bath	0-8	---	3.3-8.1	4.5-6.0	0
	8-27	---	1.0-3.6	4.5-6.0	0
	27-60	3.1-10.0	---	4.5-6.5	0
	60-64	2.1-10.0	---	5.1-8.4	0
296312					
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296313					
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296315					
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296316					
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296317					
Laidig	0-6	---	1.4-5.4	3.6-5.5	0
	6-33	---	3.6-7.0	3.6-5.5	0
	33-65	---	3.6-7.0	3.6-5.5	0
296326					
Lordstown	0-7	---	3.6-7.0	4.5-6.5	0
	7-26	---	3.6-7.0	4.5-6.5	0
	26-30	4.0-12.0	---	5.1-6.0	0
	30-42	---	---	---	0
296327					
Lordstown	0-7	---	3.6-7.0	4.5-6.5	0
	7-26	---	3.6-7.0	4.5-6.5	0
	26-30	4.0-12.0	---	5.1-6.0	0
	30-42	---	---	---	0
296328					
Lordstown	0-7	6.2-14.9	---	4.5-6.5	0
	7-26	---	1.0-5.2	4.5-6.0	0
	26-30	2.5-11.7	---	5.1-6.0	0
	30-42	---	---	---	0
Oquaga	0-7	---	1.4-5.4	3.6-6.0	0
	7-30	---	1.4-5.4	3.6-6.0	0
	30-42	---	---	---	0
296329					
Mardin	0-8	---	3.3-8.1	4.5-6.0	0
	8-17	---	2.0-3.6	3.6-6.5	0
	17-21	---	2.0-3.6	3.6-6.5	0
	21-60	7.0-14.0	---	4.5-7.3	0
	60-80	5.0-13.0	---	5.1-8.4	0
296330					
Mardin	0-8	---	3.3-8.1	4.5-6.0	0
	8-17	---	2.0-3.6	3.6-6.5	0
	17-21	---	2.0-3.6	3.6-6.5	0
	21-60	7.0-14.0	---	4.5-7.3	0
	60-80	5.0-13.0	---	5.1-8.4	0
296331					
Mardin	0-8	---	2.0-5.4	4.5-5.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-60	3.0-10.0	---	4.5-7.3	0
	60-80	3.0-9.0	---	5.1-8.4	0
296332					
Mardin	0-8	---	2.0-5.4	4.5-5.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-60	3.0-10.0	---	4.5-7.3	0
	60-80	3.0-9.0	---	5.1-8.4	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296335					
Meckesville----------	0-9	---	2.8-8.4	3.6-5.5	0
	9-36	---	3.6-7.0	3.6-5.5	0
	36-60	---	3.6-7.0	3.6-5.5	0
	60-64	---	2.0-7.0	3.6-5.5	0
296337					
Meckesville----------	0-9	---	2.8-8.4	3.6-5.5	0
	9-36	---	3.6-7.0	3.6-5.5	0
	36-60	---	3.6-7.0	3.6-5.5	0
	60-64	---	2.0-7.0	3.6-5.5	0
296338					
Morris----------	0-8	---	3.8-7.3	4.5-6.0	0
	8-17	5.9-21.2	---	4.5-6.5	0
	17-70	5.4-16.4	---	4.5-6.5	0
	70-80	4.3-15.0	---	4.5-6.5	0
296339					
Morris----------	0-8	---	3.0-5.0	4.5-6.0	0
	8-17	---	3.0-5.0	4.5-6.0	0
	17-70	7.4-17.3	---	4.5-6.5	0
	70-80	7.4-17.3	---	4.5-6.5	0
296340					
Morris----------	0-8	---	3.0-5.0	4.5-6.0	0
	8-17	---	3.0-5.0	4.5-6.0	0
	17-70	7.4-17.3	---	4.5-6.5	0
	70-80	7.4-17.3	---	4.5-6.5	0
296341					
Freetown, mucky peat-	0-6	30.0-80.0	37.5-74.3	3.6-4.4	0
	6-72	30.0-80.0	20.0-80.0	3.6-4.4	0
296342					
Paupack, mucky peat (shallow)----------	0-3	150.0-230.0	22.5-37.5	3.2-4.2	0
	3-26	150.0-230.0	22.5-37.5	3.2-4.2	0
	26-36	20.0-40.0	1.5-7.5	4.0-5.5	0
	36-70	2.0-20.0	1.0-5.1	4.0-5.5	0
296343					
Oquaga----------	0-7	---	2.9-9.9	3.6-6.0	0
	7-30	---	1.4-5.4	3.6-6.0	0
	30-42	---	---	---	0
Lackawanna----------	0-8	---	2.8-7.7	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296344					
Oquaga----------	0-7	---	2.9-9.9	3.6-6.0	0
	7-30	---	1.4-5.4	3.6-6.0	0
	30-42	---	---	---	0
Lackawanna----------	0-8	---	2.8-7.7	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296346					
Oquaga	0-7	---	1.4-5.4	3.6-6.0	0
	7-30	---	1.4-5.4	3.6-6.0	0
	30-42	---	---	---	0
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296347					
Oquaga	0-7	---	1.4-5.4	3.6-6.0	0
	7-30	---	1.4-5.4	3.6-6.0	0
	30-42	---	---	---	0
Lackawanna	0-8	---	2.0-5.4	4.5-5.5	0
	8-25	---	1.0-3.6	4.5-5.5	0
	25-60	---	1.0-3.6	4.5-6.0	0
296348					
Philo	0-10	---	3.5-6.6	4.5-6.0	0
	10-40	---	2.0-3.6	4.5-6.0	0
	40-60	---	1.0-3.6	4.5-6.0	0
296349					
Pope	0-10	---	1.8-6.0	3.6-5.5	0
	10-30	---	1.0-3.6	3.6-5.5	0
	30-60	---	1.0-4.0	3.6-5.5	0
296350					
Pope	0-10	---	1.8-6.0	3.6-5.5	0
	10-30	---	1.0-3.6	3.6-5.5	0
	30-60	---	1.0-4.0	3.6-5.5	0
296351					
Rexford, somewhat poorly drained	0-8	---	2.8-6.3	4.5-6.0	0
	8-18	5.9-14.1	---	5.1-6.5	0
	18-40	5.4-10.9	---	5.1-6.5	0
	40-63	2.5-9.5	---	5.1-6.5	0
Rexford, poorly drained	0-8	---	2.8-6.3	4.5-6.0	0
	8-18	5.9-14.1	---	5.1-6.5	0
	18-40	5.4-10.9	---	5.1-6.5	0
	40-63	2.5-9.5	---	5.1-6.5	0
296355					
Sheffield	0-7	---	5.9-9.2	4.5-5.5	0
	7-19	8.0-19.9	---	5.1-6.0	0
	19-38	13.8-18.7	---	5.6-7.3	0
	38-66	8.7-17.3	---	6.6-8.4	0
296363					
Dystrochrepts, very stony	0-6	---	2.9-6.6	3.6-5.5	0
	6-32	---	1.4-3.6	3.6-5.5	0
	32-56	---	1.0-3.0	3.6-5.5	0
	56-60	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
296369					
Wayland	0-9	12.4-27.3	---	5.1-7.8	0
	9-41	9.5-23.2	---	5.1-8.4	0
	41-60	8.1-17.3	---	5.6-8.4	0
296376					
Wellsboro	0-8	---	2.0-5.4	4.5-5.5	0
	8-17	---	3.0-5.4	4.5-6.0	0
	17-21	---	3.0-5.4	4.5-6.0	0
	21-60	---	3.0-5.4	4.5-6.0	0
	60-80	---	3.0-5.4	4.5-6.0	0
296379					
Wellsboro	0-8	---	2.0-5.4	4.5-5.5	0
	8-17	---	3.0-5.4	4.5-6.0	0
	17-21	---	3.0-5.4	4.5-6.0	0
	21-60	---	3.0-5.4	4.5-6.0	0
	60-80	---	3.0-5.4	4.5-6.0	0
296385					
Wyoming	0-7	---	3.1-6.6	3.6-6.0	0
	7-25	---	1.0-3.0	3.6-6.0	0
	25-60	---	0.2-2.2	3.6-6.0	0
296386					
Wyoming	0-7	---	3.1-6.6	3.6-6.0	0
	7-25	---	1.0-3.0	3.6-6.0	0
	25-60	---	0.2-2.2	3.6-6.0	0
296387					
Wyoming	0-7	---	3.1-6.6	3.6-6.0	0
	7-25	---	1.0-3.0	3.6-6.0	0
	25-60	---	0.2-2.2	3.6-6.0	0
296388					
Wyoming	0-7	---	3.1-6.6	3.6-6.0	0
	7-25	---	1.0-3.0	3.6-6.0	0
	25-60	---	0.2-2.2	3.6-6.0	0
296389					
Wyoming	0-8	---	3.1-6.6	3.6-6.0	0
	8-26	---	1.0-3.0	3.6-6.0	0
	26-60	---	0.2-2.2	3.6-6.0	0
297185					
Edgemere	0-2	15.0-30.0	3.0-15.0	4.0-5.5	0
	2-5	5.0-10.0	3.1-9.0	4.0-5.5	0
	5-24	5.0-10.0	1.6-3.8	4.0-5.5	0
	24-66	5.0-10.0	1.6-4.4	4.0-5.5	0
Shohola	0-3	5.0-15.0	3.1-6.0	3.5-5.0	0
	3-24	5.0-10.0	1.6-3.4	4.5-5.0	0
	24-72	0.0-5.0	1.6-3.4	4.5-5.5	0
297186					
Edgemere	0-2	15.0-30.0	3.0-15.0	4.0-5.5	0
	2-5	5.0-10.0	3.1-9.0	4.0-5.5	0
	5-24	5.0-10.0	1.6-3.8	4.0-5.5	0
	24-66	5.0-10.0	1.6-4.4	4.0-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
297188					
Manlius----------	0-5	10.0-23.0	2.7-9.6	3.5-6.0	0
	5-24	3.0-13.0	1.2-4.4	3.5-6.0	0
	24-30	2.0-9.0	1.0-3.0	4.5-6.5	0
	30-40	---	---	---	0
Arnot----------	0-3	15.0-25.0	3.9-8.1	3.6-6.0	0
	3-14	10.0-20.0	1.6-4.0	3.6-6.0	0
	14-24	---	---	---	0
297189					
Manlius----------	0-5	10.0-23.0	2.7-9.6	3.5-6.0	0
	5-24	3.0-13.0	1.2-4.4	3.5-6.0	0
	24-30	2.0-9.0	1.0-3.0	4.5-6.5	0
	30-40	---	---	---	0
Arnot----------	0-3	15.0-25.0	3.9-8.1	3.6-6.0	0
	3-14	10.0-20.0	1.6-4.0	3.6-6.0	0
	14-24	---	0.0-0.0	---	0
297190					
Braceville----------	0-11	5.0-10.0	2.5-6.0	4.5-6.0	0
	11-27	3.0-6.0	1.0-2.0	4.5-6.0	0
	27-48	3.0-6.0	1.0-3.0	5.1-6.5	0
	48-70	0.0-1.0	0.5-2.0	5.1-6.5	0
297191					
Wyalusing----------	0-6	15.0-25.0	6.0-16.0	5.1-6.5	0
	6-31	5.0-12.0	2.0-7.0	5.1-6.5	0
	31-70	0.0-5.0	0.5-2.0	5.1-6.5	0
297192					
Pope----------	0-6	10.0-20.0	1.8-6.0	3.6-5.5	0
	6-33	5.0-15.0	1.2-4.0	3.6-5.5	0
	33-70	5.0-15.0	1.1-4.6	3.6-5.5	0
297193					
Paupack----------	0-3	150.0-230.0	22.5-37.5	3.2-4.2	0
	3-26	150.0-230.0	22.5-37.5	3.2-4.2	0
	26-36	20.0-40.0	1.5-7.5	4.0-5.5	0
	36-70	2.0-20.0	1.0-5.1	4.0-5.5	0
297196					
Freetown----------	0-6	30.0-80.0	37.5-74.3	3.6-4.4	0
	6-72	30.0-80.0	20.0-80.0	3.6-4.4	0
297197					
Manlius----------	0-5	12.0-25.0	2.7-9.6	3.5-6.0	0
	5-24	3.0-13.0	1.2-4.4	3.5-6.0	0
	24-30	2.0-9.0	1.0-3.0	4.5-6.5	0
	30-40	---	---	---	0
297198					
Manlius----------	0-5	12.0-25.0	2.7-9.6	3.5-6.0	0
	5-24	3.0-13.0	1.2-4.4	3.5-6.0	0
	24-30	2.0-9.0	1.0-3.0	4.5-6.5	0
	30-40	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
297201					
Oquaga	0-2	15.0-25.0	2.9-11.4	3.6-6.0	0
	2-26	15.0-20.0	1.4-6.9	3.6-6.0	0
	26-32	15.0-20.0	1.4-6.9	3.6-6.0	0
	32-42	---	---	---	0
297203					
Delaware	0-14	5.0-10.0	4.0-9.0	5.1-7.3	0
	14-48	3.0-6.0	1.0-3.0	5.1-7.3	0
	48-72	3.0-6.0	1.0-3.0	5.6-7.3	0
297204					
Delaware	0-14	5.0-10.0	4.0-9.0	5.1-7.3	0
	14-48	3.0-6.0	1.0-3.0	5.1-7.3	0
	48-72	3.0-6.0	1.0-3.0	5.6-7.3	0
297205					
Delaware	0-14	5.0-10.0	4.0-9.0	5.1-7.3	0
	14-48	3.0-6.0	1.0-3.0	5.1-7.3	0
	48-72	3.0-6.0	1.0-3.0	5.6-7.3	0
297209					
Philo	0-6	10.0-20.0	3.5-6.6	4.5-6.0	0
	6-36	6.0-18.0	2.0-4.0	4.5-6.0	0
	36-70	4.0-10.0	1.0-4.0	4.5-6.0	0
297210					
Barbour	0-10	10.0-15.0	2.0-7.4	4.5-6.0	0
	10-38	5.0-10.0	1.2-4.0	4.5-6.0	0
	38-72	5.0-10.0	0.5-2.0	4.5-6.5	0
297216					
Wurtsboro	0-4	15.0-35.0	3.5-6.6	3.6-5.5	0
	4-22	2.0-8.0	2.0-4.0	3.6-5.5	0
	22-70	0.0-1.0	2.0-3.6	3.6-5.5	0
297217					
Wurtsboro	0-4	15.0-35.0	2.5-6.6	3.6-5.5	0
	4-22	2.0-8.0	1.0-4.0	3.6-5.5	0
	22-70	0.0-1.0	1.0-4.0	3.6-5.5	0
297227					
Arnot	0-3	12.0-22.0	3.9-8.1	3.6-6.0	0
	3-10	3.0-13.0	1.6-5.1	3.6-6.0	0
	10-14	3.0-13.0	1.6-5.1	3.6-6.0	0
	14-24	---	---	---	0
297228					
Arnot	0-3	12.0-22.0	3.9-8.1	3.6-6.0	0
	3-10	3.0-13.0	1.6-5.1	3.6-6.0	0
	10-14	3.0-13.0	1.6-5.1	3.6-6.0	0
	14-24	---	---	---	0
297229					
Wyoming	0-3	10.0-20.0	3.1-6.6	3.6-6.0	0
	3-33	5.0-10.0	1.0-3.4	3.6-6.0	0
	33-72	1.0-5.0	0.2-2.6	3.6-6.0	0
297230					
Wyoming	0-3	10.0-20.0	3.1-6.6	3.6-6.0	0
	3-33	5.0-10.0	1.0-3.4	3.6-6.0	0
	33-72	1.0-5.0	0.2-2.6	3.6-6.0	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
297231					
Wyoming	0-3	10.0-20.0	3.1-6.6	3.6-6.0	0
	3-33	5.0-10.0	1.0-3.4	3.6-6.0	0
	33-72	1.0-5.0	0.2-2.6	3.6-6.0	0
297236					
Suncook	0-10	5.0-15.0	4.0-9.0	4.5-6.5	0
	10-70	1.0-3.0	0.3-1.0	4.5-6.5	0
297237					
Mardin	0-8	12.0-25.0	4.3-8.9	3.6-6.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-30	3.0-10.0	2.0-4.0	4.5-7.3	0
	30-60	3.0-9.0	2.0-4.0	5.1-8.4	0
	60-80	3.0-9.0	2.0-4.0	5.1-8.4	0
297238					
Mardin	0-8	12.0-25.0	4.3-8.9	3.6-6.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-30	3.0-10.0	2.0-4.0	4.5-7.3	0
	30-60	3.0-9.0	2.0-4.0	5.1-8.4	0
	60-80	3.0-9.0	2.0-4.0	5.1-8.4	0
297239					
Mardin	0-8	15.0-25.0	4.3-8.9	3.6-6.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-30	3.0-10.0	2.0-4.0	4.5-7.3	0
	30-60	3.0-9.0	2.0-4.0	5.1-8.4	0
	60-80	3.0-9.0	2.0-4.0	5.1-8.4	0
297240					
Mardin	0-8	15.0-25.0	4.3-8.9	3.6-6.5	0
	8-17	5.0-12.0	2.0-4.4	3.6-6.5	0
	17-21	5.0-12.0	2.0-4.4	3.6-6.5	0
	21-30	3.0-10.0	2.0-4.0	4.5-7.3	0
	30-60	3.0-9.0	2.0-4.0	5.1-8.4	0
	60-80	3.0-9.0	2.0-4.0	5.1-8.4	0
297241					
Unadilla	0-13	12.0-28.0	2.5-9.0	4.5-6.0	0
	13-49	3.0-8.0	0.6-3.8	4.5-6.0	0
	49-80	2.0-5.0	0.2-1.8	4.5-6.0	0
297242					
Shohola	0-3	5.0-15.0	3.1-6.0	3.5-5.0	0
	3-24	5.0-10.0	1.6-3.4	4.5-5.0	0
	24-72	0.0-5.0	1.6-3.4	4.5-5.5	0
Edgemere	0-2	15.0-30.0	3.0-15.0	4.0-5.5	0
	2-5	5.0-10.0	3.1-9.0	4.0-5.5	0
	5-24	5.0-10.0	1.6-3.8	4.0-5.5	0
	24-66	5.0-10.0	1.6-4.4	4.0-5.5	0
297243					
Shohola	0-3	5.0-15.0	3.1-6.0	3.5-5.0	0
	3-24	5.0-10.0	1.6-3.4	4.5-5.0	0
	24-72	0.0-5.0	1.6-3.4	4.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
297243					
Edgemere----------	0-2	15.0-30.0	3.0-15.0	4.0-5.5	0
	2-5	5.0-10.0	3.1-9.0	4.0-5.5	0
	5-24	5.0-10.0	1.6-3.8	4.0-5.5	0
	24-66	5.0-10.0	1.6-4.4	4.0-5.5	0
297244					
Lordstown----------	0-3	15.0-25.0	7.0-17.0	4.5-6.5	0
	3-28	15.0-25.0	1.4-6.0	4.5-6.0	0
	28-30	5.0-15.0	1.0-4.0	4.5-6.0	0
	30-40	---	---	---	0
Swartswood----------	0-4	15.0-35.0	6.2-11.5	3.6-5.5	0
	4-32	3.0-10.0	2.0-4.8	3.6-5.5	0
	32-70	3.0-10.0	1.6-4.4	3.6-5.5	0
297247					
Chenango----------	0-10	20.0-35.0	2.5-6.9	4.5-6.0	0
	10-29	10.0-20.0	1.0-3.2	4.5-6.0	0
	29-70	3.0-8.0	0.5-3.0	5.1-7.8	0
297248					
Chenango----------	0-10	20.0-35.0	2.5-6.9	4.5-6.0	0
	10-29	10.0-20.0	1.0-3.2	4.5-6.0	0
	29-70	3.0-8.0	0.5-3.0	5.1-7.8	0
297249					
Chenango----------	0-10	20.0-35.0	2.5-6.9	4.5-6.0	0
	10-29	10.0-20.0	1.0-3.2	4.5-6.0	0
	29-70	3.0-8.0	0.5-3.0	5.1-7.8	0
297253					
Craigsville----------	0-5	10.0-15.0	2.5-6.8	4.5-5.5	0
	5-27	5.0-10.0	1.0-3.4	4.5-5.5	0
	27-77	5.0-10.0	1.0-2.4	4.5-5.5	0
Wyoming----------	0-3	10.0-15.0	3.1-6.6	3.6-6.0	0
	3-33	5.0-10.0	1.0-3.4	3.6-6.0	0
	33-72	1.0-5.0	0.2-2.6	3.6-6.0	0
298049					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-5	2.3-4.4	1.1-1.8	3.5-5.5	0
	5-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-30	1.2-4.3	0.0-2.3	3.5-5.5	0
	30-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298050					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
298050					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298051					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298075					
Colonie----------	0-2	3.5-7.7	0.0-3.3	5.1-6.5	0
	2-11	3.5-7.7	0.0-3.3	5.1-6.5	0
	11-24	0.6-3.8	0.0-8.7	5.1-6.5	0
	24-40	0.6-3.8	0.0-8.7	5.1-7.3	0
	40-62	0.6-3.8	0.0-8.7	5.1-7.3	0
298188					
Lackawanna, extremely stony-----	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298189					
Lackawanna, extremely stony-----	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
298221					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298222					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298223					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298255					
Delaware, rarely flooded----------	0-1	85.0-94.4	31.5-36.9	5.1-6.5	0
	1-4	3.4-12.6	0.3-9.3	5.1-6.5	0
	4-11	3.4-12.6	0.3-9.3	5.1-6.5	0
	11-20	2.2-7.0	0.3-4.1	5.1-6.5	0
	20-33	2.2-7.0	0.3-4.1	5.1-6.5	0
	33-41	2.2-7.0	0.3-4.1	5.1-6.5	0
	41-56	1.3-3.7	1.0-4.2	5.1-6.5	0
	56-60	1.3-3.7	1.0-4.2	5.1-6.5	0
298256					
Delaware, rarely flooded----------	0-1	85.0-94.4	31.5-36.9	5.1-6.5	0
	1-4	3.4-12.6	0.3-9.3	5.1-6.5	0
	4-11	3.4-12.6	0.3-9.3	5.1-6.5	0
	11-20	2.2-7.0	0.3-4.1	5.1-6.5	0
	20-33	2.2-7.0	0.3-4.1	5.1-6.5	0
	33-41	2.2-7.0	0.3-4.1	5.1-6.5	0
	41-56	1.3-3.7	1.0-4.2	5.1-6.5	0
	56-60	1.3-3.7	1.0-4.2	5.1-6.5	0
298257					
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
298258					
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0
298259					
Wallpack, extremely stony----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	8.0-35.0	6.0-20.0	5.1-6.5	0
	2-5	6.0-9.4	0.0-3.9	5.1-6.5	0
	5-18	1.7-15.4	1.3-4.8	5.1-6.5	0
	18-24	1.2-8.8	0.6-5.3	5.6-7.3	0
	24-42	1.2-8.8	0.6-5.3	5.6-7.3	0
	42-60	1.2-8.8	0.6-5.3	5.6-7.8	0
298260					
Wallpack, extremely stony----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	8.0-35.0	6.0-20.0	5.1-6.5	0
	2-5	6.0-9.4	0.0-3.9	5.1-6.5	0
	5-18	1.7-15.4	1.3-4.8	5.1-6.5	0
	18-24	1.2-8.8	0.6-5.3	5.6-7.3	0
	24-42	1.2-8.8	0.6-5.3	5.6-7.3	0
	42-60	1.2-8.8	0.6-5.3	5.6-7.8	0
298261					
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0
298262					
Wallpack, extremely stony----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	8.0-35.0	6.0-20.0	5.1-6.5	0
	2-5	6.0-9.4	0.0-3.9	5.1-6.5	0
	5-18	1.7-15.4	1.3-4.8	5.1-6.5	0
	18-24	1.2-8.8	0.6-5.3	5.6-7.3	0
	24-42	1.2-8.8	0.6-5.3	5.6-7.3	0
	42-60	1.2-8.8	0.6-5.3	5.6-7.8	0
298265					
Venango, extremely stony----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-6	10.9-15.1	4.4-11.1	3.5-6.0	0
	6-16	4.6-9.0	0.4-12.3	3.5-6.0	0
	16-22	3.5-9.0	0.0-12.3	4.5-6.5	0
	22-34	3.5-9.0	0.0-12.3	4.5-6.5	0
	34-60	3.5-9.0	0.0-12.3	5.1-7.3	0
298266					
Venango, extremely stony----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-6	10.9-15.1	4.4-11.1	3.5-6.0	0
	6-16	4.6-9.0	0.4-12.3	3.5-6.0	0
	16-22	3.5-9.0	0.0-12.3	4.5-6.5	0
	22-34	3.5-9.0	0.0-12.3	4.5-6.5	0
	34-60	3.5-9.0	0.0-12.3	5.1-7.3	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
298409					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298411					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
298413					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
318498					
Hazen, very stony----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-10	5.9-9.0	3.1-8.4	5.6-6.5	0
	10-18	5.4-7.4	2.3-3.9	5.6-6.5	0
	18-29	0.6-3.6	0.0-3.2	6.1-7.8	0
	29-41	0.6-3.6	0.0-3.2	6.1-7.8	0
	41-60	0.6-3.6	0.0-3.2	6.1-7.8	0
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0
318533					
Hazen, very stony----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-10	5.9-9.0	3.1-8.4	5.6-6.5	0
	10-18	5.4-7.4	2.3-3.9	5.6-6.5	0
	18-29	0.6-3.6	0.0-3.2	6.1-7.8	0
	29-41	0.6-3.6	0.0-3.2	6.1-7.8	0
	41-60	0.6-3.6	0.0-3.2	6.1-7.8	0
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
319783					
Catden	0-2	102.1-146.7	---	4.5-7.3	0
	2-13	102.1-146.7	---	4.5-7.3	0
	13-20	102.1-146.7	---	4.5-7.3	0
	20-32	102.1-146.7	---	4.5-7.3	0
	32-60	102.1-146.7	---	4.5-7.3	0
319784					
Fredon, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-8	3.5-8.7	3.1-8.0	5.1-7.3	0
	8-14	2.3-6.5	0.1-5.7	5.1-7.3	0
	14-18	2.3-6.5	0.1-5.7	5.1-7.3	0
	18-23	2.3-6.5	0.1-5.7	5.1-7.3	0
	23-31	0.6-3.6	0.0-3.2	5.6-8.4	0
	31-36	0.6-3.6	0.0-3.2	5.6-8.4	0
	36-45	0.6-3.6	0.0-3.2	5.6-8.4	0
	45-55	0.6-3.6	0.0-3.2	5.6-8.4	0
	55-60	0.6-3.6	0.0-3.2	5.6-8.4	0
Halsey, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-5	3.5-8.7	3.1-8.0	5.1-7.3	0
	5-11	3.5-8.7	3.1-8.0	5.1-7.3	0
	11-20	2.3-6.5	0.1-5.7	5.1-7.3	0
	20-25	0.6-3.6	0.0-3.2	5.6-8.4	0
	25-35	0.6-3.6	0.0-3.2	5.6-8.4	0
	35-49	0.6-3.6	0.0-3.2	5.6-8.4	0
	49-56	0.6-3.6	0.0-3.2	5.6-8.4	0
	56-60	0.6-3.6	0.0-3.2	5.6-8.4	0
543222					
Andover, extremely stony	0-8	---	2.3-9.5	4.2-6.2	0
	8-17	---	5.7-18.1	4.5-5.5	0
	17-53	---	5.7-18.1	4.5-5.5	0
	53-65	---	5.7-21.0	4.5-5.5	0
Buchanan, extremely stony	0-6	---	1.7-4.9	3.6-5.5	0
	6-23	---	3.5-7.2	3.6-5.5	0
	23-47	---	3.5-11.0	3.6-5.5	0
	47-61	---	3.8-11.0	3.6-5.5	0
543243					
Berks	0-10	---	1.0-6.4	4.2-6.6	0
	10-26	---	1.3-16.3	3.6-6.5	0
	26-33	---	1.3-9.5	3.6-6.5	0
	33-43	---	---	---	0
Weikert	0-8	---	3.6-8.4	4.5-6.0	0
	8-15	---	4.6-13.4	4.5-6.0	0
	15-18	---	4.6-13.4	4.5-6.0	0
	18-20	---	---	---	0
543246					
Buchanan	0-7	3.7-9.9	---	4.0-6.0	0
	7-21	---	2.9-7.7	3.5-5.5	0
	21-65	---	3.1-7.7	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
543247					
Buchanan, extremely stony	0-3	3.7-9.9	---	4.0-6.0	0
	3-21	---	2.9-7.7	3.5-5.5	0
	21-65	---	3.1-7.7	3.5-5.5	0
543257					
Chippewa	0-8	18.0-35.0	---	4.5-6.5	0
	8-16	5.0-16.0	---	4.5-6.5	0
	16-48	5.0-12.0	---	5.1-7.3	0
	48-80	2.0-11.0	---	5.6-8.4	0-5
543258					
Chippewa	0-8	18.0-35.0	---	4.5-6.5	0
	8-16	5.0-16.0	---	4.5-6.5	0
	16-48	5.0-12.0	---	5.1-7.3	0
	48-80	2.0-11.0	---	5.6-8.4	0-5
543259					
Chippewa, extremely stony	0-8	18.0-35.0	---	4.5-6.5	0
	8-16	5.0-16.0	---	4.5-6.5	0
	16-48	5.0-12.0	---	5.1-7.3	0
	48-80	2.0-11.0	---	5.6-8.4	0-5
543271					
Delaware	0-10	5.0-10.0	---	5.1-7.3	0
	10-40	3.0-6.0	---	5.1-7.3	0
	40-87	3.0-6.0	---	5.6-7.3	0
543276					
Fluvaquents	0-6	2.0-10.0	1.8-8.4	3.5-7.3	0
	6-62	2.0-15.0	---	4.5-7.3	0
543292					
Hazleton, extremely stony	0-6	---	1.5-4.9	4.2-6.6	0
	6-43	---	1.9-8.4	3.6-5.5	0
	43-55	---	1.3-6.8	3.6-5.5	0
	55-80	---	---	---	0
543293					
Hazleton, extremely stony	0-6	---	1.5-4.9	4.2-6.6	0
	6-43	---	1.9-8.4	3.6-5.5	0
	43-60	---	1.3-6.8	3.6-5.5	0
	60-80	---	---	---	0
543299					
Laidig, extremely stony	0-3	---	1.5-7.8	4.2-6.6	0
	3-38	---	5.7-18.1	3.6-5.5	0
	38-62	---	5.7-18.1	3.6-5.5	0
543300					
Laidig, extremely stony	0-3	---	1.5-7.8	4.2-6.6	0
	3-38	---	5.7-18.1	3.6-5.5	0
	38-62	---	5.7-18.1	3.6-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
543304					
Laidig	0-3	---	1.5-7.8	4.2-6.6	0
	3-38	---	5.7-18.1	3.6-5.5	0
	38-62	---	5.7-18.1	3.6-5.5	0
543327					
Swartswood	0-11	10.0-25.0	3.9-7.0	4.2-6.6	0
	11-34	3.0-10.0	2.0-4.4	3.6-5.5	0
	34-47	3.0-10.0	1.6-4.4	3.6-5.5	0
543328					
Swartswood	0-11	10.0-25.0	3.9-7.0	4.2-6.6	0
	11-34	3.0-10.0	2.0-4.4	3.6-5.5	0
	34-47	3.0-10.0	1.6-4.4	3.6-5.5	0
543330					
Swartswood, extremely stony	0-11	15.0-35.0	6.2-11.5	4.2-6.6	0
	11-34	3.0-10.0	2.0-4.8	3.6-5.5	0
	34-47	3.0-10.0	1.6-4.4	3.6-5.5	0
Wurtsboro, extremely stony	0-10	---	10.0-30.0	4.2-6.6	0
	10-20	---	2.0-8.0	3.6-5.5	0
	20-64	---	0.0-1.0	3.6-5.5	0
543331					
Swartswood, extremely stony	0-11	15.0-35.0	6.2-11.5	4.2-6.6	0
	11-34	3.0-10.0	2.0-4.8	3.6-5.5	0
	34-47	3.0-10.0	1.6-4.4	3.6-5.5	0
Wurtsboro, extremely stony	0-10	---	10.0-30.0	4.2-6.6	0
	10-20	---	2.0-8.0	3.6-5.5	0
	20-64	---	0.0-1.0	3.6-5.5	0
543359					
Volusia	0-8	12.0-25.0	---	4.5-6.5	0
	8-15	5.0-12.0	---	4.5-6.5	0
	15-70	3.0-10.0	---	5.1-7.3	0
	70-80	3.0-9.0	---	5.6-8.4	0
543360					
Volusia, extremely stony	0-8	15.0-25.0	---	4.5-6.5	0
	8-15	5.0-12.0	---	4.5-6.5	0
	15-70	3.0-10.0	---	5.1-7.3	0
	70-80	3.0-9.0	---	5.6-8.4	0
543374					
Wurtsboro	0-10	15.0-30.0	2.8-6.3	4.2-6.6	0
	10-20	2.0-8.0	2.0-4.4	3.6-5.5	0
	20-64	2.0-8.0	2.0-4.4	3.6-5.5	0
543375					
Wurtsboro	0-10	15.0-30.0	2.8-6.3	4.2-6.6	0
	10-20	2.0-8.0	2.0-4.4	3.6-5.5	0
	20-64	2.0-8.0	2.0-4.4	3.6-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
612280					
Scio	0-6	8.3-10.2	6.6-8.7	3.5-6.0	0
	6-13	8.3-10.2	6.6-8.7	3.5-6.0	0
	13-23	7.1-13.9	4.6-10.2	3.5-6.0	0
	23-28	7.1-13.9	4.6-10.2	3.5-6.0	0
	28-50	7.1-13.9	4.6-10.2	3.5-6.0	0
	50-59	8.7-11.5	6.1-11.5	5.1-7.8	0
	59-72	8.7-11.5	6.1-11.5	5.1-7.8	0
612666					
Colonie	0-2	3.5-7.7	0.0-3.3	5.1-6.5	0
	2-11	3.5-7.7	0.0-3.3	5.1-6.5	0
	11-24	0.6-3.8	0.0-8.7	5.1-6.5	0
	24-40	0.6-3.8	0.0-8.7	5.1-7.3	0
	40-62	0.6-3.8	0.0-8.7	5.1-7.3	0
612668					
Hoosic, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0
Hazen, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-10	5.9-9.0	3.1-8.4	5.6-6.5	0
	10-18	5.4-7.4	2.3-3.9	5.6-6.5	0
	18-29	0.6-3.6	0.0-3.2	6.1-7.8	0
	29-41	0.6-3.6	0.0-3.2	6.1-7.8	0
	41-60	0.6-3.6	0.0-3.2	6.1-7.8	0
612724					
Lordstown, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
Wallpack, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	8.0-35.0	6.0-20.0	5.1-6.5	0
	2-5	6.0-9.4	0.0-3.9	5.1-6.5	0
	5-18	1.7-15.4	1.3-4.8	5.1-6.5	0
	18-24	1.2-8.8	0.6-5.3	5.6-7.3	0
	24-42	1.2-8.8	0.6-5.3	5.6-7.3	0
	42-60	1.2-8.8	0.6-5.3	5.6-7.8	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
612732					
Atherton, very poorly drained------	0-2	75.0-200.0	31.5-36.9	4.5-6.0	0
	2-4	75.0-200.0	31.5-36.9	4.5-6.0	0
	4-8	3.5-8.7	3.1-5.4	5.1-7.3	0
	8-10	3.5-8.7	2.4-5.4	5.6-7.8	0
	10-18	4.5-8.0	2.2-3.1	5.6-7.8	0
	18-29	4.5-8.0	2.2-3.1	5.6-7.8	0
	29-32	4.5-8.0	2.2-3.1	5.6-7.8	0
	32-41	4.5-8.0	2.2-3.1	5.6-7.8	0
	41-45	2.3-4.4	0.6-1.8	5.6-7.8	0
	45-50	2.3-4.4	0.6-1.8	5.6-7.8	0
	50-60	2.3-4.4	0.6-1.8	5.6-7.8	0
	60-70	2.3-4.4	0.6-1.8	5.6-7.8	0
Atherton, poorly drained----------	0-6	11.4-13.4	9.3-11.0	5.1-7.3	0
	6-12	4.9-9.0	0.4-11.4	5.6-7.8	0
	12-30	4.9-9.0	0.4-11.4	5.6-7.8	0
	30-40	5.3-6.7	2.3-10.2	5.6-7.8	0
	40-60	5.3-6.7	2.3-10.2	5.6-7.8	0
612738					
Fluvaquents, occasionally flooded	0-5	10.0-20.0	4.5-15.5	5.1-6.5	0
	5-12	10.0-20.0	5.0-13.1	5.1-6.5	0
	12-18	5.0-15.0	7.8-16.5	5.1-7.3	0
	18-24	5.0-15.0	7.8-16.5	5.1-7.3	0
	24-60	5.0-10.0	2.3-7.9	5.1-7.3	0
612753					
Wallpack, aeolian mantle, very stony--	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.4-12.6	0.3-9.3	3.5-5.5	0
	2-8	3.4-12.6	0.3-9.3	3.5-5.5	0
	8-14	2.2-7.0	0.3-4.1	3.5-5.5	0
	14-21	2.2-7.0	0.3-4.1	3.5-5.5	0
	21-26	2.2-7.0	0.3-4.1	3.5-5.5	0
	26-31	2.2-7.0	0.3-4.1	3.5-5.5	0
	31-36	2.2-7.0	0.3-4.1	3.5-5.5	0
	36-60	2.2-7.0	0.3-4.1	3.5-5.5	0
612756					
Wallpack, aeolian mantle, very stony--	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.4-12.6	0.3-9.3	3.5-5.5	0
	2-8	3.4-12.6	0.3-9.3	3.5-5.5	0
	8-14	2.2-7.0	0.3-4.1	3.5-5.5	0
	14-21	2.2-7.0	0.3-4.1	3.5-5.5	0
	21-26	2.2-7.0	0.3-4.1	3.5-5.5	0
	26-31	2.2-7.0	0.3-4.1	3.5-5.5	0
	31-36	2.2-7.0	0.3-4.1	3.5-5.5	0
	36-60	2.2-7.0	0.3-4.1	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
612757					
Wallpack, aeolian mantle, very stony--	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.4-12.6	0.3-9.3	3.5-5.5	0
	2-8	3.4-12.6	0.3-9.3	3.5-5.5	0
	8-14	2.2-7.0	0.3-4.1	3.5-5.5	0
	14-21	2.2-7.0	0.3-4.1	3.5-5.5	0
	21-26	2.2-7.0	0.3-4.1	3.5-5.5	0
	26-31	2.2-7.0	0.3-4.1	3.5-5.5	0
	31-36	2.2-7.0	0.3-4.1	3.5-5.5	0
	36-60	2.2-7.0	0.3-4.1	3.5-5.5	0
612767					
Wellsboro, extremely stony----------	0-8	4.5-8.0	3.1-5.4	3.5-5.5	0
	8-15	4.6-6.5	0.1-5.7	3.5-5.5	0
	15-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	4.6-6.5	0.1-5.7	3.5-5.5	0
	29-37	4.0-10.0	0.0-2.3	3.5-5.5	0
	37-60	4.0-10.0	0.0-2.3	3.5-5.5	0
612768					
Wellsboro, extremely stony----------	0-8	4.5-8.0	3.1-5.4	3.5-5.5	0
	8-15	4.6-6.5	0.1-5.7	3.5-5.5	0
	15-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	4.6-6.5	0.1-5.7	3.5-5.5	0
	29-37	4.0-10.0	0.0-2.3	3.5-5.5	0
	37-60	4.0-10.0	0.0-2.3	3.5-5.5	0
613393					
Alden, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-7	3.5-8.7	3.1-8.0	4.5-7.3	0
	7-14	4.6-9.0	0.1-12.0	5.1-7.3	0
	14-28	4.6-9.0	0.1-12.0	5.6-7.3	0
	28-43	4.6-9.0	0.1-12.0	5.6-7.3	0
	43-60	4.6-9.0	0.1-12.0	6.1-8.4	0
613447					
Unadilla----------	0-8	8.3-10.2	6.6-8.7	4.5-7.3	0
	8-14	8.3-10.2	6.6-8.7	4.5-7.3	0
	14-25	7.1-13.9	4.6-10.2	4.5-7.3	0
	25-39	7.1-13.9	4.6-10.2	4.5-7.3	0
	39-60	8.7-11.5	6.1-11.5	4.5-7.3	0
613448					
Unadilla----------	0-8	8.3-10.2	6.6-8.7	4.5-7.3	0
	8-14	8.3-10.2	6.6-8.7	4.5-7.3	0
	14-25	7.1-13.9	4.6-10.2	4.5-7.3	0
	25-39	7.1-13.9	4.6-10.2	4.5-7.3	0
	39-60	8.7-11.5	6.1-11.5	4.5-7.3	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
614075					
Wurtsboro, extremely stony	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0
Swartswood, extremely stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
620179					
Arnot, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
620180					
Arnot	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
620181					
Arnot	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
623089					
Chippewa, extremely stony	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-4	10.9-15.1	4.4-11.1	4.5-6.5	0
	4-8	6.0-9.4	0.4-9.8	4.5-6.5	0
	8-13	4.6-15.4	0.9-12.0	4.5-6.5	0
	13-21	1.2-8.8	0.1-10.5	5.1-7.3	0
	21-29	1.2-8.8	0.1-10.5	5.1-7.3	0
	29-34	1.2-8.8	0.1-10.5	5.6-8.4	0
	34-60	1.2-8.8	0.1-10.5	5.6-8.4	0
623109					
Farmington	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-3	10.9-11.4	3.1-11.1	5.1-7.3	0
	3-9	4.4-15.4	0.0-4.8	5.1-7.8	0
	9-15	4.4-15.4	0.0-4.8	5.1-7.8	0
	15-80	---	---	---	0
624811					
Galway, very rocky	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	85.0-94.4	31.5-36.9	4.5-6.0	0
	3-5	9.5-14.3	0.0-4.5	5.0-7.3	0
	5-15	4.4-15.4	0.0-4.8	5.1-7.8	0
	15-24	4.4-15.4	0.0-4.8	5.1-7.8	0
	24-80	---	---	---	0
624813					
Lackawanna, extremely stony	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
624816					
Lordstown, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
Wallpack, very rocky-	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	8.0-35.0	6.0-20.0	5.1-6.5	0
	2-5	6.0-9.4	0.0-3.9	5.1-6.5	0
	5-18	1.7-15.4	1.3-4.8	5.1-6.5	0
	18-24	1.2-8.8	0.6-5.3	5.6-7.3	0
	24-42	1.2-8.8	0.6-5.3	5.6-7.3	0
	42-60	1.2-8.8	0.6-5.3	5.6-7.8	0
624822					
Lordstown----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0
624823					
Lordstown----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0
624824					
Lordstown----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
624824					
Wallpack----------	0-3	3.5-11.4	3.1-5.4	5.1-6.5	0
	3-9	3.5-11.4	3.1-5.4	5.1-6.5	0
	9-16	1.7-15.4	1.3-4.8	5.1-6.5	0
	16-25	1.2-8.8	0.6-5.3	5.6-7.3	0
	25-65	1.2-8.8	0.6-5.3	5.6-7.8	0
624826					
Manlius, very rocky--	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.5-8.7	3.1-5.4	3.5-7.3	0
	2-18	4.6-6.5	2.5-2.7	3.5-6.5	0
	18-27	4.6-6.5	2.5-2.7	4.5-6.5	0
	27-80	---	---	---	0
Nassau, very rocky---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.5-8.7	3.1-5.4	4.5-7.3	0
	2-15	4.6-6.5	2.5-2.7	4.5-6.5	0
	15-80	---	---	---	0
624827					
Nassau, very rocky---	0-7	3.5-8.7	3.1-5.4	4.5-7.3	0
	7-13	4.6-6.5	2.5-2.7	4.5-6.5	0
	13-80	---	---	---	0
Manlius, very rocky--	0-9	3.5-8.7	3.1-5.4	3.5-7.3	0
	9-20	4.6-6.5	2.5-2.7	3.5-6.5	0
	20-29	4.6-6.5	2.5-2.7	4.5-6.5	0
	29-80	---	---	---	0
624828					
Nassau, very rocky---	0-7	3.5-8.7	3.1-5.4	4.5-7.3	0
	7-13	4.6-6.5	2.5-2.7	4.5-6.5	0
	13-80	---	---	---	0
Manlius, very rocky--	0-9	3.5-8.7	3.1-5.4	3.5-7.3	0
	9-20	4.6-6.5	2.5-2.7	3.5-6.5	0
	20-29	4.6-6.5	2.5-2.7	4.5-6.5	0
	29-80	---	---	---	0
624829					
Nassau, very rocky---	0-7	3.5-8.7	3.1-5.4	4.5-7.3	0
	7-13	4.6-6.5	2.5-2.7	4.5-6.5	0
	13-80	---	---	---	0
Manlius, very rocky--	0-9	3.5-8.7	3.1-5.4	3.5-7.3	0
	9-20	4.6-6.5	2.5-2.7	3.5-6.5	0
	20-29	4.6-6.5	2.5-2.7	4.5-6.5	0
	29-80	---	---	---	0
624832					
Nassau----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	3.5-8.7	3.1-5.4	4.5-7.3	0
	2-15	4.6-6.5	2.5-2.7	4.5-6.5	0
	15-80	---	---	---	0
624841					
Oquaga----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
624845					
Farmington----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-3	10.9-11.4	3.1-11.1	5.1-7.3	0
	3-9	4.4-15.4	0.0-4.8	5.1-7.8	0
	9-15	4.4-15.4	0.0-4.8	5.1-7.8	0
	15-80	---	---	---	0
Galway----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	85.0-94.4	31.5-36.9	4.5-6.0	0
	3-5	9.5-14.3	0.0-4.5	5.0-7.3	0
	5-15	4.4-15.4	0.0-4.8	5.1-7.8	0
	15-24	4.4-15.4	0.0-4.8	5.1-7.8	0
	24-80	---	---	---	0
624846					
Arnot----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
626816					
Udifluvents, occasionally flooded	0-3	---	1.6-8.2	4.5-6.0	0
	3-16	1.4-9.9	1.1-7.4	5.0-6.0	0
	16-22	1.4-14.2	1.1-10.7	5.0-6.0	0
	22-27	1.4-14.2	1.1-10.7	5.0-6.0	0
	27-32	1.4-14.2	1.1-10.7	5.0-6.0	0
	32-60	1.4-9.9	1.1-7.4	5.0-6.0	0
635458					
Oquaga, very rocky---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0
Lackawanna, very rocky----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
635459					
Oquaga, very rocky---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
635459					
Lackawanna, very rocky	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
740953					
Delaware, rarely flooded	0-1	85.0-94.4	31.5-36.9	5.1-6.5	0
	1-4	3.4-12.6	0.3-9.3	5.1-6.5	0
	4-11	3.4-12.6	0.3-9.3	5.1-6.5	0
	11-20	2.2-7.0	0.3-4.1	5.1-6.5	0
	20-33	2.2-7.0	0.3-4.1	5.1-6.5	0
	33-41	2.2-7.0	0.3-4.1	5.1-6.5	0
	41-56	1.3-3.7	1.0-4.2	5.1-6.5	0
	56-60	1.3-3.7	1.0-4.2	5.1-6.5	0
740968					
Nassau, very rocky	0-7	3.5-8.7	3.1-5.4	4.5-7.3	0
	7-13	4.6-6.5	2.5-2.7	4.5-6.5	0
	13-80	---	---	---	0
Manlius, very rocky	0-9	3.5-8.7	3.1-5.4	3.5-7.3	0
	9-20	4.6-6.5	2.5-2.7	3.5-6.5	0
	20-29	4.6-6.5	2.5-2.7	4.5-6.5	0
	29-80	---	---	---	0
740969					
Nassau, very rocky	0-7	3.5-8.7	3.1-5.4	4.5-7.3	0
	7-13	4.6-6.5	2.5-2.7	4.5-6.5	0
	13-80	---	---	---	0
Manlius, very rocky	0-9	3.5-8.7	3.1-5.4	3.5-7.3	0
	9-20	4.6-6.5	2.5-2.7	3.5-6.5	0
	20-29	4.6-6.5	2.5-2.7	4.5-6.5	0
	29-80	---	---	---	0
740971					
Oquaga, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0
Lackawanna, very rocky	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
740972					
Oquaga, very rocky---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0
Lackawanna, very rocky----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
740974					
Oquaga----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0
740975					
Arnot----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
740987					
Scio----------	0-6	8.3-10.2	6.6-8.7	3.5-6.0	0
	6-13	8.3-10.2	6.6-8.7	3.5-6.0	0
	13-23	7.1-13.9	4.6-10.2	3.5-6.0	0
	23-28	7.1-13.9	4.6-10.2	3.5-6.0	0
	28-50	7.1-13.9	4.6-10.2	3.5-6.0	0
	50-59	8.7-11.5	6.1-11.5	5.1-7.8	0
	59-72	8.7-11.5	6.1-11.5	5.1-7.8	0
740988					
Udifluvents, occasionally flooded	0-3	---	1.6-8.2	4.5-6.0	0
	3-16	1.4-9.9	1.1-7.4	5.0-6.0	0
	16-22	1.4-14.2	1.1-10.7	5.0-6.0	0
	22-27	1.4-14.2	1.1-10.7	5.0-6.0	0
	27-32	1.4-14.2	1.1-10.7	5.0-6.0	0
	32-60	1.4-9.9	1.1-7.4	5.0-6.0	0
740991					
Unadilla----------	0-8	8.3-10.2	6.6-8.7	4.5-7.3	0
	8-14	8.3-10.2	6.6-8.7	4.5-7.3	0
	14-25	7.1-13.9	4.6-10.2	4.5-7.3	0
	25-39	7.1-13.9	4.6-10.2	4.5-7.3	0
	39-60	8.7-11.5	6.1-11.5	4.5-7.3	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
740992					
Unadilla----------	0-8	8.3-10.2	6.6-8.7	4.5-7.3	0
	8-14	8.3-10.2	6.6-8.7	4.5-7.3	0
	14-25	7.1-13.9	4.6-10.2	4.5-7.3	0
	25-39	7.1-13.9	4.6-10.2	4.5-7.3	0
	39-60	8.7-11.5	6.1-11.5	4.5-7.3	0
740995					
Wellsboro, extremely stony----------	0-8	4.5-8.0	3.1-5.4	3.5-5.5	0
	8-15	4.6-6.5	0.1-5.7	3.5-5.5	0
	15-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	4.6-6.5	0.1-5.7	3.5-5.5	0
	29-37	4.0-10.0	0.0-2.3	3.5-5.5	0
	37-60	4.0-10.0	0.0-2.3	3.5-5.5	0
740996					
Wellsboro, extremely stony----------	0-8	4.5-8.0	3.1-5.4	3.5-5.5	0
	8-15	4.6-6.5	0.1-5.7	3.5-5.5	0
	15-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	4.6-6.5	0.1-5.7	3.5-5.5	0
	29-37	4.0-10.0	0.0-2.3	3.5-5.5	0
	37-60	4.0-10.0	0.0-2.3	3.5-5.5	0
741149					
Lackawanna, extremely stony-----	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
741150					
Lackawanna, extremely stony-----	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
801114					
Oquaga----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0
810906					
Oquaga----------	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-4	5.9-13.4	3.1-11.1	3.5-5.5	0
	4-20	4.6-6.5	0.1-5.7	3.5-5.5	0
	20-25	2.3-6.5	0.1-5.7	3.5-5.5	0
	25-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1147465					
Alden, extremely stony	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-7	3.5-8.7	3.1-8.0	4.5-7.3	0
	7-14	4.6-9.0	0.1-12.0	5.1-7.3	0
	14-28	4.6-9.0	0.1-12.0	5.6-7.3	0
	28-43	4.6-9.0	0.1-12.0	5.6-7.3	0
	43-60	4.6-9.0	0.1-12.0	6.1-8.4	0
1147467					
Arnot, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown, very rocky	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
1147468					
Arnot	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0
1147469					
Arnot	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	3.5-6.0	0
	3-4	7.8-14.8	3.6-5.9	3.5-6.0	0
	4-12	4.6-6.5	0.1-5.7	3.5-6.0	0
	12-17	4.6-6.5	0.1-5.7	3.5-6.0	0
	17-80	---	---	---	0
Lordstown	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	4.5-6.0	0
	2-3	2.3-4.4	1.1-1.8	4.5-6.0	0
	3-5	4.6-6.5	0.1-5.7	4.5-6.0	0
	5-17	4.6-6.5	0.1-5.7	4.5-6.0	0
	17-22	4.6-6.5	0.1-5.7	4.5-6.0	0
	22-36	2.3-6.5	0.1-5.7	5.1-6.0	0
	36-80	---	---	---	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1147470					
Atherton, very poorly drained------	0-2	75.0-200.0	31.5-36.9	4.5-6.0	0
	2-4	75.0-200.0	31.5-36.9	4.5-6.0	0
	4-8	3.5-8.7	3.1-5.4	5.1-7.3	0
	8-10	3.5-8.7	2.4-5.4	5.6-7.8	0
	10-18	4.5-8.0	2.2-3.1	5.6-7.8	0
	18-29	4.5-8.0	2.2-3.1	5.6-7.8	0
	29-32	4.5-8.0	2.2-3.1	5.6-7.8	0
	32-41	4.5-8.0	2.2-3.1	5.6-7.8	0
	41-45	2.3-4.4	0.6-1.8	5.6-7.8	0
	45-50	2.3-4.4	0.6-1.8	5.6-7.8	0
	50-60	2.3-4.4	0.6-1.8	5.6-7.8	0
	60-70	2.3-4.4	0.6-1.8	5.6-7.8	0
Atherton, poorly drained----------	0-6	11.4-13.4	9.3-11.0	5.1-7.3	0
	6-12	4.9-9.0	0.4-11.4	5.6-7.8	0
	12-30	4.9-9.0	0.4-11.4	5.6-7.8	0
	30-40	5.3-6.7	2.3-10.2	5.6-7.8	0
	40-60	5.3-6.7	2.3-10.2	5.6-7.8	0
1147471					
Catden----------	0-2	102.1-146.7	---	4.5-7.3	0
	2-13	102.1-146.7	---	4.5-7.3	0
	13-20	102.1-146.7	---	4.5-7.3	0
	20-32	102.1-146.7	---	4.5-7.3	0
	32-60	102.1-146.7	---	4.5-7.3	0
1147474					
Chippewa, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-4	10.9-15.1	4.4-11.1	4.5-6.5	0
	4-8	6.0-9.4	0.4-9.8	4.5-6.5	0
	8-13	4.6-15.4	0.9-12.0	4.5-6.5	0
	13-21	1.2-8.8	0.1-10.5	5.1-7.3	0
	21-29	1.2-8.8	0.1-10.5	5.1-7.3	0
	29-34	1.2-8.8	0.1-10.5	5.6-8.4	0
	34-60	1.2-8.8	0.1-10.5	5.6-8.4	0
1147475					
Colonie----------	0-2	3.5-7.7	0.0-3.3	5.1-6.5	0
	2-11	3.5-7.7	0.0-3.3	5.1-6.5	0
	11-24	0.6-3.8	0.0-8.7	5.1-6.5	0
	24-40	0.6-3.8	0.0-8.7	5.1-7.3	0
	40-62	0.6-3.8	0.0-8.7	5.1-7.3	0
1147478					
Delaware, rarely flooded----------	0-1	85.0-94.4	31.5-36.9	5.1-6.5	0
	1-4	3.4-12.6	0.3-9.3	5.1-6.5	0
	4-11	3.4-12.6	0.3-9.3	5.1-6.5	0
	11-20	2.2-7.0	0.3-4.1	5.1-6.5	0
	20-33	2.2-7.0	0.3-4.1	5.1-6.5	0
	33-41	2.2-7.0	0.3-4.1	5.1-6.5	0
	41-56	1.3-3.7	1.0-4.2	5.1-6.5	0
	56-60	1.3-3.7	1.0-4.2	5.1-6.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1147482					
Fredon, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-8	3.5-8.7	3.1-8.0	5.1-7.3	0
	8-14	2.3-6.5	0.1-5.7	5.1-7.3	0
	14-18	2.3-6.5	0.1-5.7	5.1-7.3	0
	18-23	2.3-6.5	0.1-5.7	5.1-7.3	0
	23-31	0.6-3.6	0.0-3.2	5.6-8.4	0
	31-36	0.6-3.6	0.0-3.2	5.6-8.4	0
	36-45	0.6-3.6	0.0-3.2	5.6-8.4	0
	45-55	0.6-3.6	0.0-3.2	5.6-8.4	0
	55-60	0.6-3.6	0.0-3.2	5.6-8.4	0
Halsey, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-5	3.5-8.7	3.1-8.0	5.1-7.3	0
	5-11	3.5-8.7	3.1-8.0	5.1-7.3	0
	11-20	2.3-6.5	0.1-5.7	5.1-7.3	0
	20-25	0.6-3.6	0.0-3.2	5.6-8.4	0
	25-35	0.6-3.6	0.0-3.2	5.6-8.4	0
	35-49	0.6-3.6	0.0-3.2	5.6-8.4	0
	49-56	0.6-3.6	0.0-3.2	5.6-8.4	0
	56-60	0.6-3.6	0.0-3.2	5.6-8.4	0
1147485					
Hazen, very stony----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-10	5.9-9.0	3.1-8.4	5.6-6.5	0
	10-18	5.4-7.4	2.3-3.9	5.6-6.5	0
	18-29	0.6-3.6	0.0-3.2	6.1-7.8	0
	29-41	0.6-3.6	0.0-3.2	6.1-7.8	0
	41-60	0.6-3.6	0.0-3.2	6.1-7.8	0
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0
1147490					
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0
Hazen, very stony----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-10	5.9-9.0	3.1-8.4	5.6-6.5	0
	10-18	5.4-7.4	2.3-3.9	5.6-6.5	0
	18-29	0.6-3.6	0.0-3.2	6.1-7.8	0
	29-41	0.6-3.6	0.0-3.2	6.1-7.8	0
	41-60	0.6-3.6	0.0-3.2	6.1-7.8	0
1147491					
Hoosic, very stony---	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-9	5.9-9.0	3.1-8.4	4.5-5.5	0
	9-21	5.4-7.4	2.3-3.9	4.5-5.5	0
	21-27	0.6-3.6	0.0-3.2	4.5-6.0	0
	27-37	0.6-3.6	0.0-3.2	4.5-6.0	0
	37-49	0.6-3.6	0.0-3.2	4.5-6.0	0
	49-60	0.6-3.6	0.0-3.2	4.5-6.0	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1147491					
Otisville, very stony	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.7-9.1	2.7-9.2	3.5-6.5	0
	2-7	0.6-3.8	0.0-3.2	3.5-6.5	0
	7-11	0.6-3.6	0.0-3.2	3.5-6.5	0
	11-19	0.6-3.6	0.0-3.2	3.5-6.5	0
	19-31	0.6-3.6	0.0-3.2	4.5-6.0	0
	31-43	0.6-3.6	0.0-3.2	4.5-6.0	0
	43-60	0.6-3.6	0.0-3.2	4.5-6.0	0
1147492					
Lackawanna, extremely stony-----	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-7	2.3-4.4	1.1-1.8	3.5-5.5	0
	7-8	7.8-14.8	3.6-20.0	3.5-5.5	0
	8-16	4.6-6.5	0.1-5.7	3.5-5.5	0
	16-24	4.6-6.5	0.1-5.7	3.5-5.5	0
	24-29	1.2-4.3	0.0-2.3	3.5-5.5	0
	29-60	1.2-4.3	0.0-2.3	3.5-5.5	0
1147500					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-5	2.3-4.4	1.1-1.8	3.5-5.5	0
	5-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-30	1.2-4.3	0.0-2.3	3.5-5.5	0
	30-60	1.2-4.3	0.0-2.3	3.5-5.5	0
1147501					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
1147502					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1147502					
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
1147527					
Udorthents----------	0-12	5.9-20.0	3.1-8.4	5.0-6.0	0
	12-72	0.6-3.6	0.0-3.2	5.1-5.5	0
1147532					
Udorthents----------	0-12	5.9-20.0	3.1-8.4	5.0-6.0	0
	12-72	0.6-3.6	0.0-3.2	5.1-5.5	0
1147533					
Wurtsboro, extremely stony----------	0-2	85.0-94.4	31.5-36.9	4.5-6.0	0
	2-3	5.9-13.4	3.1-11.1	3.5-5.5	0
	3-4	2.3-4.4	1.1-1.8	3.5-5.5	0
	4-6	7.8-14.8	3.6-5.9	3.5-5.5	0
	6-18	2.3-6.5	0.1-5.7	3.5-5.5	0
	18-24	2.3-6.5	0.1-5.7	3.5-5.5	0
	24-33	1.2-4.3	0.0-2.3	3.5-5.5	0
	33-60	1.2-4.3	0.0-2.3	3.5-5.5	0
Swartswood, extremely stony-----	0-1	85.0-94.4	31.5-36.9	4.5-6.0	0
	1-2	5.9-13.4	3.1-11.1	3.5-5.5	0
	2-3	2.3-5.0	1.1-1.8	3.5-5.5	0
	3-4	7.8-14.8	3.6-5.9	3.5-5.5	0
	4-21	2.3-6.5	0.1-5.7	3.5-5.5	0
	21-32	1.2-4.3	0.0-2.3	3.5-5.5	0
	32-60	1.2-4.3	0.0-2.3	3.5-5.5	0
1948749					
Arnot----------	0-8	12.0-22.0	3.9-8.1	4.2-6.6	0
	8-16	3.0-13.0	1.6-5.1	3.6-6.0	0
	16-26	---	---	---	0
1948750					
Arnot----------	0-8	12.0-22.0	3.9-8.1	4.2-6.6	0
	8-16	3.0-13.0	1.6-5.1	3.6-6.0	0
	16-26	---	---	---	0
1948751					
Arnot----------	0-8	12.0-22.0	3.9-8.1	4.2-6.6	0
	8-16	3.0-13.0	1.6-5.1	3.6-6.0	0
	16-26	---	---	---	0
1948774					
Conotton----------	0-9	8.0-16.0	---	4.5-6.5	0
	9-45	3.0-12.0	---	4.5-7.3	0
	45-80	2.0-10.0	---	5.6-7.8	0-10
1948775					
Conotton----------	0-9	8.0-16.0	---	4.5-6.5	0
	9-45	3.0-12.0	---	4.5-7.3	0
	45-80	2.0-10.0	---	5.6-7.8	0-10

Table 18.--Chemical Soil Properties--Continued

Map unit symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate
	In	*meq/100 g*	*meq/100 g*	*pH*	*Pct*
1948776					
Conotton	0-9	8.0-16.0	---	4.5-6.5	0
	9-45	3.0-12.0	---	4.5-7.3	0
	45-80	2.0-10.0	---	5.6-7.8	0-10
1948777					
Conotton	0-9	8.0-16.0	---	4.5-6.5	0
	9-45	3.0-12.0	---	4.5-7.3	0
	45-80	2.0-10.0	---	5.6-7.8	0-10
1948797					
Manlius	0-8	12.0-25.0	2.0-7.4	4.2-6.6	0
	8-24	3.0-13.0	1.2-4.4	3.6-6.0	0
	24-32	2.0-9.0	---	4.5-6.5	0
	32-40	---	---	---	0
1948802					
Manlius	0-8	12.0-25.0	2.0-7.4	4.2-6.6	0
	8-24	3.0-13.0	1.2-4.4	3.6-6.0	0
	24-32	2.0-9.0	---	4.5-6.5	0
	32-40	---	---	---	0
1948818					
Manlius	0-8	12.0-25.0	2.0-7.4	4.2-6.6	0
	8-24	3.0-13.0	1.2-4.4	3.6-6.0	0
	24-32	2.0-9.0	---	4.5-6.5	0
	32-40	---	---	---	0
1948832					
Penargyl	0-12	10.0-20.0	---	4.5-7.3	0
	12-74	10.0-15.0	---	4.5-6.5	0
	74-80	10.0-15.0	3.6-6.8	4.5-6.0	0
	80-90	---	---	---	0
1948846					
Phelps	0-10	5.5-15.4	---	5.6-7.3	0
	10-22	9.1-18.4	---	5.6-7.3	0
	22-30	9.1-18.4	---	5.6-7.3	0
	30-79	0.5-2.7	---	7.4-8.4	0
1948855					
Udorthents, loamy	0-5	3.1-26.3	---	4.5-7.3	0
	5-40	3.1-26.3	---	4.5-7.3	0
	40-70	3.1-20.5	---	4.5-8.4	0
1948989					
Delaware	0-10	5.0-10.0	---	5.1-7.3	0
	10-40	3.0-6.0	---	5.1-7.3	0
	40-87	3.0-6.0	---	5.6-7.3	0

Table 19.--Water Features

[See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated. Depth to water table is based on a representative value]

National symbol and soil name	Hydrologic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
290836									
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Otisville, very stony	A								
		Jan-Dec	---	---	---	---	None	---	None
296265									
Alden	D								
		Jan-Jun	0.0	>6.0	0.0-1.0	Very long	Frequent	---	None
		Nov-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	---	None
296269									
Fluvents, (alluvial land)	C/D								
		Jan-Apr	1.5	>6.0	---	---	None	Very brief	Frequent
		May-Jun	---	---	---	---	None	Very brief	Frequent
		September	---	---	---	---	None	Very brief	Frequent
		Oct-Dec	1.5	>6.0	---	---	None	Very brief	Frequent
296271									
Alvira	C								
		Jan-May	1.0	1.8	---	---	None	---	None
		Oct-Dec	1.0	1.8	---	---	None	---	None
Watson	C								
		Jan-Mar	1.5	2.3	---	---	None	---	None
		Nov-Dec	1.5	2.3	---	---	None	---	None
296272									
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None
296273									
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None
296274									
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None
296275									
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296276									
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None
296277									
Benson	D								
		Jan-Dec	---	---	---	---	None	---	None
296278									
Benson	D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
296279									
Benson	D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
296280									
Braceville	C								
		Jan-Mar	2.3	2.5	---	---	None	---	None
		Nov-Dec	2.3	2.5	---	---	None	---	None
296281									
Braceville	C								
		Jan-Mar	2.3	2.5	---	---	None	---	None
		Nov-Dec	2.3	2.5	---	---	None	---	None
296283									
Buchanan	C								
		Jan-Mar	2.3	1.6	---	---	None	---	None
		Nov-Dec	2.3	1.6	---	---	None	---	None
296288									
Chippewa	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None
Norwich	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296289									
Chippewa	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None
Norwich	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None
296295									
Udorthents, cut and fill	B/D								
		Jan-May	3.5	>6.0	---	---	None	---	None
		Nov-Dec	3.5	>6.0	---	---	None	---	None
296297									
Dekalb	C								
		Jan-Dec	---	---	---	---	None	---	None
296298									
Dekalb	C								
		Jan-Dec	---	---	---	---	None	---	None
296303									
Hazleton	B								
		Jan-Dec	---	---	---	---	None	---	None
296304									
Holly	D								
		Jan-May	0.3	>6.0	---	---	None	Brief	Frequent
		November	---	---	---	---	None	Brief	Frequent
		December	0.3	>6.0	---	---	None	Brief	Frequent
296311									
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
Bath	C								
		Mar-Apr	2.1	2.2	---	---	None	---	None
296312									
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296313									
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296315									
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296316									
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296317									
Laidig	C								
		Jan-Mar	2.5	3.0	---	---	None	---	None
296326									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
296327									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
296328									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
296329									
Mardin	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
296330									
Mardin	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296331									
Mardin	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
296332									
Mardin	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
296335									
Meckesville	C								
		Jan-Apr	2.8	>6.0	---	---	None	---	None
		Nov-Dec	2.8	>6.0	---	---	None	---	None
296337									
Meckesville	C								
		Jan-Apr	2.8	>6.0	---	---	None	---	None
		Nov-Dec	2.8	>6.0	---	---	None	---	None
296338									
Morris	C								
		Jan-Feb	0.9	1.4	---	---	None	---	None
		Mar-Apr	0.5	1.4	---	---	None	---	None
		May	0.9	1.4	---	---	None	---	None
		December	0.9	1.4	---	---	None	---	None
296339									
Morris	C								
		Jan-Feb	0.9	1.4	---	---	None	---	None
		Mar-Apr	0.5	1.4	---	---	None	---	None
		May	0.9	1.4	---	---	None	---	None
		December	0.9	1.4	---	---	None	---	None
296340									
Morris	C								
		Jan-Feb	0.9	1.4	---	---	None	---	None
		Mar-Apr	0.5	1.4	---	---	None	---	None
		May	0.9	1.4	---	---	None	---	None
		December	0.9	1.4	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296341									
Freetown, mucky peat	D								
		Jan-May	0.0	>6.0	0.0-0.5	Long	Frequent	---	None
		Jun-Oct	0.5	>6.0	0.0-0.5	Long	Occasional	---	None
		Nov-Dec	0.0	>6.0	0.0-0.5	Long	Frequent	---	None
296342									
Paupack, mucky peat (shallow)	D								
		Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	---	None
296343									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296344									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296346									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296347									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna	C								
		Mar-Apr	2.1	2.3	---	---	None	---	None
296348									
Philo	B								
		Jan-Apr	2.3	>6.0	---	---	None	Very brief	Frequent
		May	---	---	---	---	None	Very brief	Frequent
		November	---	---	---	---	None	Very brief	Frequent
		December	2.3	>6.0	---	---	None	Very brief	Frequent

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296349									
Pope	B								
		January	---	---	---	---	None	Very brief	Occasional
		Feb-Mar	5.0	>6.0	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		Nov-Dec	---	---	---	---	None	Very brief	Occasional
296350									
Pope	B								
		January	---	---	---	---	None	Very brief	Rare
		Feb-Mar	5.0	>6.0	---	---	None	Very brief	Rare
		Apr-May	---	---	---	---	None	Very brief	Rare
		Nov-Dec	---	---	---	---	None	Very brief	Rare
296351									
Rexford, somewhat poorly drained	C								
		Jan-Feb	1.0	1.5	---	---	None	---	None
		Mar-Apr	0.5	1.5	---	---	None	---	None
		May	0.8	1.5	---	---	None	---	None
		December	1.0	1.5	---	---	None	---	None
Rexford, poorly drained	C								
		Jan-Feb	0.0	0.8	---	---	None	---	None
		Mar-Apr	0.0	0.3	---	---	None	---	None
		May	0.0	0.7	---	---	None	---	None
		December	0.0	0.8	---	---	None	---	None
296355									
Sheffield	D								
		Jan-May	0.0	>6.0	0.0-1.0	Very long	Occasional	---	None
		December	0.0	>6.0	0.0-1.0	Very long	Occasional	---	None
296363									
Dystrochrepts, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
296369									
Wayland	C/D								
		Jan-Jun	0.0	>6.0	0.0-0.5	Very long	Frequent	Long	Frequent
		Nov-Dec	0.0	>6.0	0.0-0.5	Very long	Frequent	Long	Frequent
296376									
Wellsboro	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
296379									
Wellsboro	C								
		Jan-Feb	1.4	1.7	---	---	None	---	None
		Mar-Apr	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
296385									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
296386									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
296387									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
296388									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
296389									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
296390									
Water.									
297185									
Edgemere	D								
		Jan-May	0.0	2.0	0.0-0.5	Very long	Frequent	---	None
		Nov-Dec	0.0	2.0	0.0-0.5	Very long	Frequent	---	None
Shohola	C								
		Jan-May	1.0	2.0	---	---	None	---	None
		Nov-Dec	1.0	2.0	---	---	None	---	None
297186									
Edgemere	D								
		Jan-May	0.0	2.0	0.0-0.5	Very long	Occasional	---	None
		Nov-Dec	0.0	2.0	0.0-0.5	Very long	Occasional	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
297188									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
Arnot	C/D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	---								
		Jan-Dec	---	---	---	---	None	---	None
297189									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
Arnot	C/D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	---								
		Jan-Dec	---	---	---	---	None	---	None
297190									
Braceville	C								
		Jan-Apr	1.7	2.2	---	---	None	---	None
		Nov-Dec	1.7	2.2	---	---	None	---	None
297191									
Wyalusing	D								
		Jan-May	0.3	>6.0	---	---	None	Very brief	Frequent
		June	0.3	>6.0	---	---	None	---	None
		Sep-Oct	0.3	>6.0	---	---	None	---	None
		Nov-Dec	0.3	>6.0	---	---	None	Very brief	Frequent
297192									
Pope	B								
		Jan-May	---	---	---	---	None	Brief	Frequent
		Jun-Nov	---	---	---	---	None	Brief	Occasional
		December	---	---	---	---	None	Brief	Frequent
297193									
Paupack	D								
		Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	---	None
297196									
Freetown	D								
		Jan-May	0.0	>6.0	0.0-0.5	Long	Frequent	---	None
		Jun-Oct	0.5	>6.0	0.0-0.5	Long	Occasional	---	None
		Nov-Dec	0.0	>6.0	0.0-0.5	Long	Frequent	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
297197									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
297198									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
297201									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
297203									
Delaware	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
297204									
Delaware	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
297205									
Delaware	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
297209									
Philo	B								
		Jan-Apr	2.3	>6.0	---	---	None	Brief	Frequent
		May	---	---	---	---	None	Brief	Frequent
		Jun-Nov	---	---	---	---	None	Brief	Occasional
		December	2.3	>6.0	---	---	None	Brief	Frequent
297210									
Barbour	B								
		Jan-Apr	4.5	>6.0	---	---	None	Brief	Occasional
		May	---	---	---	---	None	Brief	Occasional
		Jun-Nov	---	---	---	---	None	Brief	Rare
		December	---	---	---	---	None	Brief	Occasional
297216									
Wurtsboro	C								
		Jan-Apr	1.6	1.8	---	---	None	---	None
		Nov-Dec	1.6	1.8	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
297217									
Wurtsboro	C								
		Jan-Apr	1.6	1.8	---	---	None	---	None
		Nov-Dec	1.6	1.8	---	---	None	---	None
297227									
Arnot	C/D								
		Jan-Dec	---	---	---	---	None	---	None
297228									
Arnot	C/D								
		Jan-Dec	---	---	---	---	None	---	None
297229									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
297230									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
297231									
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
297236									
Suncook	A								
		Jan-May	---	---	---	---	None	Brief	Occasional
		Jun-Nov	---	---	---	---	None	Brief	Rare
		December	---	---	---	---	None	Brief	Occasional
297237									
Mardin	C								
		Jan-Mar	1.4	1.7	---	---	None	---	None
		April	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
297238									
Mardin	C								
		Jan-Mar	1.4	1.7	---	---	None	---	None
		April	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
297239									
Mardin	C								
		Jan-Mar	1.4	1.7	---	---	None	---	None
		April	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
297240									
Mardin	C								
		Jan-Mar	1.4	1.7	---	---	None	---	None
		April	1.2	1.7	---	---	None	---	None
		May	1.4	1.7	---	---	None	---	None
		December	1.4	1.7	---	---	None	---	None
297241									
Unadilla	B								
		Jan-Dec	---	---	---	---	None	---	None
297242									
Shohola	C								
		Jan-May	1.0	2.0	---	---	None	---	None
		Nov-Dec	1.0	2.0	---	---	None	---	None
Edgemere	D								
		Jan-May	0.0	2.0	0.0-0.5	Very long	Occasional	---	None
		Nov-Dec	0.0	2.0	0.0-0.5	Very long	Occasional	---	None
297243									
Shohola	C								
		Jan-May	1.0	2.0	---	---	None	---	None
		Nov-Dec	1.0	2.0	---	---	None	---	None
Edgemere	D								
		Jan-May	0.0	2.0	0.0-0.5	Very long	Occasional	---	None
		Nov-Dec	0.0	2.0	0.0-0.5	Very long	Occasional	---	None
297244									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Swartswood	C								
		Mar-Apr	2.5	2.7	---	---	None	---	None
297247									
Chenango	A								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
297248									
Chenango	A								
		Jan-Dec	---	---	---	---	None	---	None
297249									
Chenango	A								
		Jan-Dec	---	---	---	---	None	---	None
297253									
Craigsville	B								
		Jan-Mar	6.0	>6.0	---	---	None	Very brief	Occasional
		Apr-May	---	---	---	---	None	Very brief	Occasional
		Jun-Nov	---	---	---	---	None	Very brief	Rare
		December	6.0	>6.0	---	---	None	Very brief	Occasional
Wyoming	A								
		Jan-Dec	---	---	---	---	None	---	None
297254									
Pits, shale	D								
		Jan-Dec	---	---	---	---	None	---	None
Pits, gravel	A								
		Jan-Dec	---	---	---	---	None	---	None
298049									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
298050									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
298051									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
298075									
Colonie	A								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
298188									
Lackawanna, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
298189									
Lackawanna, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
298221									
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
298222									
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
298223									
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
298255									
Delaware, rarely flooded----------	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
298256									
Delaware, rarely flooded----------	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
298257									
Wallpack----------	B								
		Jan-Dec	---	---	---	---	None	---	None
298258									
Wallpack----------	B								
		Jan-Dec	---	---	---	---	None	---	None
298259									
Wallpack, extremely stony----------	B								
		Jan-Dec	---	---	---	---	None	---	None
298260									
Wallpack, extremely stony----------	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
298261									
Wallpack	B								
		Jan-Dec	---	---	---	---	None	---	None
298262									
Wallpack, extremely stony	B								
		Jan-Dec	---	---	---	---	None	---	None
298265									
Venango, extremely stony	D								
		Jan-May	0.5	1.3	---	---	None	---	None
		Nov-Dec	0.5	1.3	---	---	None	---	None
298266									
Venango, extremely stony	D								
		Jan-May	0.5	1.3	---	---	None	---	None
		Nov-Dec	0.5	1.3	---	---	None	---	None
298409									
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
298411									
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
298413									
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
		---	---	---	---	---	---	---	---
318498									
Hazen, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
318533									
Hazen, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
319783									
Catden	B/D								
		Jan-Jun	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
		Sep-Dec	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
319784									
Fredon, very stony	D								
		Jan-Jun	1.2	5.0	---	---	None	---	None
		Oct-Dec	1.2	5.0	---	---	None	---	None
Halsey, very stony	B/D								
		Jan-Jun	0.0	5.0	0.0-0.5	Very long	Frequent	---	None
		Sep-Dec	0.0	5.0	0.0-0.5	Very long	Frequent	---	None
543222									
Andover, extremely stony	D								
		Jan-Jun	0.3	1.9	---	---	None	---	None
		Oct-Dec	0.3	1.9	---	---	None	---	None
Buchanan, extremely stony	C								
		Jan-Mar	1.7	2.3	---	---	None	---	None
		Nov-Dec	1.7	2.3	---	---	None	---	None
543243									
Berks	C								
		Jan-Dec	---	---	---	---	None	---	None
Weikert	C								
		Jan-Dec	---	---	---	---	None	---	None
543246									
Buchanan	C								
		Jan-Mar	1.7	2.3	---	---	None	---	None
		Nov-Dec	1.7	2.3	---	---	None	---	None
543247									
Buchanan, extremely stony	C								
		Jan-Mar	1.7	2.3	---	---	None	---	None
		Nov-Dec	1.7	2.3	---	---	None	---	None
543257									
Chippewa	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
543258									
Chippewa	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None
543259									
Chippewa, extremely stony	D								
		Jan-Feb	0.3	1.3	---	---	None	---	None
		Mar-Apr	0.0	1.3	---	---	None	---	None
		May	0.3	1.3	---	---	None	---	None
		Nov-Dec	0.3	1.3	---	---	None	---	None
543271									
Delaware	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
543276									
Fluvaquents	D								
		Jan-Mar	0.3	>6.0	---	---	None	Brief	Frequent
		Nov-Dec	0.3	>6.0	---	---	None	Brief	Frequent
543292									
Hazleton, extremely stony	B								
		Jan-Dec	---	---	---	---	None	---	None
543293									
Hazleton, extremely stony	B								
		Jan-Dec	---	---	---	---	None	---	None
543299									
Laidig, extremely stony	C								
		Jan-Mar	3.2	>6.0	---	---	None	---	None
543300									
Laidig, extremely stony	C								
		Jan-Mar	3.2	>6.0	---	---	None	---	None
543304									
Laidig	C								
		Jan-Mar	3.2	>6.0	---	---	None	---	None
Rubble land	A								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
543318									
Rubble land	A								
		Jan-Dec	---	---	---	---	None	---	None
543327									
Swartswood	C								
		Jan-Mar	2.8	3.5	---	---	None	---	None
		Nov-Dec	2.8	3.5	---	---	None	---	None
543328									
Swartswood	C								
		Jan-Mar	2.8	3.5	---	---	None	---	None
		Nov-Dec	2.8	3.5	---	---	None	---	None
543330									
Swartswood, extremely stony	C								
		Jan-Mar	2.8	3.5	---	---	None	---	None
		Nov-Dec	2.8	3.5	---	---	None	---	None
Wurtsboro, extremely stony	C								
		Jan-Mar	2.0	2.3	---	---	None	---	None
		Nov-Dec	2.0	2.3	---	---	None	---	None
543331									
Swartswood, extremely stony	C								
		Jan-Mar	2.8	3.5	---	---	None	---	None
		Nov-Dec	2.8	3.5	---	---	None	---	None
Wurtsboro, extremely stony	C								
		Jan-Mar	2.0	2.3	---	---	None	---	None
		Nov-Dec	2.0	2.3	---	---	None	---	None
543359									
Volusia	C								
		Jan-May	1.0	3.5	---	---	None	---	None
		Nov-Dec	1.0	3.5	---	---	None	---	None
543360									
Volusia, extremely stony	C								
		Jan-May	1.0	3.5	---	---	None	---	None
		Nov-Dec	1.0	3.5	---	---	None	---	None
543374									
Wurtsboro	C								
		Jan-Mar	2.0	2.3	---	---	None	---	None
		Nov-Dec	2.0	2.3	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
543375									
Wurtsboro----------	C								
		Jan-Mar	2.0	2.3	---	---	None	---	None
		Nov-Dec	2.0	2.3	---	---	None	---	None
612280									
Scio----------	C								
		March	1.8	>6.0	---	---	None	---	None
		April	1.8	>6.0	---	---	None	---	None
		May	1.8	>6.0	---	---	None	---	None
612666									
Colonie----------	A								
		Jan-Dec	---	---	---	---	None	---	None
612668									
Hoosic, very stony----------	B								
		Jan-Dec	---	---	---	---	None	---	None
Hazen, very stony----------	B								
		Jan-Dec	---	---	---	---	None	---	None
612724									
Lordstown, very rocky----------	C								
		Jan-Dec	---	---	---	---	None	---	None
Wallpack, very rocky----------	B								
		Jan-Dec	---	---	---	---	None	---	None
612732									
Atherton, very poorly drained--------	B/D								
		Jan-Jun	0.0	5.8	0.0-0.5	Long	Frequent	---	None
		Jul-Oct	---	---	0.0-0.5	Long	Frequent	---	None
		Nov-Dec	0.0	5.8	0.0-0.5	Long	Frequent	---	None
Atherton, poorly drained----------	B/D								
		Jan-Jun	0.2	5.0	---	---	None	---	None
		Nov-Dec	0.2	5.0	---	---	None	---	None
612738									
Fluvaquents, occasionally flooded----	B/D								
		Jan-May	0.5	>6.0	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		Sep-Oct	0.5	>6.0	---	---	None	---	---
		Nov-Dec	0.5	>6.0	---	---	None	Brief	Occasional
612753									
Wallpack, aeolian mantle, very stony-	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
612756									
Wallpack, aeolian mantle, very stony-	B								
		Jan-Dec	---	---	---	---	None	---	None
612757									
Wallpack, aeolian mantle, very stony-	B								
		Jan-Dec	---	---	---	---	None	---	None
612767									
Wellsboro, extremely stony----------	C								
		Jan-Mar	2.0	2.4	---	---	None	---	None
		Nov-Dec	2.0	2.4	---	---	None	---	None
612768									
Wellsboro, extremely stony----------	C								
		Jan-Mar	2.0	2.4	---	---	None	---	None
		Nov-Dec	2.0	2.4	---	---	None	---	None
613393									
Alden, extremely stony----------	D								
		Jan-Jun	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
		Nov-Dec	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
613447									
Unadilla----------	B								
		Jan-Dec	---	---	---	---	None	---	None
613448									
Unadilla----------	B								
		Jan-Dec	---	---	---	---	None	---	None
614075									
Wurtsboro, extremely stony----------	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
620179									
Arnot, very rocky----------	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown, very rocky----------	C								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
620180									
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
620181									
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
623089									
Chippewa, extremely stony	D								
		Jan-Jun	0.0	1.1	0.0-0.5	Long	Frequent	---	None
		Nov-Dec	0.0	1.1	0.0-0.5	Long	Frequent	---	None
623109									
Farmington	D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
624811									
Galway, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
624813									
Lackawanna, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
624816									
Lordstown, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Wallpack, very rocky	B								
		Jan-Dec	---	---	---	---	None	---	None
624822									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Wallpack	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
624823									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Wallpack	B								
		Jan-Dec	---	---	---	---	None	---	None
624824									
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Wallpack	C								
		Jan-Dec	---	---	---	---	None	---	None
624826									
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
624827									
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
624828									
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
624829									
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
624832									
Nassau	D								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
624841									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
624841									
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
624845									
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
Farmington	D								
		Jan-Dec	---	---	---	---	None	---	None
Galway	C								
		Jan-Dec	---	---	---	---	None	---	None
624846									
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Rubble land	D								
		Jan-Dec	---	---	---	---	None	---	None
626816									
Udifluvents, occasionally flooded	A								
		Jan-Jun	3.3	>6.0	---	---	None	Very brief	Occasional
		Nov-Dec	3.3	>6.0	---	---	None	Very brief	Occasional
635458									
Oquaga, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
635459									
Oquaga, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
740953									
Delaware, rarely flooded	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare
740968									
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
740969									
Nassau, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Manlius, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
740971									
Oquaga, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
740972									
Oquaga, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
Lackawanna, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None
740974									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
740975									
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Rubble land	D								
		Jan-Dec	---	---	---	---	None	---	None
740987									
Scio	C								
		Mar-May	1.8	>6.0	---	---	None	---	None
740988									
Udifluvents, occasionally flooded	A								
		Jan-Jun	3.3	>6.0	---	---	None	Very brief	Occasional
		Nov-Dec	3.3	>6.0	---	---	None	Very brief	Occasional
740991									
Unadilla	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
740992									
Unadilla	B								
		Jan-Dec	---	---	---	---	None	---	None
740995									
Wellsboro, extremely stony	C								
		Jan-Mar	2.0	2.4	---	---	None	---	None
		Nov-Dec	2.0	2.4	---	---	None	---	None
740996									
Wellsboro, extremely stony	C								
		Jan-Mar	2.0	2.4	---	---	None	---	None
		Nov-Dec	2.0	2.4	---	---	None	---	None
741149									
Lackawanna, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
741150									
Lackawanna, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
801114									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
810906									
Oquaga	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
1147465									
Alden, extremely stony	D								
		Jan-Jun	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
		Nov-Dec	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
1147467									
Arnot, very rocky	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown, very rocky	C								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
1147468									
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
1147469									
Arnot	D								
		Jan-Dec	---	---	---	---	None	---	None
Lordstown	C								
		Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D								
		Jan-Dec	---	---	---	---	None	---	None
1147470									
Atherton, very poorly drained	B/D								
		Jan-Jun	0.0	5.8	0.0-0.5	Long	Frequent	---	None
		Jul-Oct	---	---	0.0-0.5	Long	Frequent	---	None
		Nov-Dec	0.0	5.8	0.0-0.5	Long	Frequent	---	None
Atherton, poorly drained	B/D								
		Jan-Jun	0.2	5.0	---	---	None	---	None
		Nov-Dec	0.2	5.0	---	---	None	---	None
1147471									
Catden	B/D								
		Jan-Jun	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
		Sep-Dec	0.0	5.0	0.0-1.0	Very long	Frequent	---	None
1147474									
Chippewa, extremely stony	D								
		Jan-Jun	0.0	1.1	0.0-0.5	Long	Frequent	---	None
		Nov-Dec	0.0	1.1	0.0-0.5	Long	Frequent	---	None
1147475									
Colonie	A								
		Jan-Dec	---	---	---	---	None	---	None
1147478									
Delaware, rarely flooded	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
1147482									
Fredon, very stony	D								
		Jan-Jun	1.2	5.0	---	---	None	---	None
		Oct-Dec	1.2	5.0	---	---	None	---	None
Halsey, very stony	B/D								
		Jan-Jun	0.0	5.0	0.0-0.5	Very long	Frequent	---	None
		Sep-Dec	0.0	5.0	0.0-0.5	Very long	Frequent	---	None
1147485									
Hazen, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
1147490									
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Hazen, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
1147491									
Hoosic, very stony	B								
		Jan-Dec	---	---	---	---	None	---	None
Otisville, very stony	A								
		Jan-Dec	---	---	---	---	None	---	None
1147492									
Lackawanna, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
1147500									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
1147501									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
Swartswood, extremely stony	C								
		Jan-Dec	---	---	---	---	None	---	None
1147502									
Wurtsboro, extremely stony	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
1147502									
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
1147527									
Udorthents----------	D								
		Jan-Dec	---	---	---	---	None	---	None
Urban land----------	D								
		Jan-Dec	---	---	---	---	None	---	None
1147532									
Udorthents----------	D								
		Jan-Dec	---	---	---	---	None	---	None
1147533									
Wurtsboro, extremely stony----------	C								
		Jan-Mar	1.5	2.0	---	---	None	---	None
		Nov-Dec	1.5	2.0	---	---	None	---	None
Swartswood, extremely stony----------	C								
		Jan-Dec	---	---	---	---	None	---	None
1948749									
Arnot----------	C/D								
		Jan-Dec	---	---	---	---	None	---	None
1948750									
Arnot----------	C/D								
		Jan-Dec	---	---	---	---	None	---	None
1948751									
Arnot----------	C/D								
		Jan-Dec	---	---	---	---	None	---	None
1948774									
Conotton----------	B								
		Jan-Dec	---	---	---	---	None	---	None
1948775									
Conotton----------	B								
		Jan-Dec	---	---	---	---	None	---	None
1948776									
Conotton----------	B								
		Jan-Dec	---	---	---	---	None	---	None

Table 19.--Water Features--Continued

National symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	*Ft*	*Ft*				
1948777									
Conotton	B								
		Jan-Dec	---	---	---	---	None	---	None
1948797									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
1948802									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
1948818									
Manlius	C								
		Jan-Dec	---	---	---	---	None	---	None
1948832									
Penargyl	B								
		Jan-Dec	---	---	---	---	None	---	None
1948846									
Phelps	B								
		Mar-May	1.8	>6.0	---	---	None	---	None
1948855									
Udorthents, loamy	A/D								
		Jan-Jun	1.7	>6.0	---	---	None	---	None
		Nov-Dec	1.7	>6.0	---	---	None	---	None
1948989									
Urban land	---								
		Jan-Dec	---	---	---	---	None	---	None
Delaware	B								
		Jan-Dec	---	---	---	---	None	Brief	Rare

Table 20.--Soil Features

[See text for definitions of terms used in this table. Absence of an entry indicates that data were not estimated]

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
290836							
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Otisville, very stony	No restriction	---	---	---	Low	Low	High
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
296265							
Alden	No restriction	---	---	---	High	High	Low
296269							
Fluvents, (alluvial land)	No restriction	---	---	---	Moderate	High	High
Holly	No restriction	---	---	---	High	High	Moderate
296271							
Alvira	Fragipan	15-28	12-65	Noncemented	High	High	High
Watson	Fragipan	18-32	---	Noncemented	Moderate	Moderate	Moderate
Shelmadine	Fragipan	18-30	10-42	Noncemented	High	High	High
296272							
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
296273							
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
296274							
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296275							
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
296276							
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
296277							
Benson	Lithic bedrock	12-20	---	Very strongly cemented	Moderate	Low	Moderate
Rock outcrop	Lithic bedrock	0	---	Very strongly cemented	---	---	---
296278							
Benson	Lithic bedrock	12-20	---	Very strongly cemented	Moderate	Low	Moderate
Rock outcrop	Lithic bedrock	0	---	Very strongly cemented	---	---	---
296279							
Benson	Lithic bedrock	12-20	---	Very strongly cemented	Moderate	Low	Moderate
Rock outcrop	Lithic bedrock	0	---	Very strongly cemented	---	---	---
296280							
Braceville	Fragipan	18-30	---	Noncemented	Moderate	Moderate	Moderate
Rexford, poorly drained	No restriction	---	---	---	High	High	High
296281							
Braceville	Fragipan	18-30	---	Noncemented	Moderate	Moderate	Moderate
Rexford, poorly drained	Fragipan	15-24	13-35	Noncemented	High	High	High
296283							
Buchanan	Fragipan	20-36	6-60	Noncemented	Moderate	High	High
Shelmadine	Fragipan	18-30	10-42	Noncemented	High	High	High
296288							
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296289							
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296295							
Udorthents, cut and fill	No restriction	---	---	---	---	---	---
296297							
Dekalb	Lithic bedrock	20-40	---	Very strongly cemented	Low	Low	High
296298							
Dekalb	Lithic bedrock	20-40	---	Very strongly cemented	Low	Low	High
296303							
Hazleton	Lithic bedrock	40-96	---	Very strongly cemented	Moderate	Low	High
296304							
Holly	No restriction	---	---	---	High	High	Moderate
296311							
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
Bath	Fragipan	21-38	20-60	Noncemented	Moderate	Moderate	Moderate
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate
296312							
Lackawanna	Fragipan	17-36	---	Noncemented	Moderate	Low	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296313							
Lackawanna	Fragipan	17-36	---	Noncemented	Moderate	Low	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Lackawanna	No restriction	---	---	---	---	---	---
296315							
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate
296316							
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Wellsboro	Fragipan	14-26	14-65	Noncemented	Moderate	High	High
296317							
Laidig	Fragipan	30-50	10-50	Noncemented	Moderate	Moderate	High
296326							
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
296327							
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296328							
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
296329							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Volusia	Fragipan	11-22	28-69	Noncemented	High	High	Moderate
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
296330							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Volusia	Fragipan	11-22	28-69	Noncemented	High	High	Moderate
Bath	No restriction	---	---	---	Moderate	Moderate	Moderate
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296331							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Volusia	Fragipan	11-22	28-69	Noncemented	High	High	Moderate
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296332							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Volusia	Fragipan	11-22	28-69	Noncemented	High	High	Moderate
Chippewa	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296335							
Meckesville	Fragipan	25-48	10-55	Noncemented	Moderate	Moderate	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296337							
Meckesville	Fragipan	25-48	10-55	Noncemented	Moderate	Moderate	High
296338							
Morris	Fragipan	11-22	26-69	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296339							
Morris	Fragipan	11-22	26-69	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296340							
Morris	Fragipan	11-22	26-69	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
296341							
Freetown, mucky peat	No restriction	---	---	---	High	High	High
296342							
Paupack, mucky peat (shallow)	No restriction	---	---	---	High	Moderate	Low
296343							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
296344							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
296346							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate
296347							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Lackawanna	Fragipan	21-36	---	Noncemented	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296348							
Philo	Lithic bedrock	48-99	---	Very strongly cemented	Moderate	Low	High
Holly	No restriction	---	---	---	High	High	Moderate
296349							
Pope	No restriction	---	---	---	Moderate	Low	High
Holly	No restriction	---	---	---	High	High	Moderate
296350							
Pope	No restriction	---	---	---	Moderate	Low	High
Holly	No restriction	---	---	---	High	High	Moderate
296351							
Rexford, somewhat poorly drained	Fragipan	15-24	13-35	Noncemented	High	High	High
Rexford, poorly drained	Fragipan	15-24	13-35	Noncemented	High	High	High
296355							
Sheffield	Fragipan Paralithic bedrock	15-26 48-99	---	Noncemented Moderately cemented	High	High	High
296363							
Dystrochrepts, very stony	Lithic bedrock	40-40	---	Very strongly cemented	Moderate	Low	High
296369							
Wayland	No restriction	---	---	---	High	High	Low
296376							
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate
Morris	Fragipan	11-22	26-69	Noncemented	High	High	Moderate
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
296379							
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
296379							
Norwich	Fragipan	10-24	12-50	Noncemented	High	High	Moderate
Morris	Fragipan	11-22	26-69	Noncemented	High	High	Moderate
296385							
Wyoming	No restriction	---	---	---	Low	Low	High
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Unadilla	No restriction	---	---	---	High	Low	Moderate
296386							
Wyoming	No restriction	---	---	---	Low	Low	High
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Unadilla	No restriction	---	---	---	High	Low	Moderate
296387							
Wyoming	No restriction	---	---	---	Low	Low	High
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Unadilla	No restriction	---	---	---	High	Low	Moderate
296388							
Wyoming	No restriction	---	---	---	Low	Low	High
Unadilla	No restriction	---	---	---	High	Low	Moderate
296389							
Wyoming	No restriction	---	---	---	Low	Low	High
296390							
Water	No restriction	---	---	---	---	---	---
297185							
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	18-30	---	Noncemented	High	High	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Freetown	No restriction	---	---	---	High	High	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297186							
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Freetown	No restriction	---	---	---	High	High	High
Wyalusing	No restriction	---	---	---	High	High	Moderate
297188							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Rock outcrop	No restriction	---	---	---	---	---	---
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Rubble land	No restriction	---	---	---	---	---	---
297189							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Rock outcrop	No restriction	---	---	---	---	---	---
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Rubble land	No restriction	---	---	---	---	---	---
297190							
Braceville	Fragipan	15-30	---	Noncemented	Moderate	Moderate	Moderate
Wyoming	No restriction	---	---	---	Low	Low	High
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Rexford, poorly drained	Fragipan	15-24	13-35	Noncemented	High	High	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297191							
Wyalusing	No restriction	---	---	---	High	High	Moderate
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
Craigsville	No restriction	---	---	---	Moderate	Low	Moderate
Pope	No restriction	---	---	---	Moderate	Low	High
297192							
Pope	No restriction	---	---	---	Moderate	Low	High
Wyalusing	No restriction	---	---	---	High	High	Moderate
297193							
Paupack	No restriction	---	---	---	High	Moderate	Low
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Kimbles	No restriction	---	---	---	High	High	Moderate
297196							
Freetown	No restriction	---	---	---	High	High	High
Gleneyre	No restriction	---	---	---	High	High	Moderate
297197							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
297198							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Rock outcrop	No restriction	---	---	---	---	---	---
297201							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297201							
Wellsboro	Fragipan	14-26	14-65	Noncemented	High	High	Moderate
Rock outcrop	No restriction	---	---	---	---	---	---
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297203							
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Pope	No restriction	---	---	---	Moderate	Low	High
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
297204							
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Pope	No restriction	---	---	---	Moderate	Low	High
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
297205							
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Pope	No restriction	---	---	---	Moderate	Low	High
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
297209							
Philo	No restriction	---	---	---	Moderate	Low	High
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Wyalusing	No restriction	---	---	---	High	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297210							
Barbour	No restriction	---	---	---	Moderate	Low	Moderate
Pope	No restriction	---	---	---	Moderate	Low	High
Philo	No restriction	---	---	---	Moderate	Low	High
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
297216							
Wurtsboro	Fragipan	17-28	---	Noncemented	Moderate	High	High
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
297217							
Wurtsboro	Fragipan	17-28	---	Noncemented	Moderate	High	High
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Rock outcrop	No restriction	---	---	---	---	---	---
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297227							
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Rock outcrop	No restriction	---	---	---	---	---	---
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Lackawanna	No restriction	---	---	---	Moderate	Low	Moderate
297228							
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Rock outcrop	No restriction	---	---	---	---	---	---

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297228							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Swartswood	Fragipan	28-36	---	Noncemented	Moderate	Low	High
297229							
Wyoming	No restriction	---	---	---	Low	Low	High
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Suncook	No restriction	---	---	---	Low	Low	High
297230							
Wyoming	No restriction	---	---	---	Low	Low	High
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Suncook	No restriction	---	---	---	Low	Low	High
297231							
Wyoming	No restriction	---	---	---	Low	Low	High
Suncook	No restriction	---	---	---	Low	Low	High
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
297236							
Suncook	No restriction	---	---	---	Low	Low	High
Wyalusing	No restriction	---	---	---	High	High	Moderate
297237							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297237							
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297238							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297239							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297240							
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Oquaga	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297241							
Unadilla	No restriction	---	---	---	High	Low	Moderate
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Suncook	No restriction	---	---	---	Low	Low	High
297242							
Shohola	Fragipan	18-30	---	Noncemented	High	High	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
297243							
Shohola	Fragipan	18-30	---	Noncemented	High	High	Moderate
Edgemere	Fragipan	15-25	---	Noncemented	High	High	Moderate
Mardin	Fragipan	14-26	14-65	Noncemented	Moderate	Moderate	Low
297244							
Lordstown	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	High
Swartswood	Fragipan	28-36	---	Noncemented	Moderate	Low	High
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Rock outcrop	No restriction	---	---	---	---	---	---
Shohola	Fragipan	15-31	---	Noncemented	High	High	Moderate
297247							
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Braceville	No restriction	---	---	---	Moderate	Moderate	Moderate
Philo	No restriction	---	---	---	Moderate	Low	High
Unadilla	No restriction	---	---	---	High	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
297248							
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Unadilla	No restriction	---	---	---	High	Low	Moderate
297249							
Chenango	No restriction	---	---	---	Moderate	Low	Moderate
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Unadilla	No restriction	---	---	---	High	Low	Moderate
297253							
Craigsville	No restriction	---	---	---	Moderate	Low	Moderate
Wyoming	No restriction	---	---	---	Low	Low	High
Wyalusing	No restriction	---	---	---	High	High	Moderate
Philo	No restriction	---	---	---	Moderate	Low	High
Pope	No restriction	---	---	---	Moderate	Low	High
297254							
Pits, shale	Paralithic bedrock	0-2	---	Very strongly cemented	Low	Low	High
Pits, gravel	No restriction	---	---	---	Low	Low	High
298049							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
298050							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
298051							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
298051							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
298075							
Colonie	No restriction	---	---	---	Low	Low	High
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Unadilla	No restriction	---	---	---	High	High	Low
298188							
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
298189							
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
298221							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
298222							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
298223							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Arnot, extremely stony	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298255							
Delaware, rarely flooded	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
298255							
Unadilla	No restriction	---	---	---	High	High	Low
298256							
Delaware, rarely flooded	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
Unadilla	No restriction	---	---	---	High	High	Low
298257							
Wallpack	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Cambridge	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298258							
Wallpack	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Cambridge	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298259							
Wallpack, extremely stony	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
Cambridge, extremely stony	Fragipan	12-36	23-47	Noncemented	Moderate	High	Moderate
Lordstown, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298260							
Wallpack, extremely stony	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
Cambridge, extremely stony	Fragipan	16-30	10-36	Noncemented	Moderate	High	Moderate
Lordstown, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298261							
Wallpack	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Cambridge	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
298262							
Wallpack, extremely stony	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
Cambridge, extremely stony	Fragipan	16-30	10-36	Noncemented	Moderate	High	Moderate
Lordstown, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
298265							
Venango, extremely stony	Fragipan	14-28	32-46	Noncemented	High	High	Moderate
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
298266							
Venango, extremely stony	Fragipan	14-28	32-46	Noncemented	High	High	Moderate
Nassau, extremely stony	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
298409							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
298411							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
298413							
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
Arnot, extremely stony	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
318498							
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Otisville, very stony	No restriction	---	---	---	Low	Low	High
318533							
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
318533							
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Hero, very stony	No restriction	---	---	---	Moderate	High	Moderate
319783							
Catden	No restriction	---	---	---	High	High	High
Alden	No restriction	---	---	---	High	High	Moderate
Wallkill	No restriction	---	---	---	High	High	High
319784							
Fredon, very stony	Strongly contrasting textural stratification	22-40	20-38	Noncemented	High	High	Moderate
Halsey, very stony	Strongly contrasting textural stratification	20-40	20-40	Noncemented	High	High	High
Hero, very stony	No restriction	---	---	---	Moderate	High	Moderate
543222							
Andover, extremely stony	Fragipan Lithic bedrock	16-28 72-99	---	Noncemented Very strongly cemented	High	High	High
Buchanan, extremely stony	Fragipan Lithic bedrock	20-36 60-99	---	Noncemented Very strongly cemented	Moderate	High	High
Laidig	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
Hazleton	Lithic bedrock	40-80	---	Very strongly cemented	Moderate	Low	High
543243							
Berks	Lithic bedrock	20-40	---	Very strongly cemented	Low	Low	High
Weikert	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Moderate	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543243							
Bedington	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Comly	Fragipan Lithic bedrock	20-35 52-96	---	Noncemented Very strongly cemented	Moderate	High	Moderate
Brinkerton	Fragipan Lithic bedrock	11-30 60-99	---	Noncemented Very strongly cemented	High	High	High
543246							
Buchanan	Fragipan Lithic bedrock	20-36 60-99	---	Noncemented Very strongly cemented	Moderate	High	High
Andover	Fragipan Lithic bedrock	16-28 72-99	---	Noncemented Very strongly cemented	Moderate	High	High
Wharton	Lithic bedrock	40-72	---	Very strongly cemented	High	High	High
Laidig	Fragipan	28-50	---	Noncemented	Moderate	Moderate	High
543247							
Buchanan, extremely stony	Fragipan Lithic bedrock	20-36 60-99	---	Noncemented Very strongly cemented	Moderate	High	High
Andover, extremely stony	Fragipan Lithic bedrock	16-28 72-99	---	Noncemented Very strongly cemented	Moderate	High	High
Cookport	Fragipan Lithic bedrock	16-30 40-72	---	Noncemented Indurated	Moderate	Moderate	Moderate
Laidig	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
Murrill	Lithic bedrock	72-99	---	Indurated	Moderate	Moderate	High
543257							
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543257							
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
543258							
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
543259							
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
543271							
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate
Alton	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Conotton	No restriction	---	---	---	Moderate	Low	High
Hatboro	Lithic bedrock	60-99	---	Very strongly cemented	High	High	Moderate
Nanticoke	Lithic bedrock	72-99	---	Very strongly cemented	Low	High	High
543276							
Fluvaquents	Lithic bedrock	72-99	---	Very strongly cemented	High	High	High
Towhee	Fragipan Lithic bedrock	20-30 48-96	---	Noncemented Very strongly cemented	High	High	Low

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543276							
Mount Lucas	Lithic bedrock	60-99	---	Very strongly cemented	High	High	Moderate
Nanticoke	Lithic bedrock	72-99	---	Very strongly cemented	Low	High	High
Neshaminy	Lithic bedrock	48-99	---	Very strongly cemented	Moderate	Moderate	Moderate
543292							
Hazleton, extremely stony	Lithic bedrock	40-80	---	Indurated	Moderate	Low	High
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
543293							
Hazleton, extremely stony	Lithic bedrock	40-80	---	Indurated	Moderate	Low	High
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
543299							
Laidig, extremely stony	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
Andover	Fragipan	16-28	---	Noncemented	High	High	High
	Lithic bedrock	72-99		Very strongly cemented			
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
Hazleton	Lithic bedrock	40-80	---	Very strongly cemented	Moderate	Low	High
543300							
Laidig, extremely stony	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
Andover, extremely stony	Fragipan	16-28	---	Noncemented	High	High	High
	Lithic bedrock	72-99		Very strongly cemented			

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543300							
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
Hazleton	Lithic bedrock	40-80	---	Very strongly cemented	Moderate	Low	High
543304							
Laidig	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
Rubble land	Lithic bedrock	40-72	---	Very strongly cemented	None	---	---
Andover	Fragipan	16-28	---	Noncemented	High	High	High
	Lithic bedrock	72-99		Very strongly cemented			
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
543318							
Rubble land	Lithic bedrock	40-72	---	Indurated	None	---	---
Hazleton	Lithic bedrock	40-80	---	Very strongly cemented	---	---	---
Buchanan	Fragipan	20-36	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-99		Very strongly cemented			
Clymer	Lithic bedrock	40-60	---	Very strongly cemented	---	---	---
Laidig	Fragipan	30-50	---	Noncemented	Moderate	Moderate	High
543327							
Swartswood	Fragipan	20-36	---	Noncemented	Moderate	Low	High
Conotton	No restriction	---	---	---	Moderate	Low	High
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543328							
Swartswood	Fragipan	20-36	---	Noncemented	Moderate	Low	High
Conotton	No restriction	---	---	---	Moderate	Low	High
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
543330							
Swartswood, extremely stony	Fragipan	20-36	---	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-120		Very strongly cemented			
Conotton	No restriction	---	---	---	Moderate	Low	High
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
543331							
Swartswood, extremely stony	Fragipan	20-36	---	Noncemented	Moderate	Low	High
Wurtsboro, extremely stony	Fragipan	17-28	---	Noncemented	Moderate	High	High
	Lithic bedrock	60-120		Very strongly cemented			
Conotton	No restriction	---	---	---	Moderate	Low	High
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
543359							
Volusia	Fragipan	10-22	---	Noncemented	High	High	Moderate
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
543360							
Volusia, extremely stony	Fragipan	10-22	---	Noncemented	High	High	Moderate
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
543360							
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
543374							
Wurtsboro	Fragipan Lithic bedrock	17-28 60-120	---	Noncemented Very strongly cemented	Moderate	High	High
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Conotton	No restriction	---	---	---	Moderate	Low	High
Halsey	No restriction	---	---	---	High	High	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Phelps	No restriction	---	---	---	High	Moderate	Low
543375							
Wurtsboro	Fragipan Lithic bedrock	17-28 60-120	---	Noncemented Very strongly cemented	Moderate	High	High
Chippewa	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Conotton	No restriction	---	---	---	Moderate	Low	High
Halsey	No restriction	---	---	---	High	High	Low
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Phelps	No restriction	---	---	---	High	Moderate	Low
612280							
Scio	No restriction	---	---	---	High	High	Moderate
Unadilla	No restriction	---	---	---	High	High	Low
Aeric Endoaquepts, postglacial alluvium	No restriction	---	---	---	High	High	Low
612666							
Colonie	No restriction	---	---	---	Low	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
612666							
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Unadilla	No restriction	---	---	---	High	High	Low
612668							
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
Otisville, very stony	No restriction	---	---	---	Low	Low	High
Colonie, very stony	No restriction	---	---	---	Low	Low	High
612724							
Lordstown, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Wallpack, very rocky	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
Chadakoin, very rocky	Lithic bedrock	39-60	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
612732							
Atherton, very poorly drained	No restriction	---	---	---	High	High	Moderate
Atherton, poorly drained	No restriction	---	---	---	High	High	Low
Aeric Endoaquepts, postglacial alluvium	No restriction	---	---	---	High	High	Low
612738							
Fluvaquents, occasionally flooded	No restriction	---	---	---	High	High	Moderate
Udifluvents, occasionally flooded	No restriction	---	---	---	Low	Low	High
612753							
Wallpack, aeolian mantle, very stony	No restriction	---	---	---	Moderate	Low	High
Lordstown, very stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Aquic Dystrudepts, aeolian mantle, very stony	No restriction	---	---	---	Low	Low	High
612756							
Wallpack, aeolian mantle, very stony	No restriction	---	---	---	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
612756							
Lordstown, very stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Aquic Dystrudepts, aeolian mantle, very stony	No restriction	---	---	---	Low	Low	High
612757							
Wallpack, aeolian mantle, very stony	No restriction	---	---	---	Moderate	Low	High
Lordstown, very stony	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Aquic Dystrudepts, aeolian mantle, very stony	No restriction	---	---	---	Low	Low	High
612767							
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Morris, extremely stony	Fragipan	10-30	15-40	Noncemented	High	High	Moderate
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
612768							
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Morris, extremely stony	Fragipan	12-30	30-48	Noncemented	High	High	Moderate
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
613393							
Alden, extremely stony	No restriction	---	---	---	High	High	Moderate
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
613447							
Unadilla	No restriction	---	---	---	High	High	Low
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
613448							
Unadilla	No restriction	---	---	---	High	High	Low
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
614075							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
620179							
Arnot, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
620180							
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
620181							
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
623089							
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Alden, extremely stony	No restriction	---	---	---	High	High	Moderate
Venango, extremely stony	Fragipan	14-28	32-46	Noncemented	High	High	Moderate
623109							
Farmington	Lithic bedrock	10-20	---	Indurated	High	Moderate	Moderate
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Galway	Lithic bedrock	20-39	---	Indurated	Moderate	Low	Moderate
624811							
Galway, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Low	Moderate
Farmington, very rocky	Lithic bedrock	10-20	---	Indurated	High	Moderate	Moderate
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
624811							
Wallpack, aeolian mantle, very rocky--	No restriction	---	---	---	Moderate	Low	High
624813							
Lackawanna, extremely stony----------	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony----------	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony----------	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
624816							
Lordstown, very rocky----------	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Wallpack, very rocky----------	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
Cambridge, very rocky----------	Fragipan	12-36	23-47	Noncemented	Moderate	High	Moderate
Chadakoin, very rocky----------	Lithic bedrock	39-60	---	Indurated	Moderate	Low	High
Rock outcrop----------	Lithic bedrock	0	---	Indurated	---	---	---
624822							
Lordstown----------	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Wallpack----------	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Chadakoin----------	Lithic bedrock	39-60	---	Indurated	Moderate	Low	High
Cambridge----------	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate
624823							
Lordstown----------	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Wallpack----------	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Chadakoin----------	Lithic bedrock	39-60	---	Indurated	Moderate	Low	High
Cambridge----------	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate
624824							
Lordstown----------	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Wallpack----------	Fragipan	12-36	29-53	Noncemented	Moderate	Low	Moderate
Chadakoin----------	Lithic bedrock	39-60	---	Indurated	Moderate	Low	High
Cambridge----------	Fragipan	12-36	29-53	Noncemented	Moderate	High	Moderate

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
624826							
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Wallpack, very rocky	Fragipan	12-36	24-48	Noncemented	Moderate	Low	Moderate
624827							
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
624828							
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
624829							
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
624832							
Nassau	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Manlius	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
624841							
Oquaga	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lackawanna	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
624845							
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Farmington	Lithic bedrock	10-20	---	Indurated	High	Moderate	Moderate
Galway	Lithic bedrock	20-39	---	Indurated	Moderate	Low	Moderate
624846							
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Rubble land	No restriction	---	---	---	---	---	---
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
626816							
Udifluvents, occasionally flooded	No restriction	---	---	---	Low	Low	High
Fluvaquents, occasionally flooded	No restriction	---	---	---	High	High	Moderate
635458							
Oquaga, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Lackawanna, very rocky	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Wellsboro, very rocky	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
635459							
Oquaga, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Lackawanna, very rocky	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Wellsboro, very rocky	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
740953							
Delaware, rarely flooded	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
Unadilla	No restriction	---	---	---	High	High	Low

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
740968							
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
740969							
Nassau, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	Low
Manlius, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	Low
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
740971							
Oquaga, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Lackawanna, very rocky	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Wellsboro, very rocky	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
740972							
Oquaga, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Lackawanna, very rocky	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Wellsboro, very rocky	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
740974							
Oquaga	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lackawanna	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
740975							
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
740975							
Rubble land	No restriction	---	---	---	---	---	---
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
740987							
Scio	No restriction	---	---	---	High	High	Moderate
Unadilla	No restriction	---	---	---	High	High	Low
Aeric Endoaquepts, postglacial alluvium	No restriction	---	---	---	High	High	Low
740988							
Udifluvents, occasionally flooded	No restriction	---	---	---	Low	Low	High
Fluvaquents, occasionally flooded	No restriction	---	---	---	High	High	Moderate
740991							
Unadilla	No restriction	---	---	---	High	High	Low
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
740992							
Unadilla	No restriction	---	---	---	High	High	Low
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
740995							
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Morris, extremely stony	Fragipan	12-30	30-48	Noncemented	High	High	Moderate
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
740996							
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Morris, extremely stony	Fragipan	10-30	15-40	Noncemented	High	High	Moderate
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
741149							
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
741150							
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
801114							
Oquaga	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Wellsboro	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
810906							
Oquaga	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Wellsboro	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
1147465							
Alden, extremely stony	No restriction	---	---	---	High	High	Moderate
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
1147467							
Arnot, very rocky	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown, very rocky	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
1147468							
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1147468							
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
1147469							
Arnot	Lithic bedrock	10-20	---	Indurated	Moderate	Moderate	High
Lordstown	Lithic bedrock	20-39	---	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0	---	Indurated	---	---	---
1147470							
Atherton, very poorly drained	No restriction	---	---	---	High	High	Moderate
Atherton, poorly drained	No restriction	---	---	---	High	High	Low
Aeric Endoaquepts, postglacial alluvium	No restriction	---	---	---	High	High	Low
1147471							
Catden	No restriction	---	---	---	High	High	High
Alden	No restriction	---	---	---	High	High	Moderate
Wallkill	No restriction	---	---	---	High	High	High
1147474							
Chippewa, extremely stony	Fragipan	8-20	8-36	Noncemented	High	High	Moderate
Alden, extremely stony	No restriction	---	---	---	High	High	Moderate
Venango, extremely stony	Fragipan	14-28	32-46	Noncemented	High	High	Moderate
1147475							
Colonie	No restriction	---	---	---	Low	Low	High
Delaware	No restriction	---	---	---	Moderate	Low	Moderate
Unadilla	No restriction	---	---	---	High	High	Low
1147478							
Delaware, rarely flooded	No restriction	---	---	---	Moderate	Low	Moderate
Colonie	No restriction	---	---	---	Low	Low	High
Unadilla	No restriction	---	---	---	High	High	Low

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1147482							
Fredon, very stony	Strongly contrasting textural stratification	22-40	20-38	Noncemented	High	High	Moderate
Halsey, very stony	Strongly contrasting textural stratification	20-40	20-40	Noncemented	High	High	High
Hero, very stony	No restriction	---	---	---	Moderate	High	Moderate
1147485							
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Otisville, very stony	No restriction	---	---	---	Low	Low	High
1147490							
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
Otisville, very stony	No restriction	---	---	---	Low	Low	High
Colonie, very stony	No restriction	---	---	---	Low	Low	High
1147491							
Hoosic, very stony	No restriction	---	---	---	Low	Low	High
Otisville, very stony	No restriction	---	---	---	Low	Low	High
Hazen, very stony	No restriction	---	---	---	Moderate	Low	Moderate
1147492							
Lackawanna, extremely stony	Fragipan	14-36	20-45	Noncemented	Moderate	Low	High
Wellsboro, extremely stony	Fragipan	12-30	30-48	Noncemented	Moderate	High	Moderate
Oquaga, extremely stony	Lithic bedrock	20-39	---	Indurated	Moderate	Moderate	High
1147500							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1147501							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
1147502							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
1147527							
Udorthents	No restriction	---	---	---	Low	Low	High
Urban land	No restriction	---	---	---	---	---	---
1147532							
Udorthents	No restriction	---	---	---	Low	Low	High
1147533							
Wurtsboro, extremely stony	Fragipan	17-28	32-43	Noncemented	Moderate	High	High
Swartswood, extremely stony	Fragipan	20-36	24-40	Noncemented	Moderate	Low	High
1948749							
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Bedington	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
1948750							
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Brinkerton	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1948751							
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Brinkerton	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Wurtsboro	Fragipan	17-28	---	Noncemented	Moderate	High	High
	Lithic bedrock	48-120		Very strongly cemented			
1948774							
Conotton	No restriction	---	---	---	Moderate	Low	High
1948775							
Conotton	No restriction	---	---	---	Moderate	Low	High
1948776							
Conotton	No restriction	---	---	---	Moderate	Low	High
1948777							
Conotton	No restriction	---	---	---	Moderate	Low	High
1948797							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Conotton	No restriction	---	---	---	Moderate	Low	High
Loudonville	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Moderate	High
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan	17-28	---	Noncemented	Moderate	High	High
	Lithic bedrock	48-120		Very strongly cemented			
1948802							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1948802							
Conotton	No restriction	---	---	---	Moderate	Low	High
Loudonville	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Moderate	High
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
1948818							
Manlius	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Low	Moderate
Arnot	Lithic bedrock	10-20	---	Very strongly cemented	Moderate	Low	High
Conotton	No restriction	---	---	---	Moderate	Low	High
Loudonville	Lithic bedrock	20-40	---	Very strongly cemented	Moderate	Moderate	High
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High
1948832							
Penargyl	Lithic bedrock	72-99	---	Moderately cemented	Moderate	Low	High
1948846							
Phelps	No restriction	---	---	---	High	Moderate	Low
Halsey	No restriction	---	---	---	High	High	Low
Swartswood	Fragipan	19-36	---	Noncemented	Moderate	Low	High
Wurtsboro	Fragipan Lithic bedrock	17-28 48-120	---	Noncemented Very strongly cemented	Moderate	High	High

Table 20.--Soil Features--Continued

Map unit symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	*In*				
1948855							
Udorthents, loamy	No restriction	---	---	---	Moderate	Moderate	Moderate
Bedington	Lithic bedrock	60-99	---	Very strongly cemented	Moderate	Low	High
Clarksburg	Fragipan	20-36	20-36	Noncemented	Moderate	Moderate	Moderate
	Lithic bedrock	60-99	---	Indurated			
Duffield	Lithic bedrock	48-120	---	Indurated	Moderate	Moderate	Moderate
Lansdale	Lithic bedrock	40-60	---	Very strongly cemented	Moderate	Low	High
Readington	Fragipan	20-36	---	Noncemented	Moderate	Moderate	Moderate
	Lithic bedrock	40-70		Very strongly cemented			
1948989							
Urban land	Lithic bedrock	10-100	---	Very strongly cemented	None	---	---
Delaware	Lithic bedrock	72-99	---	Very strongly cemented	Moderate	Low	Moderate

Table 21.--Taxonomic Classification of the Soils

Soil name	Family or higher taxonomic class
Aeric Endoaquepts	Aeric Endoaquepts
Alden	Fine-loamy, mixed, active, nonacid, mesic Mollic Endoaquepts
Alton	Loamy-skeletal, mixed, active, mesic Dystric Eutrudepts
Alvira	Fine-loamy, mixed, active, mesic Aeric Fragiaquults
Andover	Fine-loamy, mixed, active, mesic Typic Fragiaquults
Aquic Dystrudepts	Aquic Dystrudepts
Arnot	Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
Atherton taxadjunct	Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts
Barbour	Coarse-loamy over sandy or sandy-skeletal, mixed, active, mesic Fluventic Dystrudepts
Bath	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Bedington	Fine-loamy, mixed, active, mesic Typic Hapludults
Benson	Loamy-skeletal, mixed, active, mesic Lithic Eutrudepts
Berks	Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
Braceville	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Brinkerton	Fine-silty, mixed, superactive, mesic Typic Fragiaqualfs
Brinkerton taxadjunct	Fine-loamy, mixed, superactive, mesic Typic Hapludults
Buchanan	Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults
Cambridge	Coarse-loamy, mixed, superactive, mesic Oxyaquic Fragiudalfs
Catden	Euic, mesic Typic Haplosaprists
Chadakoin	Coarse-loamy, mixed, superactive, mesic Typic Dystrudepts
Chenango	Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts
Chippewa	Fine-loamy, mixed, active, mesic Typic Fragiaquepts
Clarksburg	Fine-loamy, mixed, superactive, mesic Oxyaquic Fragiudalfs
Clymer	Coarse-loamy, siliceous, active, mesic Typic Hapludults
Colonie	Mixed, mesic Lamellic Udipsamments
Comly	Fine-loamy, mixed, active, mesic Oxyaquic Fragiudalfs
Conotton	Loamy-skeletal, mixed, active, mesic Typic Hapludalfs
Cookport	Fine-loamy, mixed, active, mesic Aquic Fragiudults
Craigsville	Loamy-skeletal, mixed, superactive, mesic Fluventic Dystrudepts
Dekalb	Loamy-skeletal, mixed, siliceous, active, mesic Typic Dystrudepts
Delaware	Coarse-loamy, mixed, active, mesic Typic Dystrudepts
Duffield	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Dystrochrepts	Typic Dystrochrepts
Edgemere	Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts
Farmington	Loamy, mixed, active, mesic Lithic Eutrudepts
Fluvaquents	Fluvaquents
Fluvents	Fluvents
Fredon	Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Aeric Endoaquepts
Freetown	Dysic, mesic Typic Medisaprists
Galway	Coarse-loamy, mixed, superactive, mesic Typic Eutrudepts
Gleneyre	Coarse-silty over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Fluvaquents
Halsey	Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Humaquepts
Hatboro	Fine-loamy, mixed, active, nonacid, mesic Fluvaquentic Endoaquepts
Hazen	Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
Hazleton	Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts
Hero	Coarse-loamy over sandy or sandy-skeletal, mixed, semiactive, mesic Aquic Eutrudepts
Holly	Fine-loamy, mixed, superactive, nonacid, mesic Typic Fluvaquents
Hoosic taxadjunct	Sandy-skeletal, mixed, mesic Humic Dystrudepts
Kimbles	Coarse-silty over sandy or sandy-skeletal, mixed, mesic Typic Endoaquepts
Lackawanna	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Laidig	Fine-loamy, siliceous, active, mesic Typic Fragiudults
Lansdale	Coarse-loamy, mixed, active, mesic Typic Hapludults
Lordstown	Coarse-loamy, mixed, active, mesic Typic Dystrudepts
Loudonville	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Manlius	Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
Mardin	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Meckesville	Fine-loamy, mixed, active, mesic Typic Fragiudults
Morris	Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts
Mount Lucas	Fine-loamy, mixed, superactive, mesic Aquic Hapludalfs
Murrill	Fine-loamy, mixed, semiactive, mesic Typic Hapludults

Table 21.--Taxonomic Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Nanticoke	Fine-silty, mixed, active, nonacid, mesic Typic Hydraquents
Nassau	Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
Neshaminy	Fine-loamy, mixed, superactive, mesic Ultic Hapludalfs
Norwich	Fine-loamy, mixed, active, mesic Typic Fragiaquepts
Oquaga	Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts
Otisville	Sandy-skeletal, mixed, mesic Typic Udorthents
Paupack	Loamy-skeletal or clayey-skeletal, mixed, dysic, mesic Terric Medisaprists
Penargyl	Fine-loamy, mixed, active, mesic Typic Hapludults
Phelps	Fine-loamy over sandy or sandy-skeletal, mixed, active, mesic Glossaquic Hapludalfs
Philo	Coarse-loamy, mixed, active, mesic Fluvaquentic Dystrudepts
Pope	Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts
Readington	Fine-loamy, mixed, active, mesic Oxyaquic Fragiudalfs
Rexford	Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts
Scio	Coarse-silty, mixed, active, mesic Aquic Dystrudepts
Sheffield taxadjunct	Fine-silty, mixed, mesic Typic Fragiaqualfs
Shelmadine	Fine-loamy, mixed, semiactive, mesic Typic Fragiaquults
Shohola	Loamy-skeletal, mixed, mesic Aeric Fragiaquepts
Suncook	Mixed, mesic Typic Udipsamments
Swartswood	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Towhee	Fine-loamy, mixed, superactive, mesic Typic Fragiaqualfs
Udifluvents	Udifluvents
Udorthents, loamy	Udorthents
Udorthents	Udorthents
Unadilla	Coarse-silty, mixed, active, mesic Typic Dystrudepts
Venango	Fine-loamy, mixed, active, mesic Aeric Fragiaqualfs
Volusia	Fine-loamy, mixed, active, mesic Aeric Fragiaquepts
Wallkill taxadjunct	Fine-loamy, mixed, superactive, nonacid, mesic Fluvaquentic Endoaquepts
Wallpack	Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs
Wallpack taxadjunct	Coarse-loamy, mixed, semiactive, mesic Typic Hapludalfs
Watson	Fine-loamy, mixed, active, mesic Typic Fragiudults
Wayland	Fine-silty, mixed, active, nonacid, mesic Mollic Fluvaquents
Weikert	Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
Wellsboro	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Wharton	Fine-loamy, mixed, active, mesic Aquic Hapludults
Wurtsboro	Coarse-loamy, mixed, active, mesic Typic Fragiudepts
Wyalusing	Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid, mesic Typic Fluvaquents
Wyoming	Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Table 22.--Soil Classification Key

[An asterisk indicates a taxadjunct to the series]

```
ORDER
   Suborder
      Great Group
         Subgroup
            Series or Higher Category

ALFISOLS
   Aqualfs
      Fragiaqualfs
         Typic Fragiaqualfs
             Towhee--------------------Fine-loamy, mixed, superactive, mesic Typic Fragiaqualfs
            *Sheffield------------------Fine-silty, mixed, mesic Typic Fragiaqualfs
             Brinkerton----------------Fine-silty, mixed, superactive, mesic Typic Fragiaqualfs
         Aeric Fragiaqualfs
             Venango-------------------Fine-loamy, mixed, active, mesic Aeric Fragiaqualfs
   Udalfs
      Fragiudalfs
         Typic Fragiudalfs
             Wallpack------------------Coarse-loamy, mixed, semiactive, mesic Typic Fragiudalfs
         Oxyaquic Fragiudalfs
             Cambridge-----------------Coarse-loamy, mixed, superactive, mesic Oxyaquic Fragiudalfs
             Comly---------------------Fine-loamy, mixed, active, mesic Oxyaquic Fragiudalfs
             Readington----------------Fine-loamy, mixed, active, mesic Oxyaquic Fragiudalfs
             Clarksburg----------------Fine-loamy, mixed, superactive, mesic Oxyaquic Fragiudalfs
      Hapludalfs
         Typic Hapludalfs
            *Wallpack------------------Coarse-loamy, mixed, semiactive, mesic Typic Hapludalfs
             Conotton------------------Loamy-skeletal, mixed, active, mesic Typic Hapludalfs
         Aquic Hapludalfs
             Mount Lucas---------------Fine-loamy, mixed, superactive, mesic Aquic Hapludalfs
         Glossaquic Hapludalfs
             Phelps--------------------Fine-loamy over sandy or sandy-skeletal, mixed, active, mesic
                                        Glossaquic Hapludalfs
         Mollic Hapludalfs
             Hazen---------------------Coarse-loamy, mixed, active, mesic Mollic Hapludalfs
         Ultic Hapludalfs
             Duffield------------------Fine-loamy, mixed, active, mesic Ultic Hapludalfs
             Loudonville---------------Fine-loamy, mixed, active, mesic Ultic Hapludalfs
             Neshaminy-----------------Fine-loamy, mixed, superactive, mesic Ultic Hapludalfs

ENTISOLS
   Aquents
      Fluvaquents
             Fluvaquents---------------Fluvaquents
         Typic Fluvaquents
             Wyalusing-----------------Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid,
                                        mesic Typic Fluvaquents
             Gleneyre------------------Coarse-silty over sandy or sandy-skeletal, mixed, active, nonacid,
                                        mesic Typic Fluvaquents
             Holly---------------------Fine-loamy, mixed, superactive, nonacid, mesic Typic Fluvaquents
         Mollic Fluvaquents
             Wayland-------------------Fine-silty, mixed, active, nonacid, mesic Mollic Fluvaquents
      Hydraquents
         Typic Hydraquents
             Nanticoke-----------------Fine-silty, mixed, active, nonacid, mesic Typic Hydraquents
      Fluvents
             Fluvents------------------Fluvents
      Udifluvents
             Udifluvents---------------Udifluvents
   Orthents
      Udorthents
             Udorthents----------------Udorthents
             Udorthents, loamy---------Udorthents
         Typic Udorthents
             Otisville-----------------Sandy-skeletal, mixed, mesic Typic Udorthents
```

Table 22.--Soil Classification Key--Continued

```
ORDER
   Suborder
      Great Group
         Subgroup
            Series or Higher Category

ENTISOLS--(Continued)

   Psamments
      Udipsamments
         Typic Udipsamments
             Suncook-------------------Mixed, mesic Typic Udipsamments
         Lamellic Udipsamments
             Colonie-------------------Mixed, mesic Lamellic Udipsamments

HISTOSOLS
   Saprists
      Medisaprists
         Typic Medisaprists
             Freetown------------------Dysic, mesic Typic Medisaprists
         Terric Medisaprists
             Paupack-------------------Loamy-skeletal or clayey-skeletal, mixed, dysic, mesic Terric
                                          Medisaprists
      Haplosaprists
         Typic Haplosaprists
             Catden--------------------Euic, mesic Typic Haplosaprists

INCEPTISOLS
   Aquepts
      Fragiaquepts
         Typic Fragiaquepts
             Chippewa------------------Fine-loamy, mixed, active, mesic Typic Fragiaquepts
             Norwich-------------------Fine-loamy, mixed, active, mesic Typic Fragiaquepts
             Edgemere------------------Loamy-skeletal, mixed, superactive, mesic Typic Fragiaquepts
         Aeric Fragiaquepts
             Morris--------------------Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts
             Rexford-------------------Coarse-loamy, mixed, active, mesic Aeric Fragiaquepts
             Volusia-------------------Fine-loamy, mixed, active, mesic Aeric Fragiaquepts
             Shohola-------------------Loamy-skeletal, mixed, active, mesic Aeric Fragiaquepts
      Humaquepts
         Typic Humaquepts
             Halsey--------------------Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid,
                                          mesic Typic Humaquepts
      Endoaquepts
         Typic Endoaquepts
             Kimbles-------------------Coarse-silty over sandy or sandy-skeletal, mixed, mesic Typic
                                          Endoaquepts
         Aeric Endoaquepts
             Aeric Endoaquepts---------Aeric Endoaquepts
             Fredon--------------------Coarse-loamy over sandy or sandy-skeletal, mixed, active, nonacid,
                                          mesic Aeric Endoaquepts
            *Atherton------------------Fine-silty, mixed, active, nonacid, mesic Aeric Endoaquepts
         Mollic Endoaquepts
             Alden---------------------Fine-loamy, mixed, active, nonacid, mesic Mollic Endoaquepts
         Fluvaquentic Endoaquepts
             Hatboro-------------------Fine-loamy, mixed, active, nonacid, mesic Fluvaquentic Endoaquepts
            *Wallkill------------------Fine-loamy, mixed, superactive, nonacid, mesic Fluvaquentic
                                          Endoaquepts
   Ochrepts
      Dystrochrepts
         Typic Dystrochrepts
             Dystrochrepts-------------Typic Dystrochrepts
   Udepts
      Dystrudepts
         Lithic Dystrudepts
             Arnot---------------------Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
             Nassau--------------------Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
             Weikert-------------------Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
```

Table 22.--Soil Classification Key--Continued

```
ORDER
   Suborder
      Great Group
         Subgroup
            Series or Higher Category

INCEPTISOLS--(Continued)

      Dystrudepts
         Aquic Dystrudepts
             Aquic Dystrudepts---------Aquic Dystrudepts
             Scio----------------------Coarse-silty, mixed, active, mesic Aquic Dystrudepts
         Fluventic Dystrudepts
             Barbour-------------------Coarse-loamy over sandy or sandy-skeletal, mixed, active, mesic
                                          Fluventic Dystrudepts
             Pope----------------------Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts
             Craigsville---------------Loamy-skeletal, mixed, superactive, mesic Fluventic Dystrudepts
         Fluvaquentic Dystrudepts
             Philo---------------------Coarse-loamy, mixed, active, mesic Fluvaquentic Dystrudepts
         Humic Dystrudepts
            *Hoosic--------------------Sandy-skeletal, mixed, mesic Humic Dystrudepts
         Typic Dystrudepts
             Delaware------------------Coarse-loamy, mixed, active, mesic Typic Dystrudepts
             Lordstown-----------------Coarse-loamy, mixed, active, mesic Typic Dystrudepts
             Chadakoin-----------------Coarse-loamy, mixed, superactive, mesic Typic Dystrudepts
             Unadilla------------------Coarse-silty, mixed, active, mesic Typic Dystrudepts
             Berks---------------------Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
             Chenango------------------Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts
             Dekalb--------------------Loamy-skeletal, mixed, siliceous, active, mesic Typic Dystrudepts
             Hazleton------------------Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts
             Manlius-------------------Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
             Oquaga--------------------Loamy-skeletal, mixed, superactive, mesic Typic Dystrudepts
             Wyoming-------------------Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
      Eutrudepts
         Lithic Eutrudepts
             Benson--------------------Loamy-skeletal, mixed, mesic Lithic Eutrudepts
             Farmington----------------Loamy, mixed, active, mesic Lithic Eutrudepts
         Aquic Eutrudepts
             Hero----------------------Coarse-loamy over sandy or sandy-skeletal, mixed, semiactive,
                                          mesic Aquic Eutrudepts
         Dystric Eutrudepts
            Alton----------------------Loamy-skeletal, mixed, active, mesic Dystric Eutrudepts
         Typic Eutrudepts
            Galway---------------------Coarse-loamy, mixed, superactive, mesic Typic Eutrudepts
      Fragiudepts
         Typic Fragiudepts
             Bath----------------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Braceville----------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Lackawanna----------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Mardin--------------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Swartswood----------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Wellsboro-----------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts
             Wurtsboro-----------------Coarse-loamy, mixed, active, mesic Typic Fragiudepts

ULTISOLS
   Aquults
      Fragiaquults
         Typic Fragiaquults
             Andover-------------------Fine-loamy, mixed, active, mesic Typic Fragiaquults
             Shelmadine----------------Fine-loamy, mixed, semiactive, mesic Typic Fragiaquults
         Aeric Fragiaquults
             Alvira--------------------Fine-loamy, mixed, active, mesic Aeric Fragiaquults
   Udults
      Fragiudults
         Typic Fragiudults
             Meckesville---------------Fine-loamy, mixed, active, mesic Typic Fragiudults
             Watson--------------------Fine-loamy, mixed, active, mesic Typic Fragiudults
             Laidig--------------------Fine-loamy, siliceous, active, mesic Typic Fragiudults
```

Table 22.--Soil Classification Key--Continued

```
ORDER
   Suborder
      Great Group
         Subgroup
            Series or Higher Category

ULTISOLS--(Continued)

         Aquic Fragiudults
             Cookport------------------Fine-loamy, mixed, active, mesic Aquic Fragiudults
             Buchanan------------------Fine-loamy, mixed, semiactive, mesic Aquic Fragiudults
      Hapludults
         Typic Hapludults
             Lansdale------------------Coarse-loamy, mixed, active, mesic Typic Hapludults
             Clymer--------------------Coarse-loamy, siliceous, active, mesic Typic Hapludults
             Bedington-----------------Fine-loamy, mixed, active, mesic Typic Hapludults
             Penargyl------------------Fine-loamy, mixed, active, mesic Typic Hapludults
             Murrill-------------------Fine-loamy, mixed, semiactive, mesic Typic Hapludults
            *Brinkerton----------------Fine-loamy, mixed, superactive, mesic Typic Hapludults
         Aquic Hapludults
             Wharton-------------------Fine-loamy, mixed, active, mesic Aquic Hapludults
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