United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with Virginia Polytechnic Institute and State University

Soil Survey of Amherst County, Virginia

How To Use This Soil Survey

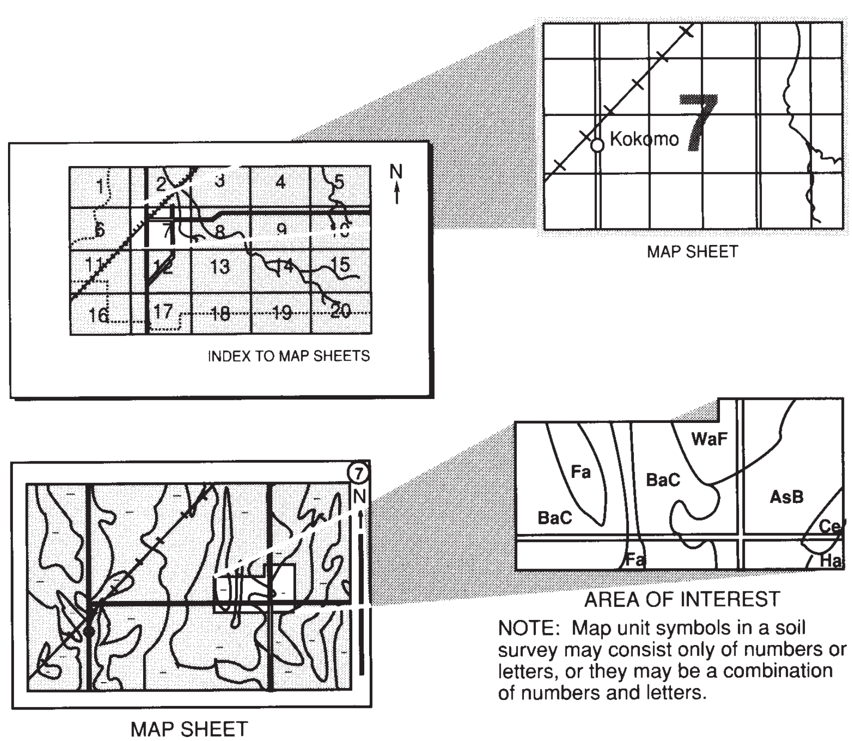
Detailed Soil Maps

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.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service; Virginia Polytechnic Institute and State University; Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation; and Amherst County Board of Supervisors. The survey is part of the technical assistance furnished to the Robert E. Lee Soil and Water Conservation District. The Amherst County Board of Supervisors provided financial assistance for the survey.

Major fieldwork for this soil survey was completed in 1996. Soil names and descriptions were approved in 2004. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2004. The most current official data are available on the Internet.

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

Nondiscrimination Statement

Cover Caption

Pasture near Pedlar Mills in the Piedmont portion of Amherst County. The Blue Ridge mountains are in the background.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

Issued 2009

Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

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

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

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are 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 soil 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 the Cooperative Extension Service.

John A. Bricker
State Conservationist
Natural Resources Conservation Service

Soil Survey of
Amherst County, Virginia

By Steven K. Thomas, Virginia Polytechnic Institute and State University

Fieldwork by Steven A. Cromer, Bruce L. Legge, and Steven K. Thomas, Virginia Polytechnic Institute and State University, and Bruce Dubee, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service,
in cooperation with
Virginia Polytechnic Institute and State University

AMHERST COUNTY is in the west-central part of Virginia (fig. 1). It has a total area of 306,300 acres and includes about 57,000 acres in the George Washington National Forest. The Blue Ridge Parkway and the Appalachian National Scenic Trail pass through the northwestern part of the survey area. Amherst is the county seat.

Amherst County is bounded on the northwest by Rockbridge County, on the northeast by Nelson County, on the southeast by Appomattox County, on the south by Campbell County, and on the southwest by Bedford County.

In 2000, the population of the county was 31,894 (USDC, 2000).

General Nature of the Survey Area

This section provides general information about the survey area. It describes the history and development; physiography, relief, and drainage; agriculture and industry; transportation; water supply; and climate.

History and Development

The Monacan Indians lived in the area now known as Amherst County prior to European settlement. The present-day Amherst County was part of the original shire

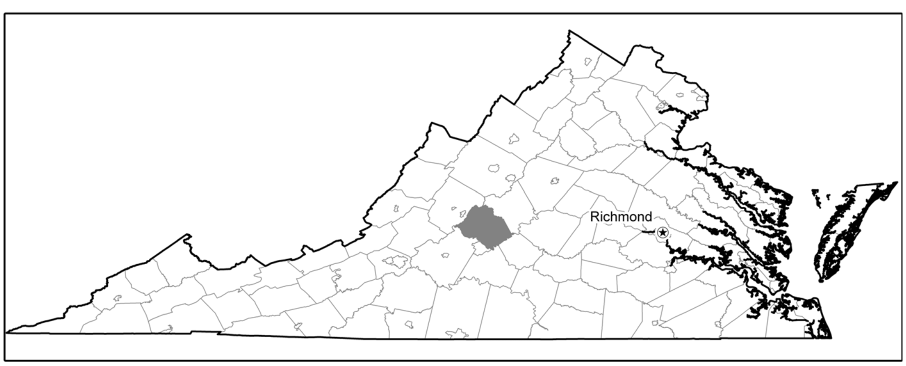


Figure 1.—Location of Amherst County in Virginia.

of Henrico, and in 1727 it became part of Goochland County. Albemarle County was formed from part of Goochland County in 1744. Old Amherst County, which included what is now Nelson County, was formed from Albemarle County in 1761. Amherst County was separated, and the northern portion became Nelson County in 1807. Amherst County is named after Sir Jeffrey Amherst who guided England to victory in the French and Indian War and was Governor of Virginia in 1760.

Physiography, Relief, and Drainage

Amherst County is in the Southern Piedmont and Northern Blue Ridge Major Land Resource Areas (MLRAs). The eastern portion of the county is in the Southern Piedmont Plateau Province, or Piedmont, and the western part of the county is in the Blue Ridge Province, or Blue Ridge. Elevation in the county ranges from about 400 feet above sea level in the Allens Creek area of the James River flood plain to 4,098 feet above sea level on Mt. Pleasant in the western part of the survey area.

The Piedmont is dissected and rolling and is underlain by crystalline rocks, such as gneiss, granite, schist, and phyllite. The Piedmont consists of gently sloping and strongly sloping interfluves and strongly sloping to very steep side slopes (fig. 2). The steeper side slopes generally are along the major drainageways, creeks, and rivers. The soils of the Piedmont commonly are deep or very deep and well drained and have a clay subsoil, but they can range from shallow to very deep and from excessively drained to poorly drained and have a loamy to clayey subsoil. Relief generally is about 20 to 200 feet.

There are several mountains within the Piedmont that have a northeast-southwest trend. The soils of these mountains generally are shallow to deep and are well drained. Relief ranges from 100 to 2,000 feet.

The Blue Ridge consists of long, steep and very steep mountain flanks that border

Figure 2.—An area of strongly sloping to steep slopes in the Piedmont portion of the survey area (Photograph taken by Ann Evans, Natural Resources Conservation Service).

Figure 3.—Hayland and pasture are common in the Piedmont portion of Amherst County. Steeper areas are in woodland.

narrow to broad, strongly sloping and moderately steep mountaintops. Metamorphic, igneous, and metasedimentary rocks underlie the Blue Ridge. Relief ranges from 100 to 3,000 feet and represents the maximum relief in the survey area.

Long, narrow to broad flood plains are along the James River, Tye River, Piney River, Pedlar River, Buffalo River and other large streams in the county. The soils of the flood plains are well drained to poorly drained. The soils are mostly loamy, but those nearest the mountains have a cobbly subsoil.

Agriculture and Industry

Agriculture and agricultural products have declined in recent years as the urban areas around Madison Heights and Lynchburg have grown. However, hay and pasture operations are still common throughout the county (fig. 3). The main agriculture products produced in Amherst County are livestock, hay, specialty crops, and woodland.

Livestock sales form a large portion of farm income because the soils in Amherst County generally are well suited to hay and pasture.

The major nonfarm enterprises consist of production-oriented industries.

About 80 percent of the county is forested. The George Washington National Forest is the largest forested area in the county and comprises most of the western part of the survey area. The predominant forest types are oak-hickory and oak-pine. Most reforested areas consist of loblolly pine or eastern white pine.

Transportation

The principal highways in Amherst County are U.S. Route 29 and U.S. Route 60, which extend north and south, and Virginia Route 151 and Virginia Route 130, which run east to west.

Passenger or freight rail services are not available in the county but they are available in nearby Charlottesville, about 45 miles to the north, and in Lynchburg, about 25 miles to the south.

Passenger air service is available in Charlottesville and Lynchburg, Virginia.

Water Supply

Groundwater is obtained from several water-bearing strata of rock that are generally between depths of 100 to 600 feet. Wells drilled between these depths generally are for individual residential use. In most areas, the water is high in mineral content.

The town of Amherst receives water from the Buffalo River. The town of Madison Heights receives water from an impoundment on the Harris Creek-Graham Creek watershed. The City of Lynchburg receives water from a reservoir on the Pedlar River.

Climate

Climate data are provided in tables 1, 2, and 3. Table 1 gives data on temperature and precipitation for the survey area as recorded at the Lynchburg Airport in nearby Campbell County, Virginia, in the period 1961 to 1990. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, the average temperature is 36.6 degrees F and the average daily minimum temperature is 27.2 degrees. The lowest temperature on record, which occurred at Lynchburg on February 5, 1996, was -10 degrees. In summer, the average temperature is 74.0 degrees and the average daily maximum temperature is 84.5 degrees. The highest temperature, which occurred at Lynchburg on July 10, 1936, was 106 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation at Lynchburg is about 41 inches. The average annual precipitation across Amherst County is generally between 42 and 46 inches, except the average is slightly less than 40 inches in the northwestern part of the county and nearly 52 inches at the higher elevations where Amherst, Nelson, and Rockbridge Counties come together. Of the approximate 42 inches of annual precipitation, about 25 inches, or 62 percent, usually falls in April through October. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 6.05 inches, recorded on September 6, 1996. Thunderstorms occur on about 41 days each year, and most occur between May and August.

The average seasonal snowfall is about 20.8 inches. The greatest snow depth at any one time during the period of record was 25 inches. On the average, 16 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

The average relative humidity in midafternoon is about 52 percent. Humidity is higher at night, and the average at dawn is about 82 percent. The sun shines 63 percent of the time possible in summer and 53 percent in winter. The prevailing wind is from the southwest, except in August when it is from the north. Average windspeed is highest, about 9 miles per hour, in March and April.

How This Survey Was Made

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

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

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

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

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

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

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

The descriptions, names, and delineations of the soils in this survey area do not fully agree with those of the soils in adjacent survey areas. Differences are the result of a better knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Detailed Soil Map Units

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

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

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

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

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

Soils that have profiles that are almost alike make up a *soil series*. 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, Clifford loam, 7 to 15 percent slopes, is a phase of the Clifford series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes. 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. Edneytown-Peaks complex, 35 to 55 percent slopes, extremely stony, is an example.

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

Table 4 lists the map units in this survey area. 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.

1B—Buffstat silt loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Buffstat and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown silt loam

Subsurface layer:
3 to 7 inches—light yellowish brown loam

Subsoil:
7 to 22 inches—strong brown silty clay loam
22 to 39 inches—strong brown clay; common yellowish red and brownish yellow mottles

Substratum:
39 to 50 inches—red channery silty clay loam; common brownish yellow and yellowish red mottles

Soft bedrock:
50 to 60 inches—slightly weathered sericite schist

Minor Components

Dissimilar components:
- Very deep, well drained Wintergreen soils, which formed in colluvial and alluvial material; in similar landform positions
- Very deep, well drained Clifford soils, which have a red subsoil; in similar landform positions
- Very deep, well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Shallow, somewhat excessively drained Bugley soils that have less clay in the subsoil than the Buffstat soil; on the edges of map units

Similar components:
- Well drained Littlejoe soils, which have a red subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 5.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay; moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to loblolly pine and northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: V
Hydric soil: No

1C—Buffstat silt loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Buffstat and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown silt loam

Subsurface layer:
3 to 7 inches—light yellowish brown loam

Subsoil:
7 to 22 inches—strong brown silty clay loam
22 to 39 inches—strong brown clay; common yellowish red and brownish yellow mottles

Substratum:
39 to 50 inches—red channery silty clay loam; common brownish yellow and yellowish red mottles

Soft bedrock:
50 to 60 inches—slightly weathered sericite schist

Minor Components

Dissimilar components:
- Very deep, well drained Wintergreen soils, which formed in colluvial and alluvial material; in similar landform positions
- Very deep, well drained Clifford soils, which have a red subsoil; in similar landform positions
- Very deep, well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Shallow, somewhat excessively drained Bugley soils that have less clay in the subsoil than the Buffstat soil; on the edges of map units

Similar components:
- Well drained Littlejoe soils, which have a red subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 5.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)

Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to loblolly pine and northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: V
Hydric soil: No

1D—Buffstat silt loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Buffstat and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown silt loam

Subsurface layer:
3 to 7 inches—light yellowish brown loam

Subsoil:
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50 to 60 inches—slightly weathered sericite schist

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- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
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Similar components:
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Soil Properties and Qualities

Available water capacity: Low (about 5.9 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)

Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat, grass-legume hay, and alfalfa hay; poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to loblolly pine and northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: V
Hydric soil: No

2C—Bugley-Littlejoe complex, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular and linear

Map Unit Composition

Bugley and similar soils: Typically 70 percent, ranging from about 60 to 80 percent
Littlejoe and similar soils: Typically 25 percent, ranging from about 15 to 40 percent

Typical Profile

Bugley
Surface layer:
0 to 2 inches—dark grayish brown very channery silt loam

Subsurface layer:
2 to 6 inches—brownish yellow very channery silt loam

Subsoil:
6 to 12 inches—strong brown very channery silt loam

Substratum:
12 to 16 inches—light gray, brownish yellow, and yellowish brown extremely channery silt loam

Hard bedrock:
16 inches—sericite schist bedrock

Littlejoe
Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils, which have a strong brown clay loam subsoil that has seasonal wetness features; in and along narrow, natural drainageways
- Well drained Buffstat soils that have more clay in the subsoil than the major soils; in similar landscape positions

Similar components:
- Areas of soils that have very stony surface layers; in similar landscape positions

Soil Properties and Qualities

Available water capacity: Bugley—very low (about 2.0 inches); Littlejoe—high (about 9.6 inches)
Slowest saturated hydraulic conductivity: Bugley—high (about 2.0 in/hr); Littlejoe—moderately high (about 0.20 in/hr)
Depth class: Bugley—shallow (10 to 20 inches); Littlejoe—deep (40 to 60 inches)
Depth to root-restrictive feature: Bugley—10 to 20 inches to lithic bedrock; Littlejoe—40 to 60 inches to paralithic bedrock
Drainage class: Bugley—somewhat excessively drained; Littlejoe—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Bugley—low; Littlejoe—moderate
Runoff class: Bugley—very high; Littlejoe—medium
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Bugley—unsuited to cropland; Littlejoe—moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Bugley—poorly suited to pasture; Littlejoe—moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Bugley—moderately suited to northern red oak and poorly suited to loblolly pine; Littlejoe—moderately suited to loblolly pine, northern red oak, and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.

- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Bugley—6s; Littlejoe—3e
Virginia soil management group: Bugley—JJ; Littlejoe—V
Hydric soils: No

2D—Bugley-Littlejoe complex, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular and linear

Map Unit Composition

Bugley and similar soils: Typically 70 percent, ranging from about 60 to 80 percent
Littlejoe and similar soils: Typically 25 percent, ranging from about 15 to 40 percent

Typical Profile

Bugley
Surface layer:
0 to 2 inches—dark grayish brown very channery silt loam

Subsurface layer:
2 to 6 inches—brownish yellow very channery silt loam

Subsoil:
6 to 12 inches—strong brown very channery silt loam

Substratum:
12 to 16 inches—light gray, brownish yellow, and yellowish brown extremely channery silt loam

Hard bedrock:
16 inches—sericite schist bedrock

Littlejoe
Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Buffstat soils, which have more clay in the subsoil; in similar landscape positions

Similar components:
- Areas of soils that have very stony surface layers; in similar landscape positions

Soil Properties and Qualities

Available water capacity: Bugley—very low (about 2.0 inches); Littlejoe—high (about 9.6 inches)
Slowest saturated hydraulic conductivity: Bugley—high (about 2.0 in/hr); Littlejoe—moderately high (about 0.20 in/hr)
Depth class: Bugley—shallow (10 to 20 inches); Littlejoe—deep (40 to 60 inches)
Depth to root-restrictive feature: Bugley—10 to 20 inches to lithic bedrock; Littlejoe—40 to 60 inches to paralithic bedrock
Drainage class: Bugley—somewhat excessively drained; Littlejoe—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Bugley—low; Littlejoe—moderate
Runoff class: Bugley—very high; Littlejoe—high
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Bugley—unsuited to cropland; Littlejoe—moderately suited to wheat, grass-legume hay, and alfalfa hay and poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture

Suitability: Bugley—poorly suited to pasture; Littlejoe—moderately suited to pasture

- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland

Suitability: Bugley—moderately suited to northern red oak and poorly suited to loblolly pine; Littlejoe—moderately suited to loblolly pine, northern red oak, and yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites

- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets

- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Bugley—6s; Littlejoe—4e
Virginia soil management group: Bugley—JJ; Littlejoe—V
Hydric soils: No

2E—Bugley-Littlejoe complex, 25 to 60 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)

Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular and linear

Map Unit Composition

Bugley and similar soils: Typically 70 percent, ranging from about 60 to 80 percent
Littlejoe and similar soils: Typically 25 percent, ranging from about 15 to 40 percent

Typical Profile

Bugley
Surface layer:
0 to 2 inches—dark grayish brown very channery silt loam

Subsurface layer:
2 to 6 inches—brownish yellow very channery silt loam

Subsoil:
6 to 12 inches—strong brown very channery silt loam

Substratum:
12 to 16 inches—light gray, brownish yellow, and yellowish brown extremely channery silt loam

Hard bedrock:
16 inches—sericite schist bedrock

Littlejoe
Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Buffstat soils that have more clay in the subsoil; in similar landscape positions

Similar components:
- Areas of soils that have very stony surface layers; in similar landscape positions

Soil Properties and Qualities

Available water capacity: Bugley—very low (about 2.0 inches); Littlejoe—high (about 9.6 inches)
Slowest saturated hydraulic conductivity: Bugley—high (about 2.0 in/hr); Littlejoe—moderately high (about 0.20 in/hr)
Depth class: Bugley—shallow (10 to 20 inches); Littlejoe—deep (40 to 60 inches)
Depth to root-restrictive feature: Bugley—10 to 20 inches to lithic bedrock; Littlejoe—40 to 60 inches to paralithic bedrock

Drainage class: Bugley—somewhat excessively drained; Littlejoe—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Bugley—low; Littlejoe—moderate
Runoff class: Bugley—very high; Littlejoe—high
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Bugley—unsuited to pasture; Littlejoe—moderately suited to poorly suited to pasture
- These soils are not recommended for use as pasture.

Woodland
Suitability: Bugley—moderately suited to northern red oak and poorly suited to loblolly pine; Littlejoe—moderately suited to loblolly pine, northern red oak, and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Bugley—7e; Littlejoe—6e
Virginia soil management group: Bugley—JJ; Littlejoe—V
Hydric soils: No

3C—Catoctin-Rock outcrop complex, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 250 acres
Shape of areas: Irregular to linear

Map Unit Composition

Catoctin and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rock outcrop: Typically 30 percent, ranging from about 25 to 35 percent

Typical Profile

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—slightly weathered greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are metabasalts and associated metavolcanic and metasedimentary rocks, primarily greenstone.

Minor Components

Dissimilar components:
- Myersville soils, which have fewer rock fragments in the subsoil than the Catoctin soil and are in similar landscape positions

Similar components:
- Areas that have rock outcrops spaced more than 200 feet apart

Properties and Qualities of the Catoctin Soil

Available water capacity: Low (about 3.3 inches)
Slowest saturated hydraulic conductivity: High (about 2.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited

Pasture
Suitability: Unsuited

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Catoctin—7s; Rock outcrop—8
Virginia soil management group: Catoctin—JJ; Rock outcrop—none assigned
Hydric soils: No

3D—Catoctin-Rock outcrop complex, 15 to 25 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops and mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular to linear

Map Unit Composition

Catoctin and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rock outcrop: Typically 30 percent, ranging from about 25 to 35 percent

Typical Profile

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—slightly weathered greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are metabasalts and associated metavolcanic and metasedimentary rocks, primarily greenstone.

Minor Components

Dissimilar components:
- Myersville soils, which have fewer rock fragments in the subsoil than the Catoctin soil and are in similar landscape positions

Similar components:
- Areas that have rock outcrops spaced more than 200 feet apart

Properties and Qualities of the Catoctin Soil

Available water capacity: Low (about 3.3 inches)
Slowest saturated hydraulic conductivity: High (about 2.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Catoctin—7s; Rock outcrop—8
Virginia soil management group: Catoctin—JJ; Rock outcrop—none assigned
Hydric soils: No

3E—Catoctin-Rock outcrop complex, 25 to 75 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular to linear

Map Unit Composition

Catoctin and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rock outcrop: Typically 30 percent, ranging from about 25 to 35 percent

Typical Profile

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—slightly weathered greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are metabasalts and associated metavolcanic and metasedimentary rocks, primarily greenstone.

Minor Components

Dissimilar components:
- Myersville soils, which have fewer rock fragments in the subsoil than the Catoctin soil and are in similar landscape positions

Similar components:
- Areas that have rock outcrops spaced more than 200 feet apart

Properties and Qualities of the Catoctin Soil

Available water capacity: Low (about 3.3 inches)
Slowest saturated hydraulic conductivity: High (about 2.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Catoctin—7s; Rock outcrop—8
Virginia soil management group: Catoctin—JJ; Rock outcrop—none assigned
Hydric soils: No

4B—Clifford clay loam, 2 to 7 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown clay loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvial or alluvial materials; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Noneroded soils that have loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat and poorly suited to corn, soybeans, grass-legume hay, and alfalfa hay

- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: X
Hydric soil: No

4C—Clifford clay loam, 7 to 15 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown clay loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvial or alluvial materials; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Noneroded soils that have loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: X
Hydric soil: No

4D—Clifford clay loam, 15 to 25 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown clay loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units

- Well drained Wintergreen soils, which formed in colluvial or alluvial materials; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Noneroded soils that have loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.

• Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6e
Virginia soil management group: X
Hydric soil: No

4E—Clifford clay loam, 25 to 50 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Nose slopes and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown clay loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
• Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
• Well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
• Well drained Wintergreen soils, which formed in colluvial or alluvial materials; in similar landform positions

Similar components:
• Well drained soils that have a strong brown subsoil; in similar landform positions
• Noneroded soils that have loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and eastern white pine; moderately suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites

- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets

- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: X
Hydric soil: No

5B—Clifford loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 100 acres
Shape of areas: Broad to irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Moderately deep, well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils; on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: X
Hydric soil: No

5C—Clifford loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 100 acres
Shape of areas: Broad to irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Moderately deep, well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: X
Hydric soil: No

5D—Clifford loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Moderately deep, well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Edneytown soils, which have less clay in the subsoil than the Clifford soil; in similar landscape positions
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat, grass-legume hay, and alfalfa hay and poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: X
Hydric soil: No

5E—Clifford loam, 25 to 50 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Nose slopes and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Moderately deep, well drained Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Stott Knob soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Edneytown soils, which have less clay in the subsoil than the Clifford soil; in similar landscape positions
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: X
Hydric soil: No

6B—Clifford loam, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to eastern white pine; moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: X
Hydric soil: No

6C—Clifford loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None

Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to eastern white pine and moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: X
Hydric soil: No

6D—Clifford loam, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils; on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions
- Well drained Minnieville soils in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to eastern white pine and moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.

- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: X
Hydric soil: No

6E—Clifford loam, 25 to 50 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Nose slopes and side slopes
Size of areas: 5 to 50 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Clifford and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 10 inches—brown loam

Subsoil:
10 to 72 inches—red clay

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Clifford soil; on the edges of map units
- Well drained Elsinboro soils and moderately well drained Delanco soils; on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvial or alluvial material; in similar landform positions

Similar components:
- Well drained soils that have a strong brown subsoil; in similar landform positions
- Eroded soils that have clay loam surface layers; in similar landform positions

- Well drained Minnieville soils in similar landform positions
- Well drained Littlejoe soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Residuum weathered from granite, mica gneiss, and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to eastern white pine and moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e

Virginia soil management group: X
Hydric soil: No

7A—Codorus silt loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 50 acres
Shape of areas: Irregular and linear

Map Unit Composition

Codorus and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 7 inches—brown loam

Subsoil:
7 to 13 inches—brown clay loam; yellowish red and yellowish brown masses of oxidized iron
13 to 27 inches—dark yellowish brown clay loam; dark grayish brown iron depletions and yellowish red masses of oxidized iron
27 to 40 inches—dark gray clay loam; grayish brown iron depletions and yellowish brown masses of oxidized iron

Substratum:
40 to 58 inches—gray clay loam; strong brown masses of oxidized iron
58 to 65 inches—gray fine sandy loam; strong brown masses of oxidized iron

Minor Components

Dissimilar components:
- Well drained Comus soils, which have less clay in the subsoil than the Codorus soil; in similar landform positions
- Well drained Craigsville soils, which have more rock fragments throughout than the Codorus soil; in similar landform positions
- Well drained Elsinboro soils, which have a more developed subsoil than the Codorus soil; on adjacent low terraces

Similar components:
- Moderately well drained Suches soils in similar landform positions
- Moderately well drained Delanco soils, which have a more developed subsoil than the Codorus soil; on adjacent low terraces
- Soils that have darker surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 8.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Somewhat poorly drained
Depth to seasonal water saturation: About 1.0 to 2.0 feet

Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, schist, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.
- Soil wetness may limit the use of log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding limits the use of the soil for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- Flooding limits the use of the soil for septic tank absorption fields.
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Flooding may damage local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6w
Virginia soil management group: A
Hydric soil: No

8B—Colleen loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 30 acres
Shape of areas: Broad to irregular

Map Unit Composition

Colleen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish brown loam

Subsoil:
6 to 50 inches—red clay

Substratum:
50 to 65 inches—red silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Poorly drained Pineywoods soils in broad, level landform positions

Similar components:
- Well drained Minnieville soils, which weathered from hornblende gneiss, gabbro, and greenstone; in similar landform positions
- Moderately well drained Sketerville soils in similar landform positions
- Soils that have gravelly surfaces

Soil Properties and Qualities

Available water capacity: Moderate (about 7.9 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn and grass-legume hay, soybeans, and wheat and unsuited to alfalfa hay

- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and chestnut oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: KK
Hydric soil: No

8C—Colleen loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 30 acres
Shape of areas: Broad to irregular

Map Unit Composition

Colleen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish brown loam

Subsoil:
6 to 50 inches—red clay

Substratum:
50 to 65 inches—red silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Poorly drained Pineywoods soils in broad, level landform positions

Similar components:
- Well drained Minnieville soils, which weathered from hornblende gneiss, gabbro, and greenstone; in similar landform positions
- Moderately well drained Sketerville soils in broad, level landform positions
- Soils that have gravelly surfaces

Soil Properties and Qualities

Available water capacity: Moderate (about 7.9 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Moderately suited to grass-legume hay; poorly suited to corn, soybeans, and wheat; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and chestnut oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.

- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: KK
Hydric soil: No

8D—Colleen loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 30 acres
Shape of areas: Irregular to linear

Map Unit Composition

Colleen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish brown loam

Subsoil:
6 to 50 inches—red clay

Substratum:
50 to 65 inches—red silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions

Similar components:
- Well drained Minnieville soils, which weathered from hornblende gneiss, gabbro, and greenstone; in similar landform positions
- Moderately well drained Sketerville soils in broad, level landform positions
- Soils that have gravelly surfaces

Soil Properties and Qualities

Available water capacity: Moderate (about 7.9 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn, soybeans, wheat, and grass-legume hay and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and chestnut oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: KK
Hydric soil: No

9A—Combs loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 100 acres
Shape of areas: Irregular and linear

Map Unit Composition

Combs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 12 inches—very dark grayish brown loam; brown when dry

Subsoil:
12 to 44 inches—dark yellowish brown loam
44 to 61 inches—dark yellowish brown fine sandy loam
61 to 72 inches—dark yellowish brown loam

Minor Components

Dissimilar components:
- Well drained Speedwell soils, which have more clay in the subsoil than the Combs soil; in similar landform positions
- Moderately well drained Sindion soils, which have more clay in the subsoil than the Combs soil; in similar landform positions
- Poorly drained Yogaville soils, which have more clay in the subsoil than the Combs soil; in similar landform positions

Similar components:
- Soils that have thin or light-colored surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, schist, greenstone, phyllite, sandstone and shale, and/or limestone

Use and Management Considerations

Cropland
Suitability: Well suited to corn and soybeans and moderately suited to wheat and alfalfa hay
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.

Woodland
Suitability: Well suited to loblolly pine, moderately suited to sweetgum, and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- Flooding limits the use of the soil for building site development.

Septic tank absorption fields
- Flooding limits the use of the soil for septic tank absorption fields.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Flooding may damage local roads and streets.

Interpretive Groups

Prime farmland: Prime farmland if protected from flooding or not frequently flooded during the growing season

Land capability class: 2w
Virginia soil management group: A
Hydric soil: No

10A—Comus fine sandy loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 100 acres
Shape of areas: Irregular and linear

Map Unit Composition

Comus and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 8 inches—dark yellowish brown fine sandy loam

Subsoil:
8 to 38 inches—strong brown fine sandy loam
38 to 45 inches—brown fine sandy loam

Substratum:
45 to 65 inches—brown stratified fine sandy loam to loamy sand

Minor Components

Dissimilar components:
- Well drained Elsinboro soils and moderately well drained Delanco soils, which have more clay in the subsoil; on head slopes, on footslopes, on toeslopes, and in drainageways
- Moderately well drained and somewhat poorly drained Codorus soils, which have less sand throughout; in similar landform positions
- Moderately well drained Suches soils, which have more clay in the subsoil; on valley flats

Similar components:
- Well drained Craigsville soils, which have more rock fragments throughout; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low

Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, schist, gabbro, diorite, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.

Building sites
- Flooding limits the use of the soil for building site development.

Septic tank absorption fields
- Flooding limits the use of the soil for septic tank absorption fields.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Flooding may damage local roads and streets.

Interpretive Groups

Prime farmland: Prime farmland if protected from flooding or not frequently flooded during the growing season
Land capability class: 2w
Virginia soil management group: A
Hydric soil: No

11A—Craigsville very cobbly sandy loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 100 acres
Shape of areas: Irregular and linear

Map Unit Composition

Craigsville and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 5 inches—dark yellowish brown very cobbly sandy loam

Subsoil:
5 to 14 inches—dark yellowish brown very cobbly loam
14 to 32 inches—yellowish brown very cobbly loam; yellowish brown masses of oxidized iron

Substratum:
32 to 54 inches—dark yellowish brown extremely gravelly loamy sand; yellowish brown masses of oxidized iron and black manganese coatings
54 to 72 inches—yellowish brown extremely cobbly sandy loam; yellowish brown masses of oxidized iron

Minor Components

Dissimilar components:
- Moderately well drained Suches soils, which have fewer rock fragments throughout; in similar landform positions
- Moderately well drained and somewhat poorly drained Codorus soils, which have fewer rock fragments throughout; in similar landform positions
- Small areas of poorly drained soils in backswamp positions
- Moderately well drained Delanco soils, which have a more developed subsoil; on adjacent low terraces
- Well drained Elsinboro soils, which have a more developed subsoil; on adjacent low terraces

Similar components:
- Well drained Comus soils, which have fewer rock fragments throughout; in similar landform positions
- Areas of soils that have very stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 5.8 inches)
Slowest saturated hydraulic conductivity: High (about 2.0 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very low
Surface fragments: About 0.1 to 3.0 percent stones
Parent material: Alluvium derived from granodiorite, granite and gneiss, schist, phyllite, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat; poorly suited to corn, soybeans, and grass-legume hay; and unsuited to alfalfa hay
- Rock fragments on the surface may restrict the operation of farm machinery and interfere with the emergence of seedlings.
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture

Suitability: Poorly suited to pasture

- Flooding may damage pastures.
- Rock fragments on the surface may restrict the operation of farm machinery.

Woodland

Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse-textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- The coarseness of the soil material may reduce the traction of wheeled harvest equipment and log trucks.

Building sites

- Flooding limits the use of the soil for building site development.

Septic tank absorption fields

- Flooding limits the use of the soil for septic tank absorption fields.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets

- Flooding may damage local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4s
Virginia soil management group: CC
Hydric soil: No

12D—Dekalb-Hazleton complex, 15 to 35 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Dekalb and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Hazleton and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Dekalb
Organic layer:
0 to 1 inch—moderately decomposed plant material

Surface layer:
1 to 4 inches—black channery loam

Subsoil:
4 to 7 inches—dark yellowish brown loam
7 to 13 inches—dark yellowish brown very channery loam
13 to 20 inches—yellowish brown very channery loam
20 to 26 inches—yellowish brown very flaggy loam

Substratum:
26 to 31 inches—yellowish brown extremely flaggy loam

Hard bedrock:
31 inches—metasandstone bedrock

Hazleton
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 4 inches—black loam

Subsoil:
4 to 7 inches—brown channery loam
7 to 16 inches—strong brown very channery loam
16 to 24 inches—dark yellowish brown very channery loam
24 to 31 inches—dark yellowish brown extremely channery loam

Substratum:
31 to 43 inches—dark yellowish brown extremely channery loam

Hard bedrock:
43 inches—metasandstone bedrock

Minor Components

Dissimilar components:
- Well drained Sylco soils, which formed in phyllite; in similar landform positions
- Shallow, well drained Sylvatus soils, which formed in phyllite; in similar landform positions
- Well drained Edneytown soils, which formed in granite and granodiorite; in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Somewhat excessively drained Peaks soils, which formed in granite and granodiorite; in similar landform positions

Soil Properties and Qualities

Available water capacity: Dekalb—very low (about 2.8 inches); Hazleton—low (about 4.3 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Dekalb—moderately deep (20 to 40 inches); Hazleton—deep (40 to 60 inches)

Depth to root-restrictive feature: Dekalb—20 to 40 inches to lithic bedrock; Hazleton—40 to 60 inches to lithic bedrock
Drainage class: Dekalb—excessively drained; Hazleton—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Dekalb—very high; Hazleton—medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Residuum weathered from quartzite and/or metasandstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Dekalb—poorly suited to northern red oak; Hazleton—moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Dekalb—FF; Hazleton—JJ
Hydric soils: No

12E—Dekalb-Hazleton complex, 35 to 55 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Dekalb and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Hazleton and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Dekalb
Organic layer:
0 to 1 inch—moderately decomposed plant material

Surface layer:
1 to 4 inches—black channery loam

Subsoil:
4 to 7 inches—dark yellowish brown loam
7 to 13 inches—dark yellowish brown very channery loam
13 to 20 inches—yellowish brown very channery loam
20 to 26 inches—yellowish brown very flaggy loam

Substratum:
26 to 31 inches—yellowish brown extremely flaggy loam

Hard bedrock:
31 inches—metasandstone bedrock

Hazleton
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 4 inches—black loam

Subsoil:
4 to 7 inches—brown channery loam
7 to 16 inches—strong brown very channery loam
16 to 24 inches—dark yellowish brown very channery loam
24 to 31 inches—dark yellowish brown extremely channery loam

Substratum:
31 to 43 inches—dark yellowish brown extremely channery loam

Hard bedrock:
43 inches—metasandstone bedrock

Minor Components

Dissimilar components:
- Well drained Sylco soils, which formed in phyllite; in similar landform positions
- Shallow, well drained Sylvatus soils, which formed in phyllite; in similar landform positions
- Well drained Edneytown soils, which formed in granite and granodiorite; in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Somewhat excessively drained Peaks soils, which formed in granite and granodiorite; in similar landform positions

Soil Properties and Qualities

Available water capacity: Dekalb—very low (about 2.8 inches); Hazleton—low (about 4.3 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Dekalb—moderately deep (20 to 40 inches); Hazleton—deep (40 to 60 inches)
Depth to root-restrictive feature: Dekalb—20 to 40 inches to lithic bedrock; Hazleton—40 to 60 inches to lithic bedrock
Drainage class: Dekalb—excessively drained; Hazleton—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Dekalb—very high; Hazleton—medium
Surface fragments: About 3 to 15 percent subangular stones
Parent material: Residuum weathered from quartzite and/or metasandstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Dekalb—poorly suited to northern red oak; Hazleton—moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.

- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse-textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Dekalb—FF; Hazleton—JJ
Hydric soils: No

12F—Dekalb-Hazleton complex, 55 to 75 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Dekalb and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Hazleton and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Dekalb
Organic layer:
0 to 1 inch—moderately decomposed plant material

Surface layer:
1 to 4 inches—black channery loam

Subsoil:
4 to 7 inches—dark yellowish brown loam
7 to 13 inches—dark yellowish brown very channery loam
13 to 20 inches—yellowish brown very channery loam
20 to 26 inches—yellowish brown very flaggy loam

Substratum:
26 to 31 inches—yellowish brown extremely flaggy loam

Hard bedrock:
31 inches—metasandstone bedrock

Hazleton
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 4 inches—black loam

Subsoil:
4 to 7 inches—brown channery loam
7 to 16 inches—strong brown very channery loam
16 to 24 inches—dark yellowish brown very channery loam
24 to 31 inches—dark yellowish brown extremely channery loam

Substratum:
31 to 43 inches—dark yellowish brown extremely channery loam

Hard bedrock:
43 inches—metasandstone bedrock

Minor Components

Dissimilar components:
- Well drained Sylco soils, which formed in phyllite; in similar landform positions
- Shallow, well drained Sylvatus soils, which formed in phyllite; in similar landform positions
- Well drained Edneytown soils, which formed in granite and granodiorite; in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Somewhat excessively drained Peaks soils, which formed in granite and granodiorite; in similar landform positions

Soil Properties and Qualities

Available water capacity: Dekalb—very low (about 2.8 inches); Hazleton—low (about 4.3 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Dekalb—moderately deep (20 to 40 inches); Hazleton—deep (40 to 60 inches)
Depth to root-restrictive feature: Dekalb—20 to 40 inches to lithic bedrock; Hazleton—40 to 60 inches to lithic bedrock
Drainage class: Dekalb—excessively drained; Hazleton—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Dekalb—very high; Hazleton—medium

Surface fragments: About 3 to 15 percent subangular stones
Parent material: Residuum weathered from quartzite and/or metasandstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Dekalb—poorly suited to northern red oak; Hazleton—moderately suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e

Virginia soil management group: Dekalb—FF; Hazleton—JJ
Hydric soils: No

13E—Dekalb-Rock outcrop complex, 35 to 55 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Dekalb and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Dekalb
Organic layer:
0 to 1 inch—moderately decomposed plant material

Surface layer:
1 to 4 inches—black channery loam

Subsoil:
4 to 7 inches—dark yellowish brown loam
7 to 13 inches—dark yellowish brown very channery loam
13 to 20 inches—yellowish brown very channery loam
20 to 26 inches—yellowish brown very flaggy loam

Substratum:
26 to 31 inches—yellowish brown extremely flaggy loam

Hard bedrock:
31 inches—metasandstone bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are quartzite or metasandstone.

Minor Components

Dissimilar components:
- Deep, well drained Hazleton soils in similar landform positions
- Well drained Edneytown soils, which formed in granite or granodiorite; in similar landform positions
- Well drained Sylco soils, which formed in phyllite; in similar landform positions
- Shallow, well drained Sylvatus soils, which formed in phyllite; in similar landform positions
- Areas of soils that have rock outcrops

Similar components:
- Moderately deep, somewhat excessively drained Peaks soils, which formed in granite or granodiorite; in similar landform positions

Properties and Qualities of the Dekalb Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from quartzite and/or metasandstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Poorly suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Dekalb—7s; Rock outcrop—8
Virginia soil management group: Dekalb—FF; Rock outcrop—none assigned
Hydric soils: No

13F—Dekalb-Rock outcrop complex, 55 to 75 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Dekalb and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Dekalb
Organic layer:
0 to 1 inch—moderately decomposed plant material

Surface layer:
1 to 4 inches—black channery loam

Subsoil:
4 to 7 inches—dark yellowish brown loam
7 to 13 inches—dark yellowish brown very channery loam
13 to 20 inches—yellowish brown very channery loam
20 to 26 inches—yellowish brown very flaggy loam

Substratum:
26 to 31 inches—yellowish brown extremely flaggy loam

Hard bedrock:
31 inches—metasandstone bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are quartzite or metasandstone.

Minor Components

Dissimilar components:
- Deep, well drained Hazleton soils in similar landform positions

- Well drained Edneytown soils, which formed in granite or granodiorite; in similar landform positions
- Well drained Sylco soils, which formed in phyllite; in similar landform positions
- Shallow, well drained Sylvatus soils, which formed in phyllite; in similar landform positions
- Areas of soils that have rock outcrops

Similar components:
- Moderately deep, somewhat excessively drained Peaks soils, which formed in granite or granodiorite; in similar landform positions

Properties and Qualities of the Dekalb Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from quartzite and/or metasandstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Poorly suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Dekalb—7s; Rock outcrop—8
Virginia soil management group: Dekalb—FF; Rock outcrop—none assigned
Hydric soils: No

14B—Delanco loam, 2 to 7 percent slopes, rarely flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Stream terraces
Position on the landform: Treads and risers
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Delanco and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 4 inches—dark yellowish brown loam

Subsoil:
4 to 25 inches—strong brown clay loam
25 to 35 inches—strong brown clay loam; grayish brown iron depletions

Substratum:
35 to 60 inches—strong brown silt loam; grayish brown iron depletions

Minor Components

Dissimilar components:
- Well drained Comus soils, which have less clay in the subsoil than the Delanco soil; on levees
- Well drained Craigsville soils, which have more rock fragments in the subsoil than the Delanco soil; on flood plains
- Well drained Unison soils in similar landform positions

Similar components:
- Somewhat poorly drained Codorus soils, which have a less developed subsoil than the Delanco soil; in similar landform positions

- Well drained Elsinboro soils in similar landform positions
- Moderately well drained Suches soils, which have a less developed subsoil than the Delanco soil; on flood plains
- Soils that have cobbly layers at a depth of 24 inches or more

Soil Properties and Qualities

Available water capacity: High (about 9.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Moderately well drained
Depth to seasonal water saturation: About 1.0 to 2.5 feet
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, schist, diorite, gabbro, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay; moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- Soil wetness may limit the use of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding limits the use of the soil for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: B
Hydric soil: No

15B—Delanco-Elsinboro complex, 2 to 7 percent slopes, rarely flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Stream terraces and drainageways
Position on the landform: Treads, risers, head slopes, and base slopes
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Delanco and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Elsinboro and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Delanco
Surface layer:
0 to 4 inches—dark yellowish brown loam

Subsoil:
4 to 25 inches—strong brown clay loam
25 to 35 inches—strong brown clay loam; grayish brown iron depletions

Substratum:
35 to 60 inches—strong brown silt loam; grayish brown iron depletions

Elsinboro
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 20 inches—strong brown clay loam
20 to 38 inches—yellowish red clay loam

Substratum:
38 to 60 inches—strong brown sandy clay loam

Minor Components

Dissimilar components:
- Small areas of somewhat poorly drained soils; on flats or in depressions

Similar components:
- Moderately well drained Suches soils on flood plains

- Areas of soils that have clay loam surface layers; in similar landform positions
- Areas of soils that have a clayey subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Delanco—high (about 9.3 inches); Elsinboro—moderate (about 8.1 inches)
Slowest saturated hydraulic conductivity: Delanco—moderately high (about 0.20 in/hr); Elsinboro—moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Delanco—moderately well drained; Elsinboro—well drained
Depth to seasonal water saturation: Delanco—about 12 to 30 inches; Elsinboro—about 60 to 79 inches
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Delanco—moderate; Elsinboro—low
Runoff class: Medium
Surface fragments: None
Parent material: Alluvium and/or colluvium derived from granite and gneiss, schist, diorite, gabbro, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- Soil wetness may limit the use of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding limits the use of the soil for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: Delanco—B; Elsinboro—L
Hydric soils: No

15C—Delanco-Elsinboro complex, 7 to 15 percent slopes, rarely flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Stream terraces and drainageways
Position on the landform: Treads, risers, head slopes, and base slopes
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Delanco and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Elsinboro and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Delanco
Surface layer:
0 to 4 inches—dark yellowish brown loam

Subsoil:
4 to 25 inches—strong brown clay loam
25 to 35 inches—strong brown clay loam; grayish brown iron depletions

Substratum:
35 to 60 inches—strong brown silt loam; grayish brown iron depletions

Elsinboro
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 20 inches—strong brown clay loam
20 to 38 inches—yellowish red clay loam

Substratum:
38 to 60 inches—strong brown sandy clay loam

Minor Components

Dissimilar components:
- Small areas of somewhat poorly drained soils on flats or in depressions

Similar components:
- Moderately well drained Suches soils; on flood plains
- Areas of soils that have clay loam surface layers; in similar landform positions
- Areas of soils that have a clayey subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Delanco—high (about 9.3 inches); Elsinboro—moderate (about 8.1 inches)
Slowest saturated hydraulic conductivity: Delanco—moderately high (about 0.20 in/hr); Elsinboro—moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Delanco—moderately well drained; Elsinboro—well drained
Depth to seasonal water saturation: Delanco—about 12 to 30 inches; Elsinboro—about 60 to 79 inches
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Delanco—moderate; Elsinboro—low
Runoff class: Medium
Surface fragments: None
Parent material: Alluvium and/or colluvium derived from granite and gneiss, schist, diorite, gabbro, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Delanco—well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay; Elsinboro—well suited to wheat and grass-legume hay and moderately suited to alfalfa hay, corn, and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- Soil wetness may limit the use of log trucks.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Flooding limits the use of the soil for building site development.

- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: Delanco—B; Elsinboro—L
Hydric soils: No

16C—Edneytown loam, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions

- Areas of soils that have very stony surfaces; in similar landform positions
- Somewhat excessively drained Peaks soils, which have more rock fragments throughout than the Edneytown soil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: L
Hydric soil: No

16D—Edneytown loam, 15 to 25 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops and mountain flanks
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that have very stony surfaces; in similar landform positions
- Somewhat excessively drained Peaks soils, which have more rock fragments throughout; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet

Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to wheat; moderately suited to corn, soybeans, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: L
Hydric soil: No

16E—Edneytown loam, 25 to 50 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that have very stony surfaces; in similar landform positions
- Somewhat excessively drained Peaks soils, which have more rock fragments throughout than the Edneytown soil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.7 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: L
Hydric soil: No

17B—Edneytown-Peaks complex, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Peaks and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Edneytown
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Well drained Sylco soils in similar landform positions
- Well drained Sylvatus soils in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Soil Properties and Qualities

Available water capacity: Edneytown—moderate (about 7.7 inches); Peaks—very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: Edneytown—moderately high (about 0.6 in/hr); Peaks—high (about 6.0 in/hr)
Depth class: Edneytown—very deep (more than 60 inches); Peaks—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Edneytown—more than 60 inches; Peaks—20 to 40 inches to lithic bedrock
Drainage class: Edneytown—well drained; Peaks—somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet

Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Edneytown—moderately suited to pasture; Peaks—poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Edneytown—well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar; Peaks—moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: Edneytown—L; Peaks—JJ
Hydric soils: No

17C—Edneytown-Peaks complex, 7 to 15 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Peaks and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Edneytown
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Well drained Sylco soils in similar landform positions
- Well drained Sylvatus soils in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Soil Properties and Qualities

Available water capacity: Edneytown—moderate (about 7.7 inches); Peaks—very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: Edneytown—moderately high (about 0.6 in/hr); Peaks—high (about 6.0 in/hr)
Depth class: Edneytown—very deep (more than 60 inches); Peaks—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Edneytown—more than 60 inches; Peaks—20 to 40 inches to lithic bedrock
Drainage class: Edneytown—well drained; Peaks—somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: About 3 to 15 percent angular stones
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Edneytown—well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar; Peaks—moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.

- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Edneytown—L; Peaks—JJ
Hydric soils: No

17D—Edneytown-Peaks complex, 15 to 35 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops and mountain flanks
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Peaks and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Edneytown
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Well drained Sylco soils in similar landform positions
- Well drained Sylvatus soils in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Soil Properties and Qualities

Available water capacity: Edneytown—moderate (about 7.7 inches); Peaks—very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: Edneytown—moderately high (about 0.6 in/hr); Peaks—high (about 6.0 in/hr)
Depth class: Edneytown—very deep (more than 60 inches); Peaks—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Edneytown—more than 60 inches; Peaks—20 to 40 inches to lithic bedrock
Drainage class: Edneytown—well drained; Peaks—somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low

Runoff class: High
Surface fragments: About 3 to 15 percent angular stones
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Edneytown—well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar; Peaks—moderately suited to northern red oak

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites

- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields

- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets

- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Edneytown—L; Peaks—JJ
Hydric soils: No

17E—Edneytown-Peaks complex, 35 to 55 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 400 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Peaks and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Edneytown
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Well drained Sylco soils in similar landform positions
- Well drained Sylvatus soils in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Soil Properties and Qualities

Available water capacity: Edneytown—moderate (about 7.7 inches); Peaks—very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: Edneytown—moderately high (about 0.6 in/hr); Peaks—high (about 6.0 in/hr)
Depth class: Edneytown—very deep (more than 60 inches); Peaks—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Edneytown—more than 60 inches; Peaks—20 to 40 inches to lithic bedrock
Drainage class: Edneytown—well drained; Peaks—somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 3 to 15 percent angular stones
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Edneytown—well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar; Peaks—moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.

- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Edneytown—L; Peaks—JJ
Hydric soils: No

17F—Edneytown-Peaks complex, 55 to 75 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 400 acres
Shape of areas: Irregular

Map Unit Composition

Edneytown and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Peaks and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Edneytown
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown loam

Subsurface layer:
3 to 7 inches—yellowish brown fine sandy loam

Subsoil:
7 to 39 inches—strong brown clay loam

Substratum:
39 to 61 inches—yellowish brown and strong brown loam saprolite

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Minor Components

Dissimilar components:
- Well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Well drained Sylco soils in similar landform positions
- Well drained Sylvatus soils in similar landform positions
- Areas of soils that do not have stony surfaces; in similar landform positions

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Soil Properties and Qualities

Available water capacity: Edneytown—moderate (about 7.7 inches); Peaks—very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: Edneytown—moderately high (about 0.6 in/hr); Peaks—high (about 6.0 in/hr)

Depth class: Edneytown—very deep (more than 60 inches); Peaks—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Edneytown—more than 60 inches; Peaks—20 to 40 inches to lithic bedrock
Drainage class: Edneytown—well drained; Peaks—somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 3 to 15 percent angular stones
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Edneytown—well suited to northern red oak and eastern white pine and moderately suited to loblolly pine and yellow-poplar; Peaks—moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Edneytown—L; Peaks—JJ
Hydric soils: No

18B—Elsinboro loam, 2 to 7 percent slopes, rarely flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Stream terraces
Position on the landform: Treads and risers
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Elsinboro and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 20 inches—strong brown clay loam
20 to 38 inches—yellowish red clay loam

Substratum:
38 to 60 inches—strong brown sandy clay loam

Minor Components

Dissimilar components:
- Well drained Comus soils, which have less clay in the subsoil than the Elsinboro soil; on levees
- Well drained Craigsville soils, which have more rock fragments in the subsoil than the Elsinboro soil; on flood plains
- Well drained Unison soils in similar landform positions

Similar components:

- Somewhat poorly drained Codorus soils, which have a less developed subsoil than the Elsinboro soil; on flood plains
- Moderately well drained Delanco soils in similar landform positions
- Moderately well drained Suches soils, which have a less developed subsoil; on flood plains
- Soils that have cobbly layers at a depth of 24 inches or more

Soil Properties and Qualities

Available water capacity: Moderate (about 8.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: About 60 to 79 inches
Water table kind: Apparent
Flooding hazard: Rare
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, schist, diorite, gabbro, and/or phyllite

Use and Management Considerations

Cropland

Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay

- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture

Suitability: Well suited to pasture

- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland

Suitability: Moderately suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites

- Flooding limits the use of the soil for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields

- This soil is well suited to septic tank absorption fields

Local roads and streets

- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: L
Hydric soil: No

19C—Fauquier loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Mountain slopes and hillslopes
Position on the landform: Mountaintops and interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Fauquier and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 4 inches—strong brown loam

Subsoil:
4 to 25 inches—red clay
25 to 38 inches—red silty clay loam

Substratum:
38 to 55 inches—yellowish red, black, and yellowish brown silt loam

Soft bedrock:
55 to 60 inches—greenstone bedrock

Minor Components

Dissimilar components:

- Well drained Minnieville soils in similar landform positions
- Moderately deep, well drained Spriggs soils in similar landform positions
- Moderately deep, well drained Catoctin soils in similar landform positions

Similar components:

- Deep, well drained Myersville soils in similar landform positions
- Soils that lack stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.4 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained

Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from greenstone and/or gabbro

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: N
Hydric soil: No

19D—Fauquier loam, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Mountain slopes and hillslopes
Position on the landform: Mountain flanks, head slopes, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Narrow to irregular

Map Unit Composition

Fauquier and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 4 inches—strong brown loam

Subsoil:
4 to 25 inches—red clay
25 to 38 inches—red silty clay loam

Substratum:
38 to 55 inches—yellowish red, black, and yellowish brown silt loam

Soft bedrock:
55 to 60 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Minnieville soils in similar landform positions
- Moderately deep, well drained Spriggs soils in similar landform positions
- Moderately deep, well drained Catoctin soils in similar landform positions

Similar components:
- Deep, well drained Myersville soils in similar landform positions
- Soils that lack stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.4 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from greenstone and/or gabbro

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: N
Hydric soil: No

19E—Fauquier loam, 25 to 50 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Mountain slopes and hillslopes
Position on the landform: Mountain flanks, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Narrow to irregular

Map Unit Composition

Fauquier and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 4 inches—strong brown loam

Subsoil:
4 to 25 inches—red clay
25 to 38 inches—red silty clay loam

Substratum:
38 to 55 inches—yellowish red, black, and yellowish brown silt loam

Soft bedrock:
55 to 60 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Minnieville soils in similar landform positions
- Moderately deep, well drained Spriggs soils in similar landform positions
- Moderately deep, well drained Catoctin soils in similar landform positions

Similar components:
- Deep, well drained Myersville soils in similar landform positions
- Soils that lack stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.4 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from greenstone and/or gabbro

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.

- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: N
Hydric soil: No

20B—Haymarket-Mirerock complex, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 150 acres
Shape of areas: Broad to narrow and irregular

Map Unit Composition

Haymarket and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Mirerock and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Haymarket
Surface layer:
0 to 7 inches—dark yellowish brown loam; black iron-manganese concretions

Subsoil:
7 to 20 inches—yellowish brown clay; strong brown and yellowish red masses of oxidized iron
20 to 35 inches—yellowish brown clay; grayish brown iron depletions and yellowish red, strong brown, and red masses of oxidized iron
35 to 45 inches—strong brown, white, red, and yellowish brown silty clay loam

Substratum:
45 to 65 inches—yellowish red and strong brown loam saprolite

Mirerock
Surface layer:
0 to 1 inch—dark brown loam

Subsurface layer:
1 to 5 inches—light olive brown fine sandy loam

Subsoil:
5 to 30 inches—pale brown and yellowish brown silty clay; black iron-manganese concretions

Soft bedrock:
30 inches—chlorite-amphibole schist bedrock

Minor Components

Dissimilar components:
- Well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the major soils; in similar landform positions
- Areas of soils that have very stony surfaces
- Soils that have perched seasonal wetness at a depth of 20 inches or less

Soil Properties and Qualities

Available water capacity: Haymarket—moderate (about 8.7 inches); Mirerock—low (about 4.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Haymarket—very deep (more than 60 inches); Mirerock—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Haymarket—more than 60 inches; Mirerock—20 to 40 inches to paralithic bedrock
Drainage class: Haymarket—well drained to moderately well drained; Mirerock—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: High
Runoff class: Haymarket—medium; Mirerock—high
Surface fragments: None
Parent material: Haymarket—residuum weathered from gabbro, greenstone, and/or diorite; Mirerock—residuum weathered from gabbro, diorite, greenstone, chlorite-amphibole schist, hornblende schist, and/or hornblende gneiss

Use and Management Considerations

Cropland
Suitability: Moderately suited to grass-legume hay; poorly suited to corn, soybeans, and wheat; and unsuited to alfalfa hay

- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Haymarket—well suited to loblolly pine and northern red oak and poorly suited to yellow-poplar; Mirerock—moderately suited to loblolly pine and northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- Shrinking and swelling of the soil may crack foundations and basement walls.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 2e
Virginia soil management group: KK
Hydric soils: No

20C—Haymarket-Mirerock complex, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes

Position on the landform: Interfluves, head slopes, and side slopes
Size of areas: 5 to 150 acres
Shape of areas: Broad to narrow and irregular

Map Unit Composition

Haymarket and similar soils: Typically 55 percent, ranging from about 50 to 60 percent
Mirerock and similar soils: Typically 40 percent, ranging from about 35 to 45 percent

Typical Profile

Haymarket
Surface layer:
0 to 7 inches—dark yellowish brown loam; black iron-manganese concretions

Subsoil:
7 to 20 inches—yellowish brown clay; strong brown and yellowish red masses of oxidized iron
20 to 35 inches—yellowish brown clay; grayish brown iron depletions and yellowish red, strong brown, and red masses of oxidized iron
35 to 45 inches—strong brown, white, red, and yellowish brown silty clay loam

Substratum:
45 to 65 inches—yellowish red and strong brown loam saprolite

Mirerock
Surface layer:
0 to 1 inch—dark brown loam

Subsurface layer:
1 to 5 inches—light olive brown fine sandy loam

Subsoil:
5 to 30 inches—pale brown and yellowish brown silty clay; black iron-manganese concretions

Soft bedrock:
30 inches—chlorite-amphibole schist bedrock

Minor Components

Dissimilar components:
- Well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil; in similar landform positions
- Areas of soils that have very stony surfaces
- Soils that have perched seasonal wetness at a depth of 20 inches or less

Soil Properties and Qualities

Available water capacity: Haymarket—moderate (about 8.7 inches); Mirerock—low (about 4.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Haymarket—very deep (more than 60 inches); Mirerock—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Haymarket—more than 60 inches; Mirerock—20 to 40 inches to paralithic bedrock
Drainage class: Haymarket—well drained to moderately well drained; Mirerock—well drained

Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: High
Runoff class: Haymarket—medium; Mirerock—high
Surface fragments: None
Parent material: Haymarket—residuum weathered from gabbro, greenstone, and/or diorite; Mirerock—residuum weathered from gabbro, diorite, greenstone, chlorite-amphibole schist, hornblende schist, and/or hornblende gneiss

Use and Management Considerations

Cropland
Suitability: Moderately suited to grass-legume hay; poorly suited to corn, soybeans, and wheat; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Haymarket—well suited to loblolly pine and northern red oak and poorly suited to yellow-poplar; Mirerock—moderately suited to loblolly pine and northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Shrinking and swelling of the soil may crack foundations and basement walls.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: KK
Hydric soils: No

21B—Littlejoe silt loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Littlejoe and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Wintergreen soils, which formed in colluvial and alluvial material; in similar landform positions
- Very deep, well drained Clifford soils, which have a red subsoil; in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Shallow, excessively drained Bugley soils on the edges of map units

Similar components:
- Well drained Buffstat soils, which have a strong brown subsoil; in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to loblolly pine, northern red oak, and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: V
Hydric soil: No

21C—Littlejoe silt loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Littlejoe and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Wintergreen soils, which formed in colluvial and alluvial material; in similar landform positions
- Very deep, well drained Clifford soils, which have a red subsoil; in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Shallow, excessively drained Bugley soils on the edges of map units

Similar components:
- Well drained Buffstat soils, which have a strong brown subsoil; in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained

Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to loblolly pine, northern red oak, and yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e

Virginia soil management group: V
Hydric soil: No

21D—Littlejoe silt loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Littlejoe and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 2 inches—brown silt loam

Subsurface layer:
2 to 5 inches—light yellowish brown silt loam

Subsoil:
5 to 38 inches—red clay

Substratum:
38 to 56 inches—red and brownish yellow silt loam saprolite

Soft bedrock:
56 inches—sericite schist bedrock

Minor Components

Dissimilar components:
- Well drained Wintergreen soils, which formed in colluvial and alluvial material; in similar landform positions
- Very deep, well drained Clifford soils, which have a red subsoil; in similar landform positions
- Shallow, excessively drained Bugley soils on the edges of map units

Similar components:
- Well drained Buffstat soils, which have a strong brown subsoil; in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 9.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High

Surface fragments: None
Parent material: Residuum weathered from phyllite and/or sericite schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat, grass-legume hay, and alfalfa hay; poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to chestnut oak; moderately suited to loblolly pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e

Virginia soil management group: V
Hydric soil: No

22B—Minnieville clay loam, 2 to 7 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish red clay loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Rhodhiss soils in similar landform positions

Similar components:
- Well drained Clifford soils in similar landform positions
- Well drained Fauquier soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None

Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, wheat, grass-legume hay, and alfalfa hay and poorly suited to soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: N
Hydric soil: No

22C—Minnieville clay loam, 7 to 15 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish red clay loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Rhodhiss soils in similar landform positions

Similar components:
- Well drained Clifford soils in similar landform positions
- Well drained Fauquier soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium

Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat, grass-legume hay, and alfalfa hay; poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak; poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: N
Hydric soil: No

22D—Minnieville clay loam, 15 to 25 percent slopes, severely eroded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Side slopes
Size of areas: 5 to 50 acres
Shape of areas: Linear to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—yellowish red clay loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units

Similar components:
- Well drained Clifford soils in similar landform positions
- Well drained Fauquier soils in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.3 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6e
Virginia soil management group: N
Hydric soil: No

23B—Minnieville loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—brown loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the Minnieville soils on the edges of map units
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Edneytown soils on the edges of map units

Similar components:
- Well drained Clifford soils in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture

Suitability: Well suited to pasture

- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland

Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites

- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- This soil is well suited to septic tank absorption fields.

Local roads and streets

- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: N
Hydric soil: No

23C—Minnieville loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 50 acres
Shape of areas: Broad to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—brown loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Well drained Elsinboro soils and moderately well drained Delanco soils on head slopes of drainageways
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil than the Minnieville soil; on the edges of map units
- Well drained Rhodhiss soils on the edges of map units

Similar components:
- Well drained Clifford soils in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.

- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: N
Hydric soil: No

23D—Minnieville loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Side slopes
Size of areas: 5 to 50 acres
Shape of areas: Linear to irregular

Map Unit Composition

Minnieville and similar soils: Typically 85 percent, ranging from about 80 to 95 percent

Typical Profile

Surface layer:
0 to 6 inches—brown loam

Subsoil:
6 to 46 inches—red clay
46 to 52 inches—yellowish red clay; few brownish yellow mottles

Substratum:
52 to 72 inches—black, red, yellowish brown, and strong brown silty clay loam saprolite

Minor Components

Dissimilar components:
- Well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Spriggs soils, which have less clay in the subsoil; in similar landform positions

- Well drained Wintergreen soils, which formed in colluvium; in similar landform positions
- Well drained Rhodhiss soils in similar landform positions
- Moderately deep, well drained Stott Knob soils, which have less clay in the subsoil; in similar landform positions

Similar components:
- Well drained Clifford soils in similar landform positions
- Soils that have clay loam surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.6 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, and/or diorite

Use and Management Considerations

Cropland

Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture

Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland

Suitability: Moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

• The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
• The slope influences the use of machinery and the amount of excavation required.
• The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
• The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
• Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
• The low strength of the soil is unfavorable for supporting heavy loads.
• Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: N
Hydric soil: No

24C—Myersville-Catoctin complex, 7 to 15 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Myersville and similar soils: Typically 50 percent, ranging from about 45 to 55 percent
Catoctin and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Myersville
Surface layer:
0 to 3 inches—dark yellowish brown silt loam

Subsoil:
3 to 20 inches—yellowish red silty clay loam
20 to 28 inches—strong brown silty clay loam; common yellowish red, yellowish brown, and red mottles

Substratum:
28 to 50 inches—red, white, black, strong brown, and yellowish brown channery silt loam saprolite

Soft bedrock:
50 inches—greenstone bedrock; many black manganese coatings

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Fauquier soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that lack stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Myersville—moderate (about 8.1 inches); Catoctin—low (about 3.3 inches)
Slowest saturated hydraulic conductivity: Myersville—moderately high (about 0.6 in/hr); Catoctin—high (about 2.0 in/hr)
Depth class: Myersville—deep (40 to 60 inches); Catoctin—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Myersville—40 to 60 inches to paralithic bedrock; Catoctin—20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Myersville—medium; Catoctin—very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Myersville—well suited to northern red oak and moderately suited to yellow-poplar; Catoctin—moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.

- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Myersville—D; Catoctin—JJ
Hydric soils: No

24D—Myersville-Catoctin complex, 15 to 35 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops and mountain flanks
Size of areas: 5 to 50 acres
Shape of areas: Irregular to linear

Map Unit Composition

Myersville and similar soils: Typically 50 percent, ranging from about 45 to 55 percent
Catoctin and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Myersville
Surface layer:
0 to 3 inches—dark yellowish brown silt loam

Subsoil:
3 to 20 inches—yellowish red silty clay loam
20 to 28 inches—strong brown silty clay loam; common yellowish red, yellowish brown, and red mottles

Substratum:
28 to 50 inches—red, white, black, strong brown, and yellowish brown channery silt loam saprolite

Soft bedrock:
50 inches—greenstone bedrock; many black manganese coatings

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Fauquier soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that lack stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Myersville—moderate (about 8.1 inches); Catoctin—low (about 3.3 inches)
Slowest saturated hydraulic conductivity: Myersville—moderately high (about 0.6 in/hr); Catoctin—high (about 2.0 in/hr)
Depth class: Myersville—deep (40 to 60 inches); Catoctin—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Myersville—40 to 60 inches to paralithic bedrock; Catoctin—20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Myersville—high; Catoctin—very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Myersville—well suited to northern red oak and moderately suited to yellow-poplar; Catoctin—moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.

- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Myersville—D; Catoctin—JJ
Hydric soils: No

24E—Myersville-Catoctin complex, 35 to 55 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular to linear

Map Unit Composition

Myersville and similar soils: Typically 50 percent, ranging from about 45 to 55 percent
Catoctin and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Myersville
Surface layer:
0 to 3 inches—dark yellowish brown silt loam

Subsoil:
3 to 20 inches—yellowish red silty clay loam
20 to 28 inches—strong brown silty clay loam; common yellowish red, yellowish brown, and red mottles

Substratum:
28 to 50 inches—red, white, black, strong brown, and yellowish brown channery silt loam saprolite

Soft bedrock:
50 inches—greenstone bedrock; many black manganese coatings

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Fauquier soils, which have a red clay subsoil; in similar landform positions
- Deep, well drained Myersville soils that have fewer rock fragments in the subsoil; in similar landform positions
- Areas of soils that lack stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Myersville—moderate (about 8.1 inches); Catoctin—low (about 3.3 inches)
Slowest saturated hydraulic conductivity: Myersville—moderately high (about 0.6 in/hr); Catoctin—high (about 2.0 in/hr)
Depth class: Myersville—deep (40 to 60 inches); Catoctin—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Myersville—40 to 60 inches to paralithic bedrock; Catoctin—20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Myersville—high; Catoctin—very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Myersville—well suited to northern red oak and moderately suited to yellow-poplar; Catoctin—moderately suited to northern red oak and poorly suited to yellow-poplar

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Myersville—D; Catoctin—JJ
Hydric soils: No

24F—Myersville-Catoctin complex, 55 to 75 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular to linear

Map Unit Composition

Myersville and similar soils: Typically 50 percent, ranging from about 45 to 55 percent
Catoctin and similar soils: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Myersville
Surface layer:
0 to 3 inches—dark yellowish brown silt loam

Subsoil:
3 to 20 inches—yellowish red silty clay loam
20 to 28 inches—strong brown silty clay loam; common yellowish red, yellowish brown, and red mottles

Substratum:
28 to 50 inches—red, white, black, strong brown, and yellowish brown channery silt loam saprolite

Soft bedrock:
50 inches—greenstone bedrock; many black manganese coatings

Catoctin
Surface layer:
0 to 4 inches—dark yellowish brown channery silt loam

Subsoil:
4 to 22 inches—strong brown very channery silt loam

Soft bedrock:
22 to 30 inches—greenstone bedrock

Hard bedrock:
30 inches—greenstone bedrock

Minor Components

Dissimilar components:
- Well drained Fauquier soils, which have a red clay subsoil; in similar landform positions
- Deep, well drained Myersville soils, which have fewer rock fragments in the subsoil; in similar landform positions
- Areas of soils that lack stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Myersville—moderate (about 8.1 inches); Catoctin—low (about 3.3 inches)
Slowest saturated hydraulic conductivity: Myersville—moderately high (about 0.6 in/hr); Catoctin—high (about 2.0 in/hr)

Depth class: Myersville—deep (40 to 60 inches); Catoctin—moderately deep (20 to 40 inches)
Depth to root-restrictive feature: Myersville—40 to 60 inches to paralithic bedrock; Catoctin—20 to 40 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Myersville—high; Catoctin—very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Myersville—well suited to northern red oak and moderately suited to yellow-poplar; Catoctin—moderately suited to northern red oak and poorly suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets

- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Myersville—D; Catoctin—JJ
Hydric soils: No

25B—Orenda loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 25 acres
Shape of areas: Irregular

Map Unit Composition

Orenda and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 20 inches—yellowish brown clay; strong brown mottles
20 to 40 inches—yellowish brown clay loam; black manganese coatings and yellowish red and strong brown mottles

Substratum:
40 to 60 inches—grayish brown, yellowish red, strong brown, and black sandy loam saprolite

Minor Components

Dissimilar components:

- Well drained Spriggs soils, which have less clay in the subsoil than the Orenda soil; in similar landform positions

Similar components:

- Well drained Minnieville soils, which have a red clay subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from gabbro, diorite, hornblende gneiss, and/or hornblende schist

Use and Management Considerations

Cropland
Suitability: Well suited to grass-legume hay; moderately suited to corn, soybeans, and wheat; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- This soil is suited to building sites.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: Y
Hydric soil: No

25C—Orenda loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 25 acres
Shape of areas: Irregular

Map Unit Composition

Orenda and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 20 inches—yellowish brown clay; strong brown mottles
20 to 40 inches—yellowish brown clay loam; black manganese coatings and yellowish red and strong brown mottles

Substratum:
40 to 60 inches—grayish brown, yellowish red, strong brown, and black sandy loam saprolite

Minor Components

Dissimilar components:
- Well drained Spriggs soils, which have less clay in the subsoil than the Orenda soil; in similar landform positions

Similar components:
- Well drained Minnieville soils, which have a red clay subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from gabbro, diorite, hornblende gneiss, and/or hornblende schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to grass-legume hay, corn, soybeans, and wheat and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: Y
Hydric soil: No

25D—Orenda loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Side slopes
Size of areas: 5 to 25 acres
Shape of areas: Irregular

Map Unit Composition

Orenda and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 20 inches—yellowish brown clay; strong brown mottles
20 to 40 inches—yellowish brown clay loam; black manganese coatings and yellowish red and strong brown mottles

Substratum:
40 to 60 inches—grayish brown, yellowish red, strong brown, and black sandy loam saprolite

Minor Components

Dissimilar components:
- Well drained Spriggs soils, which have less clay in the subsoil than the Orenda soil; in similar landform positions

Similar components:
- Well drained Minnieville soils, which have a red clay subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.20 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from gabbro, diorite, hornblende gneiss, and/or hornblende schist

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat and grass-legume hay; poorly suited to corn and soybeans; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: Y
Hydric soil: No

26C—Peaks-Rock outcrop complex, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Peaks and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorite, granite, and gneiss.

Minor Components

Dissimilar components:
- Very deep, well drained Edneytown soils, which contain fewer rock fragments in the subsoil than the Peaks soil; in similar landform positions
- Very deep, well drained Saunook soils in colluvial landform positions
- Areas of soils that have rock outcrops

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Properties and Qualities of the Peaks Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Peaks—7s; Rock outcrop—8
Virginia soil management group: Peaks—JJ; Rock outcrop—none assigned
Hydric soils: No

26D—Peaks-Rock outcrop complex, 15 to 35 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Peaks and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Rock outcrop

Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorite, granite, and gneiss.

Minor Components

Dissimilar components:
- Very deep, well drained Edneytown soils, which contain less rock fragments in the subsoil; in similar landform positions
- Very deep, well drained Saunook soils; in colluvial landform positions
- Areas of soils that have rock outcrops

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Properties and Qualities of the Peaks Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Peaks—7s; Rock outcrop—8
Virginia soil management group: Peaks—JJ; Rock outcrop—none assigned
Hydric soils: No

26E—Peaks-Rock outcrop complex, 35 to 55 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Peaks and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Rock outcrop

Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorite, granite, and gneiss.

Minor Components

Dissimilar components:
- Very deep, well drained Edneytown soils, which contain fewer rock fragments in the subsoil than the Peaks soil; in similar landform positions
- Very deep, well drained Saunook soils; in colluvial landform positions
- Areas of soils that have rock outcrops

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Properties and Qualities of the Peaks Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.

- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse-textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse-textured soil layers increase the need for maintenance of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Peaks—7s; Rock outcrop—8
Virginia soil management group: Peaks—JJ; Rock outcrop—none assigned
Hydric soils: No

26F—Peaks-Rock outcrop complex, 55 to 75 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 500 acres
Shape of areas: Irregular

Map Unit Composition

Peaks and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Peaks
Surface layer:
0 to 2 inches—brown gravelly loam

Subsurface layer:
2 to 6 inches—brownish yellow gravelly fine sandy loam

Subsoil:
6 to 20 inches—yellowish brown very gravelly sandy loam

Substratum:
20 to 34 inches—yellowish brown very gravelly sandy loam saprolite; few strong brown and brownish yellow mottles

Soft bedrock:
34 to 40 inches—granodiorite bedrock

Hard bedrock:
40 inches—granodiorite bedrock

Rock outcrop

Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorite, granite, and gneiss.

Minor Components

Dissimilar components:
- Very deep, well drained Edneytown soils, which contain fewer rock fragments in the subsoil; in similar landform positions
- Very deep, well drained Saunook soils; in colluvial landform positions
- Areas of soils that have rock outcrops

Similar components:
- Soils that are deep to bedrock; in similar landform positions

Properties and Qualities of the Peaks Soil

Available water capacity: Very low (about 2.8 inches)
Slowest saturated hydraulic conductivity: High (about 6.0 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.

- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The use of mechanical planting equipment is impractical because of the content of rock fragments.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- Coarse textured soil layers may slough, thus reducing the efficiency of mechanical planting equipment.
- Coarse textured soil layers increase the need for maintenance of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the hard bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Peaks—7s; Rock outcrop—8
Virginia soil management group: Peaks—JJ; Rock outcrop—none assigned
Hydric soils: No

27A—Pineywoods silt loam, 0 to 2 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves and head slopes
Size of areas: 5 to 150 acres
Shape of areas: Irregular

Map Unit Composition

Pineywoods and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 1 inch—dark gray silt loam

Subsurface layer:
1 to 6 inches—light brownish gray silt loam; brownish yellow masses of oxidized iron

Subsoil:
6 to 15 inches—light brownish gray silty clay; brownish yellow masses of oxidized iron
15 to 22 inches—light brownish gray clay; pale brown iron-manganese masses

Substratum:
22 to 41 inches—white loam; reddish yellow masses of oxidized iron and gray iron depletions

Soft bedrock:
41 inches—light gray anorthosite bedrock

Minor Components

Dissimilar components:
- Well drained Colleen soils, which have a red clay subsoil; on the more rolling landforms
- Moderately well drained Sketerville soils in similar landform positions

Similar components:
- Soils that have gravelly surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 5.7 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Poorly drained
Depth to seasonal water saturation: About 0 to 1.0 foot
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn, soybeans, and wheat and unsuited to grass-legume hay and alfalfa hay
- The high clay content restricts the rooting depth of crops.
- Frost action may damage the root system of winter grain crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture
Suitability: Poorly suited to pasture

- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.
- Compaction may occur when the soil is wet.
- Frost action may damage the root systems of plants.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- Soil wetness may limit the use of log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4w
Virginia soil management group: NN
Hydric soil: Yes

27B—Pineywoods silt loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves and head slopes
Size of areas: 5 to 150 acres
Shape of areas: Irregular

Map Unit Composition

Pineywoods and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 1 inch—dark gray silt loam

Subsurface layer:
1 to 6 inches—light brownish gray silt loam; brownish yellow masses of oxidized iron

Subsoil:
6 to 15 inches—light brownish gray silty clay; brownish yellow masses of oxidized iron
15 to 22 inches—light brownish gray clay; pale brown iron-manganese masses

Substratum:
22 to 41 inches—white loam; reddish yellow masses of oxidized iron and gray iron depletions

Soft bedrock:
41 inches—light gray anorthosite bedrock

Minor Components

Dissimilar components:
- Well drained Colleen soils, which have a red clay subsoil; on the more rolling landforms
- Moderately well drained Sketerville soils; in similar landform positions

Similar components:
- Soils that have gravelly surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 5.7 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Deep (40 to 60 inches)
Depth to root-restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Poorly drained
Depth to seasonal water saturation: About 0 to 1.0 foot
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn, soybeans, and wheat and unsuited to grass-legume hay and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.
- Frost action may damage the root system of winter grain crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.
- The seasonal high water table restricts equipment operation, decreases the viability of crops, and interferes with the planting and harvesting of crops.

Pasture

Suitability: Poorly suited to pasture

- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.
- Compaction may occur when the soil is wet.
- Frost action may damage the root systems of plants.

Woodland

Suitability: Moderately suited to northern red oak

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- Soil wetness may limit the use of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites

- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets

- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4w
Virginia soil management group: NN
Hydric soil: Yes

28—Pits, quarry

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Quarries on hillslopes and mountains slopes
Position on the landform: Variable

Size of areas: 3 to 65 acres
Shape of areas: Variable

Map Unit Composition

Pits: Typically 100 percent

Typical Profile

Areas of this map unit primarily consist of open excavations from which soil and underlying rock have been removed, exposing bedrock. These pits are associated with mining or quarry activities. They may contain water. A typical profile is not given due to the variability of the soil material.

Use and Management Considerations

Onsite investigation is needed to determine the suitability for specific uses.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 8s
Virginia soil management group: None assigned
Hydric soils: Unranked

29B—Saunook loam, 2 to 7 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 200 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils; on adjacent ridges and side slopes
- Well drained Craigsville soils; on flood plains

Similar components:
- Very deep, well drained Edneytown soils; on adjacent ridges and side slopes
- Areas of soils that have very stony surfaces; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)

Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- This soil is well suited to haul roads and log landings.
- This soil is well suited to equipment operations.

Building sites
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: L
Hydric soil: No

29C—Saunook loam, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 250 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes

Similar components:
- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have very stony surfaces; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay; moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- This soil is well suited to haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: L
Hydric soil: No

29D—Saunook loam, 15 to 25 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 250 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes

Similar components:
- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have very stony surfaces; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: L
Hydric soil: No

30B—Saunook loam, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes

Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 50 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes
- Well drained Craigsville soils on flood plains

Similar components:
- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have fewer stones on the surface; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.

Building sites
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: L
Hydric soil: No

30C—Saunook loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 250 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes

Similar components:
- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have fewer stones on the surface; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low

Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: L
Hydric soil: No

30D—Saunook loam, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 250 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:
- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes

Similar components:
- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have fewer stones on the surface; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets

- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: L
Hydric soil: No

30E—Saunook loam, 25 to 50 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Lower portions of mountain slopes and bases of mountain slopes
Position on the landform: Lower one-third of mountain flanks and mountain bases
Size of areas: 5 to 250 acres
Shape of areas: Irregular and linear

Map Unit Composition

Saunook and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 19 inches—dark yellowish brown loam

Subsoil:
19 to 60 inches—strong brown gravelly clay loam

Minor Components

Dissimilar components:

- Somewhat excessively drained Peaks soils on adjacent ridges and side slopes

Similar components:

- Very deep, well drained Edneytown soils on adjacent ridges and side slopes
- Areas of soils that have fewer stones on the surface; in similar landform positions
- Areas of soils that do not have thick, dark surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Moderate (about 7.5 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium derived from granite and gneiss and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Low strength makes this soil unfavorable for supporting heavy loads.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: L
Hydric soil: No

31A—Sindion-Yogaville complex, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 100 acres
Shape of areas: Irregular and linear

Map Unit Composition

Sindion and similar soils: Typically 45 percent, ranging from about 40 to 50 percent
Yogaville and similar soils: Typically 40 percent, ranging from about 35 to 50 percent

Typical Profile

Sindion

Surface layer:
0 to 14 inches—dark brown loam

Subsoil:
14 to 25 inches—yellowish brown silty clay loam; grayish brown iron depletions and yellowish brown masses of oxidized iron
25 to 35 inches—yellowish brown clay loam; grayish brown iron depletions and yellowish brown masses of oxidized iron
35 to 62 inches—brown loam; grayish brown iron depletions and yellowish brown masses of oxidized iron

Substratum:
62 to 72 inches—brown sandy loam; grayish brown iron depletions and dark yellowish brown masses of oxidized iron

Yogaville

Surface layer:
0 to 16 inches—dark brown loam

Subsoil:
16 to 21 inches—dark gray clay loam; yellowish brown masses of oxidized iron
21 to 50 inches—gray clay loam; yellowish brown and strong brown masses of oxidized iron and black manganese coatings
50 to 72 inches—gray loam; black manganese coatings and strong brown and yellowish brown masses of oxidized iron

Minor Components

Dissimilar components:
- Well drained Combs soils, which have less clay in the subsoil; in similar landform positions

Similar components:
- Well drained Speedwell soils in similar landform positions
- Soils that have thin, light-colored surface layers; in similar landform positions
- Soils that have sand and loamy sand textures in the lower part

Soil Properties and Qualities

Available water capacity: Sindion—high (about 10.9 inches); Yogaville—high (about 9.2 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Sindion—moderately well drained; Yogaville—poorly drained
Depth to seasonal water saturation: Sindion—about 1.5 to 3.0 feet; Yogaville—about 0 to 1.0 foot
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: Sindion—none; Yogaville—occasional
Depth of ponding: Sindion—not applicable; Yogaville—0.1 to 0.3 foot
Shrink-swell potential: Low
Runoff class: Sindion—low; Yogaville—negligible
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, greenstone, schist, and/or phyllite

Use and Management Considerations

Cropland

Suitability: Sindion—well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay; Yogaville—unsuited to cropland

- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture

Suitability: Sindion—well suited to pasture; Yogaville—moderately suited to pasture

- Flooding may damage pastures.
- The seasonal high water table can affect equipment use, grazing patterns, and the viability of grass and legume species.
- Frost action may damage the root systems of plants.

Woodland

Suitability: Sindion—well suited to northern red oak and moderately suited to yellow-poplar; Yogaville—moderately suited to sweetgum

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding and ponding restrict the safe use of roads by log trucks.
- Soil wetness may limit the use of log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites

- Flooding and ponding limit these soils for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields

- Flooding and ponding limit these soils for septic tank absorption fields.
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets

- Flooding may damage local roads and streets.
- Ponding affects the ease of excavation and grading and limits the bearing capacity of the soil.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Sindion—3w; Yogaville—6w
Virginia soil management group: Sindion—G; Yogaville—MM
Hydric soils: Sindion—no; Yogaville—yes

32B—Sketerville silt loam, 2 to 7 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes and mountain slopes
Position on the landform: Interfluves, head slopes, and mountaintops

Size of areas: 5 to 50 acres
Shape of areas: Irregular

Map Unit Composition

Sketerville and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 4 inches—very pale brown, dark brown, and dark grayish brown silt loam

Subsoil:
4 to 12 inches—light yellowish brown clay; very pale brown iron depletions and brownish yellow iron-manganese masses
12 to 42 inches—yellowish brown clay; light brownish gray iron depletions and brownish yellow iron-manganese masses

Substratum:
42 to 52 inches—gray clay saprolite; light brownish gray iron depletions and brownish yellow iron-manganese masses
52 to 70 inches—white silty clay loam saprolite; brownish yellow iron-manganese masses and light brownish gray and light gray iron depletions

Hard bedrock:
70 inches—white anorthosite bedrock

Minor Components

Dissimilar components:
- Poorly drained Pineywoods soils, which have a gray clay subsoil; in nearly level landform positions

Similar components:
- Well drained Colleen soils, which have a red clay subsoil; in similar landform positions
- Soils that have gravelly surfaces; in similar landscape positions

Soil Properties and Qualities

Available water capacity: Moderate (about 8.0 inches)
Slowest saturated hydraulic conductivity: Moderately low (about 0.06 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Moderately well drained
Depth to seasonal water saturation: About 1.5 to 2.5 feet
Water table kind: Apparent
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from anorthosite

Use and Management Considerations

Cropland
Suitability: Moderately suited to grass-legume hay; poorly suited to corn, soybeans, and wheat; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

- The high clay content restricts the rooting depth of crops.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Poorly suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The seasonal high water table may restrict the period when excavations can be made.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of the soil.
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 2e
Virginia soil management group: KK
Hydric soil: No

33A—Speedwell loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Flood plains

Position on the landform: Treads
Size of areas: 5 to 100 acres
Shape of areas: Irregular and linear

Map Unit Composition

Speedwell and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 20 inches—dark brown loam; brown when dry

Subsoil:
20 to 26 inches—dark yellowish brown clay loam
26 to 44 inches—brown clay loam
44 to 72 inches—dark yellowish brown loam

Minor Components

Dissimilar components:
- Well drained Combs soils, which have less clay in the subsoil; in similar landform positions
- Poorly drained Yogaville soils; in similar landform positions

Similar components:
- Moderately well drained Sindion soils; in similar landform positions
- Soils that have thin or light-colored surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: High (about 11.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Surface fragments: None
Parent material: Alluvium derived from granite and gneiss, greenstone, schist, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on

streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- Flooding limits the use of the soil for building site development.

Septic tank absorption fields
- Flooding limits the use of the soil for septic tank absorption fields.

Local roads and streets
- Flooding may damage local roads and streets.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland if protected from flooding or not frequently flooded during the growing season
Land capability class: 2w
Virginia soil management group: A
Hydric soil: No

34C—Spriggs loam, 7 to 15 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Soils that have very stony surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat and grass-legume hay; poorly suited to corn and soybeans; and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.

- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: JJ
Hydric soil: No

34D—Spriggs loam, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Soils that have very stony surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Poorly suited to corn, soybeans, wheat, and grass-legume hay and unsuited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: JJ
Hydric soil: No

34E—Spriggs loam, 25 to 50 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Soils that have very stony surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soil: No

35B—Spriggs loam, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions

- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Areas of soils that do not have stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: JJ
Hydric soil: No

35C—Spriggs loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Areas of soils that do not have stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained

Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: JJ
Hydric soil: No

35D—Spriggs loam, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Areas of soils that do not have stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones

Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: JJ
Hydric soil: No

35E—Spriggs loam, 25 to 50 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes

Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Spriggs and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 6 inches—strong brown loam

Subsoil:
6 to 18 inches—yellowish red silty clay loam; few olive brown mottles; black iron-manganese concretions

Substratum:
18 to 30 inches—olive brown and yellowish red silt loam saprolite; black iron-manganese concretions

Soft bedrock:
30 to 41 inches—hornblende gneiss bedrock

Hard bedrock:
41 inches—hornblende gneiss bedrock

Minor Components

Dissimilar components:
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Orenda soils, which have a yellowish brown clay subsoil; in similar landform positions
- Very deep, well drained Haymarket soils in similar landform positions
- Moderately deep, well drained Mirerock soils in similar landform positions
- Areas of soils that do not have stones on the surface; in similar landform positions

Soil Properties and Qualities

Available water capacity: Low (about 4.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Moderately deep (20 to 40 inches)
Depth to root-restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, and/or greenstone

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to northern red oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- The low strength of the soil may cause structural damage to local roads and streets.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soil: No

36D—Stott Knob-Rhodhiss complex, 15 to 25 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Stott Knob and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rhodhiss and similar soils: Typically 35 percent, ranging from about 25 to 50 percent

Typical Profile

Stott Knob
Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 9 inches—yellowish brown loam

Subsoil:
9 to 21 inches—yellowish red clay loam

Substratum:
21 to 30 inches—strong brown loam saprolite; common brownish yellow and yellowish brown mottles

Soft bedrock:
30 inches—gneiss bedrock

Rhodhiss
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 30 inches—strong brown clay loam
30 to 40 inches—yellowish brown clay loam; few strong brown mottles

Substratum:
40 to 60 inches—yellowish brown loam saprolite; few black mottles

Minor Components

Dissimilar components:
- Very deep, well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Wintergreen soils, which formed in colluvial material; in similar landform positions
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that have very stony surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Stott Knob—low (about 4.3 inches); Rhodhiss—moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Stott Knob—moderately deep (20 to 40 inches); Rhodhiss—very deep (more than 60 inches)
Depth to root-restrictive feature: Stott Knob—20 to 40 inches to paralithic bedrock; Rhodhiss—more than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High

Surface fragments: None
Parent material: Stott Knob—residuum weathered from gneiss, granite, and/or granodiorite; Rhodhiss—residuum weathered from granite and gneiss and/or mica schist

Use and Management Considerations

Cropland
Suitability: Stott Knob—moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay; Rhodhiss—moderately suited to alfalfa hay, grass-legume hay, and wheat and poorly suited to corn and soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.

Pasture
Suitability: Stott Knob—well suited to pasture; Rhodhiss—moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Stott Knob—moderately suited to chestnut oak, yellow-poplar, and eastern white pine; Rhodhiss—well suited to eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: Stott Knob—N; Rhodhiss—X
Hydric soils: No

36E—Stott Knob-Rhodhiss complex, 25 to 50 percent slopes

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Interfluves, nose slopes, and side slopes
Size of areas: 5 to 300 acres
Shape of areas: Irregular to linear

Map Unit Composition

Stott Knob and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rhodhiss and similar soils: Typically 35 percent, ranging from about 25 to 50 percent

Typical Profile

Stott Knob
Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 9 inches—yellowish brown loam

Subsoil:
9 to 21 inches—yellowish red clay loam

Substratum:
21 to 30 inches—strong brown loam saprolite; common brownish yellow and yellowish brown mottles

Soft bedrock:
30 inches—gneiss bedrock

Rhodhiss
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 30 inches—strong brown clay loam
30 to 40 inches—yellowish brown clay loam; few strong brown mottles

Substratum:
40 to 60 inches—yellowish brown loam saprolite; few black mottles

Minor Components

Dissimilar components:
- Very deep, well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Wintergreen soils, which formed in colluvial material; in similar landform positions

- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Areas of soils that have very stony surface layers; in similar landform positions

Soil Properties and Qualities

Available water capacity: Stott Knob—low (about 4.3 inches); Rhodhiss—moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Stott Knob—moderately deep (20 to 40 inches); Rhodhiss—very deep (more than 60 inches)
Depth to root-restrictive feature: Stott Knob—20 to 40 inches to paralithic bedrock; Rhodhiss—more than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Stott Knob—residuum weathered from gneiss, granite, and/or granodiorite; Rhodhiss—residuum weathered from granite and gneiss and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Stott Knob—moderately suited to chestnut oak, yellow-poplar, and eastern white pine; Rhodhiss—well suited to eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Stott Knob—N; Rhodhiss—X
Hydric soils: No

37D—Stott Knob-Rhodhiss complex, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 100 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Stott Knob and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rhodhiss and similar soils: Typically 35 percent, ranging from about 25 to 50 percent

Typical Profile

Stott Knob
Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 9 inches—yellowish brown loam

Subsoil:
9 to 21 inches—yellowish red clay loam

Substratum:
21 to 30 inches—strong brown loam saprolite; common brownish yellow and yellowish brown mottles

Soft bedrock:
30 inches—gneiss bedrock

Rhodhiss
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 30 inches—strong brown clay loam
30 to 40 inches—yellowish brown clay loam; few strong brown mottles

Substratum:
40 to 60 inches—yellowish brown loam saprolite; few black mottles

Minor Components

Dissimilar components:
- Very deep, well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions

Soil Properties and Qualities

Available water capacity: Stott Knob—low (about 4.3 inches); Rhodhiss—moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Stott Knob—moderately deep (20 to 40 inches); Rhodhiss—very deep (more than 60 inches)
Depth to root-restrictive feature: Stott Knob—20 to 40 inches to paralithic bedrock; Rhodhiss—more than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Stott Knob—residuum weathered from gneiss, granite, and/or granodiorite; Rhodhiss—residuum weathered from granite and gneiss and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Stott Knob—moderately suited to chestnut oak, yellow-poplar, and eastern white pine; Rhodhiss—well suited to eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: Stott Knob—N; Rhodhiss—X
Hydric soils: No

37E—Stott Knob-Rhodhiss complex, 25 to 50 percent slopes, very stony

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Hillslopes
Position on the landform: Head slopes, nose slopes, and side slopes
Size of areas: 5 to 150 acres
Shape of areas: Narrow and irregular

Map Unit Composition

Stott Knob and similar soils: Typically 55 percent, ranging from about 45 to 65 percent
Rhodhiss and similar soils: Typically 35 percent, ranging from about 25 to 50 percent

Typical Profile

Stott Knob
Surface layer:
0 to 3 inches—very dark grayish brown loam

Subsurface layer:
3 to 9 inches—yellowish brown loam

Subsoil:
9 to 21 inches—yellowish red clay loam

Substratum:
21 to 30 inches—strong brown loam saprolite; common brownish yellow and yellowish brown mottles

Soft bedrock:
30 inches—gneiss bedrock

Rhodhiss
Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 30 inches—strong brown clay loam
30 to 40 inches—yellowish brown clay loam; few strong brown mottles

Substratum:
40 to 60 inches—yellowish brown loam saprolite; few black mottles

Minor Components

Dissimilar components:
- Very deep, well drained Clifford soils, which have a red clay subsoil; in similar landform positions
- Very deep, well drained Minnieville soils, which have a red clay subsoil; in similar landform positions
- Well drained Wintergreen soils, which formed in colluvial material; in similar landform positions

Soil Properties and Qualities

Available water capacity: Stott Knob—low (about 4.3 inches); Rhodhiss—moderate (about 7.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Stott Knob—moderately deep (20 to 40 inches); Rhodhiss—very deep (more than 60 inches)
Depth to root-restrictive feature: Stott Knob—20 to 40 inches to paralithic bedrock; Rhodhiss—more than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent angular stones
Parent material: Stott Knob—residuum weathered from gneiss, granite, and/or granodiorite; Rhodhiss—residuum weathered from granite and gneiss and/or mica schist

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Stott Knob—moderately suited to chestnut oak, yellow-poplar, and eastern white pine; Rhodhiss—well suited to eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.

- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the nature and depth of the soft bedrock, the ease of excavation is reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.

Local roads and streets
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: Stott Knob—N; Rhodhiss—X
Hydric soils: No

38A—Suches loam, 0 to 3 percent slopes, frequently flooded

Setting

Major land resource area: Southern Piedmont (MLRA 136)
Landform: Flood plains
Position on the landform: Treads
Size of areas: 5 to 50 acres
Shape of areas: Irregular and linear

Map Unit Composition

Suches and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 8 inches—dark yellowish brown loam

Subsoil:
8 to 35 inches—strong brown loam
35 to 45 inches—strong brown silt loam; dark yellowish brown iron-manganese masses

Substratum:
45 to 60 inches—dark yellowish brown and strong brown silt loam

Minor Components

Dissimilar components:
- Well drained Comus soils, which have less clay in the subsoil; on levees
- Well drained Craigsville soils, which have more rock fragments in the subsoil; in similar landform positions
- Moderately well drained Delanco soils, which have a more developed subsoil; on adjacent low terraces
- Well drained Elsinboro soils, which have a more developed subsoil; on adjacent low terraces

Similar components:
- Moderately well drained and somewhat poorly drained Codorus soils; in similar landform positions
- Soils that have darker surface layers; in similar landform positions
- Soils that have cobbly layers at a depth of 24 inches or more

Soil Properties and Qualities

Available water capacity: Very high (about 12.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Moderately well drained
Depth to seasonal water saturation: About 30 to 48 inches
Water table kind: Apparent
Flooding hazard: Frequent
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Low
Surface fragments: None
Parent material: Alluvium derived from granite, gneiss, schist, gabbro, diorite, and/or phyllite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- Frequent flooding restricts the use of winter grain crops.
- Flooding may damage crops.

Pasture
Suitability: Well suited to pasture
- Flooding may damage pastures.

Woodland
Suitability: Well suited to loblolly pine, northern red oak, yellow-poplar, and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should focus on streamside management zones and stream crossings and should include general adherence to all applicable best management practices.
- Flooding may damage haul roads.
- Flooding restricts the safe use of roads by log trucks.
- The low strength of the soil interferes with the construction of haul roads and log landings.

- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- Flooding limits the use of the soil for building site development.
- The seasonal high water table may restrict the period when excavations can be made.

Septic tank absorption fields
- Flooding limits the use of the soil for septic tank absorption fields.
- The seasonal high water table greatly limits the absorption and proper treatment of the effluent from conventional septic systems.

Local roads and streets
- Flooding may damage local roads and streets.
- The low strength of the soil may cause structural damage to local roads and streets.

Interpretive Groups

Prime farmland: Prime farmland if protected from flooding or not frequently flooded during the growing season
Land capability class: 3w
Virginia soil management group: A
Hydric soil: No

39C—Sylco-Sylvatus complex, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus

Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: None
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Sylco—moderately suited to wheat and grass-legume hay, poorly suited to corn and soybeans, and unsuited to alfalfa hay; Sylvatus—unsuited to cropland

- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The limited available water capacity may cause plants to suffer from moisture stress.

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Sylco—3e; Sylvatus—6s
Virginia soil management group: JJ
Hydric soils: No

39D—Sylco-Sylvatus complex, 15 to 35 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops

Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Poorly suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- The slope may restrict the use of some farm equipment.
- The limited available water capacity may cause plants to suffer from moisture stress during the drier summer months.

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6e
Virginia soil management group: JJ
Hydric soils: No

39E—Sylco-Sylvatus complex, 35 to 55 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine

- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soils: No

39F—Sylco-Sylvatus complex, 55 to 75 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)

Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: None
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soils: No

40C—Sylco-Sylvatus complex, 7 to 15 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions

Similar components:
- Areas of soils that do not have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: High
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- Bedrock may interfere with the construction of haul roads and log landings.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.

- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: JJ
Hydric soils: No

40D—Sylco-Sylvatus complex, 15 to 35 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountaintops
Size of areas: 5 to 100 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that do not have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: JJ
Hydric soils: No

40E—Sylco-Sylvatus complex, 35 to 55 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes

Position on the landform: Mountain flanks
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that do not have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soils: No

40F—Sylco-Sylvatus complex, 55 to 75 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 200 acres
Shape of areas: Irregular

Map Unit Composition

Sylco and similar soils: Typically 60 percent, ranging from about 50 to 65 percent
Sylvatus and similar soils: Typically 35 percent, ranging from about 30 to 45 percent

Typical Profile

Sylco
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—dark yellowish brown channery silt loam

Subsurface layer:
3 to 7 inches—yellowish brown channery silt loam

Subsoil:
7 to 26 inches—yellowish brown very channery silty clay loam

Substratum:
26 to 33 inches—yellowish brown extremely channery silt loam saprolite; common light gray and light yellowish brown mottles

Hard bedrock:
33 inches—phyllite bedrock

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, or granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that do not have stony surfaces; in similar landform positions

Soil Properties and Qualities

Available water capacity: Sylco—low (about 3.5 inches); Sylvatus—very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Sylco—high (about 2.0 in/hr); Sylvatus—moderately high (about 0.6 in/hr)
Depth class: Sylco—moderately deep (20 to 40 inches); Sylvatus—shallow (10 to 20 inches)
Depth to root-restrictive feature: Sylco—20 to 40 inches to lithic bedrock; Sylvatus—10 to 20 inches to lithic bedrock
Drainage class: Sylco—somewhat excessively drained; Sylvatus—well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak and eastern white pine
- Proper planning for timber harvesting is essential in order to minimize the potential

negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.
- Rock fragments restrict the use of equipment during site preparation for planting or seeding.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.

Septic tank absorption fields
- The excessive rate of water movement through the soil limits the proper treatment of the effluent from conventional septic systems, which may pollute the water table.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7e
Virginia soil management group: JJ
Hydric soils: No

41E—Sylvatus-Rock outcrop complex, 35 to 55 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular

Map Unit Composition

Sylvatus and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Sylvatus

Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Rock outcrop

Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorites, granites, and gneiss

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, and granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, and granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have no rock outcrops

Properties and Qualities of the Sylvatus Soil

Available water capacity: Very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Shallow (10 to 20 inches)
Depth to root-restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Sylvatus—7s; Rock outcrop—8
Virginia soil management group: Sylvatus—JJ; Rock outcrop—none assigned
Hydric soils: No

41F—Sylvatus-Rock outcrop complex, 55 to 75 percent slopes, extremely stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A)
Landform: Mountain slopes
Position on the landform: Mountain flanks
Size of areas: 5 to 250 acres
Shape of areas: Irregular

Map Unit Composition

Sylvatus and similar soils: Typically 60 percent, ranging from about 55 to 65 percent
Rock outcrop: Typically 35 percent, ranging from about 30 to 40 percent

Typical Profile

Sylvatus
Organic layer:
0 to 1 inch—slightly decomposed plant material

Surface layer:
1 to 3 inches—very dark grayish brown very channery silt loam

Subsurface layer:
3 to 5 inches—very pale brown channery silt loam

Subsoil:
5 to 14 inches—yellowish brown very channery silt loam

Substratum:
14 to 16 inches—yellowish brown, light gray, and reddish yellow very channery silt loam saprolite

Hard bedrock:
16 inches—phyllite bedrock

Rock outcrop
Rock outcrops, up to 50 feet in height, are 10 to 200 feet apart. Rock outcrops are granodiorites, granites, and gneiss

Minor Components

Dissimilar components:
- Well drained Edneytown soils, which weathered from granodiorite, granite, and granite gneiss; in similar landform positions
- Well drained Peaks soils, which weathered from granodiorite, granite, and granite gneiss; in similar landform positions
- Moderately deep, well drained Dekalb soils, which weathered from metasandstone and quartzite; in similar landform positions
- Deep and very deep, well drained Hazleton soils, which weathered from metasandstone and quartzite; in similar landform positions

Similar components:
- Areas of soils that have no rock outcrops

Properties and Qualities of the Sylvatus Soil

Available water capacity: Very low (about 2.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Shallow (10 to 20 inches)

Depth to root-restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Low
Runoff class: Very high
Surface fragments: About 3.0 to 15.0 percent angular stones
Parent material: Residuum weathered from phyllite, siltstone, and/or slate

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Moderately suited to chestnut oak
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality, especially in areas on the steeper slopes. A timber harvest plan should focus on the proper location of haul roads and skid trails, and careful attention should be given to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for planting and seeding is impractical.
- The slope makes the use of mechanical planting equipment impractical.
- The high content of stones or boulders on the surface may obstruct the construction of haul roads and log landings.
- The volume of rock fragments on the surface may reduce the traction of wheeled harvest equipment.
- Rock fragments on the surface interfere with the use of site preparation equipment.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- Because of the limited depth to bedrock, the ease of excavation is greatly reduced and the difficulty of constructing foundations and installing utilities is increased.
- Because of rock outcrops, rock removal may be needed.

Septic tank absorption fields
- Slow water movement limits the absorption and proper treatment of the effluent from conventional septic systems.
- Because of the limited depth to bedrock, the filtering capacity of the soil is reduced and the difficulty of properly installing the effluent distribution lines is increased.
- The slope limits the proper treatment of effluent from conventional septic systems.
- Because of rock outcrops, special design of septic tank absorption fields is needed.

Local roads and streets
- Because of the limited depth to bedrock, the ease of excavation is reduced and the difficulty of constructing roads is increased.
- Because of the slope, designing local roads and streets is difficult.
- Because of rock outcrops, special design of the grade of local roads and streets and special consideration of their location are needed to avoid having to remove rocks.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Sylvatus—7s; Rock outcrop—8
Virginia soil management group: Sylvatus—JJ; Rock outcrop—none assigned
Hydric soils: No

42—Udorthents, smoothed

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)

Map Unit Composition

Note: Because of the variability of areas of this map unit and the intricate pattern in which Udorthents occur, the composition is not given.

Typical Profile

Udorthents consist of cut and fill areas where the natural soil has been excavated or covered by earthy fill material. The thickness of the fill material varies but generally is more than 20 inches. The fill material generally is soil materials ranging from loamy sand to clay. Rock outcrops are common in the excavated areas.

Use and Management Considerations

Onsite investigation is needed to determine the suitability for specific uses.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Unspecified
Virginia soil management group: None assigned
Hydric soils: Unranked

43B—Unison loam, 2 to 7 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 50 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Unison and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 30 inches—yellowish red clay
30 to 62 inches—yellowish red clay; brown iron-manganese masses

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay; in the steeper landform positions
- Well drained Littlejoe soils, which formed in residual material; in similar landform positions

Similar components:
- Well drained, Clifford soils, which formed in residual material; in similar landform positions
- Moderately well drained Delanco soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Elsinboro soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Saunook soils, which have darker surface layers; in adjacent landform positions
- Well drained Wintergreen soils, which have a red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 7.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from gneiss, granite, greenstone, phyllite, schist, and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.

- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: L
Hydric soil: No

43C—Unison loam, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 50 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Unison and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Unison
Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 30 inches—yellowish red clay
30 to 62 inches—yellowish red clay; brown iron-manganese masses

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay; in the steeper landform positions
- Well drained Littlejoe soils, which formed in residual material; in similar landform positions

Similar components:
- Well drained Clifford soils, which formed in residual material; in similar landform positions
- Moderately well drained Delanco soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Elsinboro soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Saunook soils, which have darker surface layers; in adjacent landform positions
- Well drained Wintergreen soils, which have a red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 7.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from gneiss, granite, greenstone, phyllite, schist, and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: L
Hydric soil: No

44B—Unison loam, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 50 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Unison and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 30 inches—yellowish red clay
30 to 62 inches—yellowish red clay; brown iron-manganese masses

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay; in the steeper landform positions
- Well drained Littlejoe soils, which formed in residual material; in similar landform positions

Similar components:
- Well drained Clifford soils, which formed in residual material; in similar landform positions
- Moderately well drained Delanco soils, which have less clay in the subsoil; on adjacent terraces

- Well drained Elsinboro soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Saunook soils, which have darker surface layers; in adjacent landform positions
- Well drained Wintergreen soils, which have a red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 7.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium and/or alluvium derived from gneiss, granite, greenstone, phyllite, schist, and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: L
Hydric soil: No

44C—Unison loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 50 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Unison and similar soils: Typically 85 percent, ranging from about 80 to 90 percent

Typical Profile

Surface layer:
0 to 6 inches—dark yellowish brown loam

Subsoil:
6 to 30 inches—yellowish red clay
30 to 62 inches—yellowish red clay; brown iron-manganese masses

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay; in the steeper landform positions
- Well drained Littlejoe soils, which formed in residual material; in similar landform positions

Similar components:
- Well drained Clifford soils, which formed in residual material; in similar landform positions
- Moderately well drained Delanco soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Elsinboro soils, which have less clay in the subsoil; on adjacent terraces
- Well drained Saunook soils, which have darker surface layers; in adjacent landform positions
- Well drained Wintergreen soils, which have a red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 7.0 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)

Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium and/or alluvium derived from gneiss, granite, greenstone, phyllite, schist, and/or granodiorite

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: L
Hydric soil: No

45B—Wintergreen clay loam, 2 to 7 percent slopes, severely eroded

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—strong brown clay loam

Subsoil:
3 to 7 inches—strong brown clay loam
7 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 8.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium

Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, wheat, grass-legume hay, and alfalfa hay and poorly suited to soybeans
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- Clods may form if the soil is tilled when wet.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine; moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: O
Hydric soil: No

45C—Wintergreen clay loam, 7 to 15 percent slopes, severely eroded

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—strong brown clay loam

Subsoil:
3 to 7 inches—strong brown clay loam
7 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 8.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate

Runoff class: Medium
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Moderately suited to wheat and alfalfa hay and poorly suited to corn, soybeans, and grass-legume hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- Erosion has removed part of the surface soil, and the remaining surface soil is less productive and more difficult to manage.
- The high clay content restricts the rooting depth of crops.
- Clods may form if the soil is tilled when wet.
- The risk of compaction increases when the soil is wet.
- Soil crusting results in a decrease in water infiltration and hinders the emergence of seedlings.

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e
Virginia soil management group: O
Hydric soil: No

45D—Wintergreen clay loam, 15 to 25 percent slopes, severely eroded

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—strong brown clay loam

Subsoil:
3 to 7 inches—strong brown clay loam
7 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain loam surface layers

Soil Properties and Qualities

Available water capacity: Moderate (about 8.8 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)

Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6e

Virginia soil management group: O
Hydric soil: No

46B—Wintergreen loam, 2 to 7 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches

Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Well suited to corn, soybeans, wheat, and grass-legume hay and moderately suited to alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Prime farmland in all areas
Land capability class: 2e
Virginia soil management group: O
Hydric soil: No

46C—Wintergreen loam, 7 to 15 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Well suited to wheat and grass-legume hay and moderately suited to corn, soybeans, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 3e
Virginia soil management group: O
Hydric soil: No

46D—Wintergreen loam, 15 to 25 percent slopes

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 90 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate

Runoff class: High
Surface fragments: None
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Moderately suited to corn, soybeans, wheat, grass-legume hay, and alfalfa hay
- The rate of surface runoff, the hazard of erosion, and the amount of nutrient loss are increased because of the slope.
- The high clay content restricts the rooting depth of crops.

Pasture
Suitability: Well suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.

Woodland
Suitability: Well suited to northern red oak and eastern white pine; moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 4e

Virginia soil management group: O
Hydric soil: No

47B—Wintergreen loam, 2 to 7 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None

Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- This soil is well suited to septic tank absorption fields.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: O
Hydric soil: No

47C—Wintergreen loam, 7 to 15 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)

Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads
Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: Medium
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Moderately suited to pasture
- The hazard of erosion, the rate of surface runoff, and the amount of nutrient loss are increased because of the slope.
- Large stones on the surface may restrict the operation of some farm machinery.

Woodland
Suitability: Well suited to northern red oak and eastern white pine; moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 6s
Virginia soil management group: O
Hydric soil: No

47D—Wintergreen loam, 15 to 25 percent slopes, very stony

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)
Landform: Fans, drainageways, coves, and other colluvial areas at the bases of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Position on the landform: Mountain bases and treads

Size of areas: 5 to 100 acres
Shape of areas: Broad to narrow and linear

Map Unit Composition

Wintergreen and similar soils: Typically 85 percent, ranging from about 85 to 95 percent

Typical Profile

Surface layer:
0 to 3 inches—brown loam

Subsurface layer:
3 to 7 inches—strong brown loam

Subsoil:
7 to 24 inches—red clay
24 to 35 inches—red clay
35 to 62 inches—red clay; few pinkish white and strong brown mottles

Minor Components

Dissimilar components:
- Well drained Stott Knob and Rhodhiss soils, which have less clay in the subsoil than the Wintergreen soil; on the steeper side slopes
- Well drained Buffstat and Littlejoe soils, which formed in residuum of sericite schist; in similar landform positions
- Well drained Clifford soils, which formed in residuum of granite and gneiss; in similar landform positions
- Well drained Minnieville soils, which formed in residuum of gabbro and hornblende gneiss and schist; in similar landform positions
- Well drained Colleen soils, which formed in residuum of anorthosite; in similar landform positions

Similar components:
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil; in similar landform positions
- Soils that contain clay loam surface layers

Soil Properties and Qualities

Available water capacity: High (about 9.1 inches)
Slowest saturated hydraulic conductivity: Moderately high (about 0.6 in/hr)
Depth class: Very deep (more than 60 inches)
Depth to root-restrictive feature: More than 60 inches
Drainage class: Well drained
Depth to seasonal water saturation: More than 6.0 feet
Flooding hazard: None
Ponding hazard: None
Shrink-swell potential: Moderate
Runoff class: High
Surface fragments: About 0.1 to 3.0 percent subangular stones
Parent material: Colluvium and/or alluvium derived from granite, greenstone, schist, granodiorite, and/or gneiss

Use and Management Considerations

Cropland
Suitability: Unsuited to cropland

Pasture
Suitability: Unsuited to pasture

Woodland
Suitability: Well suited to northern red oak and eastern white pine and moderately suited to yellow-poplar
- Proper planning for timber harvesting is essential in order to minimize the potential negative impact to soil and water quality. A timber harvest plan should include general adherence to all applicable best management practices.
- The slope poses safety hazards and creates a potential for erosion during the construction of haul roads and log landings.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks and harvesting equipment.
- Because of the slope, the use of equipment for preparing sites for planting and seeding is restricted.
- The slope may restrict the use of some mechanical planting equipment.
- The low strength of the soil interferes with the construction of haul roads and log landings.
- The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil increases the difficulty of constructing haul roads and log landings when the soil is wet.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment.
- The stickiness of the soil restricts the use of equipment for site preparation to the drier periods.

Building sites
- The slope influences the use of machinery and the amount of excavation required.
- The high content of clay in the subsurface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields
- The slope limits the proper treatment of effluent from conventional septic systems.

Local roads and streets
- Because of shrinking and swelling, the use of the soil as base material for local roads and streets is restricted.
- The low strength of the soil is unfavorable for supporting heavy loads.
- Because of the slope, designing local roads and streets is difficult.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: 7s
Virginia soil management group: O
Hydric soil: No

W—Water

Setting

Major land resource area: Northern Blue Ridge (MLRA 130A) and Southern Piedmont (MLRA 136)

Typical Profile

This map unit includes streams, rivers, lakes, ponds, and other areas covered with water most of the time.

Interpretive Groups

Prime farmland: Not prime farmland
Land capability class: Unspecified
Virginia soil management group: None assigned
Hydric soil: Unranked

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of gravel, sand, reclamation material, 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, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the 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, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately 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.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and Virginia soil management groups are described.

Effective pasture management practices include maintaining a mixture of grasses and legumes, rotating pasture, deferring grazing, controlling undesirable vegetation, and using proper stocking rates.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Yields per Acre

The average yields per acre shown in table 5 are those that can be expected of the principal crops under a high level of management. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification and the Virginia soil management group of map units in the survey area also are shown in the tables.

The yields are based on the Virginia Agronomic Land Use Evaluation System, or VALUES (Virginia Polytechnic Institute and State University, 1994). Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

Realistic yield goals can be maintained over a long-term basis through proper nutrient management and other soil amendments, such as lime. Nitrogen and phosphorus from organic and inorganic forms should be applied according to approved nutrient management practices and regulations.

Pasture yields are expressed in terms of animal unit months. An animal unit month (AUM) is the amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the yields table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension

Service can provide information about the management and productivity of the soils for those crops.

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, 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 and 3e-6. These units are not given in all soil surveys.

The capability classification of the soils in this survey area is given in the section "Detailed Soil Map Units" and in table 5.

Virginia Soil Management Groups

The Virginia Agronomic Land Use Evaluation System (VALUES) is a system that ranks soils for management and productivity (Virginia Polytechnic Institute and State University, 1994). VALUES places each soil series in Virginia into one of 43 management groups. The management groups, A through QQ, include the following soil characteristics: regional occurrence; parent material; landscape position or influence; solum thickness; dominant profile features, such as texture; available water capacity for plants; and internal soil drainage. Economically and environmentally feasible yields were assigned to each management group based on yields of field trial crop data and research. The following paragraphs describe the soil management groups in Amherst County.

Group A. The soils of this group formed in alluvium and are on gently sloping flood plains or streams terraces. They are deep, have a medium texture throughout, have a high available water capacity, and are well drained.

Group B. The soils of this group formed in alluvium and are on nearly level or gently sloping flood plains or stream terraces in the Coastal Plain region. They are very deep, have a loamy texture throughout, have a high available water capacity, and are well drained or moderately well drained.

Group D. The soils of this group formed in a variety of residual parent materials on upland landscapes in the northern Piedmont region. They are moderately deep, have fine loamy textures, have a moderate available water capacity, and are well drained or moderately well drained.

Group G. The soils of this group formed in locally transported, medium textured sediments of either colluvial or alluvial origin of the Piedmont. They overlay a wide range of residual materials and are in landscape positions ranging from footslopes and toeslopes to the heads of drainageways, depressions, and narrow upland drainageways. They are deep, have a silty to loamy upper subsoil that is underlain by clayey to stony materials, have a moderate available water capacity, and are moderately well drained or somewhat poorly drained.

Group L. The soils of this group formed in old transported deposits of alluvium or colluvium and are on stream terraces, footslopes, and older, elevated upland landscapes that were once stream terraces. They are deep; have a medium textured surface layer and a more clayey subsurface layer, commonly with gravel and rounded stones; have a moderate or high available water capacity; and generally are well drained.

Group N. The soils of this group formed in residuum, ranging from weathered mafic rock to Triassic sediments, on dissected uplands in the Piedmont. They are moderately deep or deep, have a medium textured surface layer and a reddish brown clayey subsurface layer, have a moderate available water capacity, and are well drained.

Group O. The soils of this group formed in transported materials from old alluvium on dissected uplands. They are deep to shallow; have very dark red, clayey subsurface layers, which sometimes contain significant coarse fragments; have a moderate available water capacity; and are well drained.

Group V. The soils of this group formed in saprolite derived from a variety of parent materials, including slate, granite, gneiss, schist, and more basic granitic rock. These soils have a clayey subsurface layer, have a moderate available water capacity, and are well drained.

Group X. The soils of this group formed in a variety of residual materials, including slate, granite, gneiss, and schist. These soils have a clayey subsurface layer, which contains coarse fragments or gravel in some areas; have a moderate available water capacity; and are well drained or moderately well drained.

Group CC. The soils of this group formed from a range of parent materials that include alluvium and colluvium. These soils occur on a variety of landscapes, including uplands, stream terraces, colluvial areas, and bottomlands. They commonly have a moderately deep solum, are very deep to bedrock, have clayey-skeletal to coarse-loamy subsurface layers (which have as much as 70 percent coarse fragments in some areas), have a moderate available water capacity, and are well drained.

Group FF. The soils of this group formed in residual parent materials, ranging from sandstone, shale, and slate to loamy granitic saprolite, and extend across the Piedmont on steeply dissected uplands. They are moderately shallow; generally have a loamy-skeletal subsurface layer, which may contain 80 percent or more coarse fragments; have a very low or low available water capacity; and are moderately well drained or well drained.

Group JJ. The soils of this group formed in a wide variety of residual parent materials, ranging from sandstone and shale to Triassic materials and granite and schist saprolite, and are located primarily in the Piedmont. They are shallow, have predominantly loamy-skeletal textures throughout that range from 30 to 70 percent coarse fragments, have a very low available water capacity, and are well drained.

Group KK. The soils of this group formed in a variety of residual materials, including Triassic sediments, residuum from basic rocks, and other clayey sediments. They are moderately deep, have a clayey subsurface layer, commonly have large components of high shrink-swell clays, have a moderate available water capacity, and are moderately well drained or somewhat poorly drained.

Group MM. The soils of this group formed in loamy sediments. These soils flood frequently, have a high available water capacity, and are poorly drained.

Group NN. The soils of this group formed in alluvium along streams or on terraces. They are moderately deep, have a silty to clay loam subsurface texture, have a moderate available water capacity, and are somewhat poorly drained or poorly drained.

The management groups for the map units in Amherst County are given in the section “Detailed Soil Map Units” and in table 5.

Prime Farmland

Table 6 lists the map units in the survey area that are considered prime farmland. 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.

About 43,400 acres in Amherst County, or nearly 14 percent of the total acreage, meets the requirements for prime farmland. 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.

For some soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Table 7, parts I, II, and III, show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include saturated hydraulic conductivity (Ksat), depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include saturated hydraulic conductivity (Ksat), depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, saturated hydraulic conductivity (Ksat), slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate needed for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Saturated hydraulic conductivity (Ksat) and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, saturated hydraulic conductivity (Ksat), depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erosion factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Forestland Productivity and Management

The tables described in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forestland management.

Forestland Productivity

In table 8, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

Interpretive ratings for various aspects of forestland management are given in table 9, parts I through V. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified aspect of forestland management. *Well suited* indicates that the soil has features that are favorable for the specified management aspect 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 management aspect. 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 management aspect. 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 management aspect or that extreme measures are needed to overcome the undesirable soil properties.

Proper planning for timber harvesting is essential in order to minimize the potential impact to soil and water quality. A harvest plan should include logging roads, log decks, streamside management zones, stream crossings, skid trails, a schedule of activities, and best management practices for each activity. Forests should be managed in order to increase economic and environmental benefits. A forest stewardship plan should be developed to guide management and utilization of the forestland.

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 aspect of forestland management (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).

The paragraphs that follow indicate the soil properties considered in rating the soils. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* 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 soils are described as well suited, moderately suited, or poorly suited to use as log landings.

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 forest 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.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erosion factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other 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 erosion 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.

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 *suitability for use of harvesting equipment* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, and ponding. The soils are described as well suited, moderately suited, or poorly suited to this use.

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.

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 *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.

Recreational Development

In table 10, parts I and II, the soils of the survey area are rated according to limitations that affect their suitability for recreational development. 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 table are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, 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 this table can be supplemented by other information in this survey, for example, interpretations for dwellings without basements, for local roads and streets, and for septic tank absorption fields.

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, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), 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, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, saturated hydraulic conductivity (Ksat), and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, saturated hydraulic conductivity (Ksat), and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Hydric Soils

Table 11 lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 2006) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 2002).

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 following map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

8B Colleen loam, 2 to 7 percent slopes
8C Colleen loam, 7 to 15 percent slopes
9A Combs loam, 0 to 3 percent slopes, frequently flooded
11A Craigsville very cobbly sandy loam, 0 to 3 percent slopes, frequently flooded
32B Sketerville silt loam, 2 to 7 percent slopes
33A Speedwell loam, 0 to 3 percent slopes, frequently flooded

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, saturated hydraulic conductivity (Ksat), corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, reclamation material, roadfill, and topsoil; plan structures for water management; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Table 12, parts I and II, show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in table 12 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.

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.

Lawns and landscaping require soils on which turf and ornamental 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.

Sanitary Facilities

Table 13, parts I and II, show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *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.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include saturated hydraulic conductivity (Ksat), depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If the downward movement of water through the soil profile is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Table 14, parts I and II, give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. 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. In table 14, part I, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The 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.

In table 14, part II, the rating class terms are *good, fair,* and *poor*. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, and topsoil. 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.

Water Management

Table 15 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, permeability 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 determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, 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 16 gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, 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 17 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the 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 the 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 the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The 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 (Ksat), 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.

Saturated hydraulic conductivity (Ksat) 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. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In the table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion 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 saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the “National Soil Survey Handbook,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

Table 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 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. 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 exchangeable 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.

Water Features

Table 19 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

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.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. The table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 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. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness of the restrictive layer, which significantly affects the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2006). 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. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is 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. 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. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic 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 plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine, smectitic, mesic Typic Hapludalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Table 21 indicates the order, suborder, great group, subgroup, and family of the soil series in the survey area.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993) 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, 2006). Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

Buffstat Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from phyllite or sericite schist
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Deep
Slope range: 2 to 25 percent

Associated Soils

- Littlejoe soils, which have a red subsoil
- Bugley soils, which are shallow

Taxonomic Classification

Fine, mixed, semiactive, mesic Typic Hapludults

Typical Pedon

Buffstat silt loam, 15 to 25 percent slopes; in Amherst County, Virginia; about 2.5 miles east (90 degrees) of the intersection of Highways VA-669 and VA-663 and 2.2 miles southeast (110 degrees) of the intersection of Highways VA-654 and VA-613, in woodland; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 28 minutes 05.00 seconds N. and long. 79 degrees 00 minutes 20.00 seconds W.

A—0 to 3 inches; brown (10YR 4/3) silt loam; weak medium granular structure; friable, slightly sticky; many fine, medium, and coarse roots; few fine mica flakes; 10 percent gravel; strongly acid; abrupt smooth boundary.

E—3 to 7 inches; light yellowish brown (10YR 6/4) loam; weak medium subangular blocky structure; friable, slightly sticky; many fine, medium, and coarse roots; few fine mica flakes; 10 percent gravel; very strongly acid; clear wavy boundary.

Bt1—7 to 22 inches; strong brown (7.5YR 5/6) silty clay loam; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine and medium roots; many distinct clay films on all faces of peds; common fine mica flakes; 5 percent channers; very strongly acid; clear smooth boundary.

Bt2—22 to 39 inches; strong brown (7.5YR 5/6) clay; common medium faint yellowish red (5YR 5/6) and common medium distinct brownish yellow (10YR 6/8) mottles from weathered schist fragments; moderate fine and medium subangular blocky structure; firm, slightly sticky, slightly plastic; few fine and medium roots; many distinct clay films on all faces of peds; common fine mica flakes; 5 percent channers; very strongly acid; clear wavy boundary.

C—39 to 50 inches; red (2.5YR 4/6) channery silty clay loam; common medium prominent brownish yellow (10YR 6/6) and common medium faint yellowish red (5YR 5/6) mottles; weathered schist fragments; massive; friable, slightly sticky, slightly plastic; many fine mica flakes; 30 percent channers; very strongly acid; abrupt wavy boundary.

Cr—50 to 60 inches; slightly weathered, soft sericite schist.

Range in Characteristics

Solum thickness: 25 to 50 inches
Depth to soft bedrock: 40 to 60 inches
Depth to hard bedrock: 40 to 60 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons, 0 to 35 percent in the E and Bt horizons, and 0 to 50 percent in the C horizon
Reaction: Very strongly acid or strongly acid throughout the profile, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—2 to 6
Texture—fine sandy loam, loam, or silt loam; clay loam and silty clay loam in eroded areas

A horizon:
Hue—10YR
Value—2 to 4
Chroma—2 to 4
Texture—silt loam

E horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 6
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

Bt horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—silty clay loam, clay loam, silty clay, or clay; more than 30 percent silt in particle-size control section on average

C horizon:
Hue—10R to 10YR
Value—3 or 4
Chroma—4 to 6
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam

Cr horizon:
Type of bedrock—weathered, soft sericite schist or phyllite

Bugley Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from phyllite or sericite schist
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Shallow
Slope range: 7 to 60 percent

Associated Soils

- Buffstat and Littlejoe soils, which are clayey

Taxonomic Classification

Loamy-skeletal, mixed, semiactive, mesic Lithic Dystrudepts

Typical Pedon

Bugley very channery silt loam in an area of Bugley-Littlejoe complex, 25 to 60 percent slopes; in Amherst County, Virginia; about 2.25 miles north-northeast (24 degrees) of the intersection of Highways VA-613 and VA-648, and 1.7 miles east-northeast (70 degrees) of the intersection of Highways VA-654 and VA-613, in woodland; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 29 minutes 04.00 seconds N. and long. 79 degrees 00 minutes 50.00 seconds W.

A—0 to 2 inches; dark grayish brown (10YR 4/2) very channery silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; common fine mica flakes; 35 percent channers; extremely acid; abrupt smooth boundary.

E—2 to 6 inches; brownish yellow (10YR 6/6) very channery silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; common fine mica flakes; 35 percent channers; extremely acid; abrupt smooth boundary.

Bw—6 to 12 inches; strong brown (7.5YR 5/6) very channery silt loam; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; common fine and medium and few coarse roots; common fine mica flakes; 50 percent channers; extremely acid; clear wavy boundary.

C—12 to 16 inches; light gray (10YR 7/1), brownish yellow (10YR 6/8), and yellowish brown (10YR 5/8) extremely channery silt loam; massive; firm; few fine roots; many fine mica flakes; 65 percent channers; extremely acid; abrupt irregular boundary.

R—16 inches; hard sericite schist.

Range in Characteristics

Solum thickness: 10 to 20 inches
Depth to hard bedrock: 10 to 20 inches
Rock fragment content: 35 to 60 percent in the A and Ap horizons, 15 to 60 percent in the E horizon, and 35 to 80 percent in the Bw and C horizons
Reaction: Extremely acid to strongly acid throughout the profile, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—4 to 6
Texture (fine-earth fraction)—loam or silt loam

A horizon:
Hue—10YR or 2.5Y
Value—3 or 4
Chroma—2 to 4
Texture (fine-earth fraction)—silt loam

E horizon:
Hue—7.5YR or 10YR
Value—4 to 6

Chroma—3 to 6
Texture (fine-earth fraction)—loam or silt loam

Bw horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—silt loam, clay loam, or silty clay loam

C horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—1 to 8
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam

Cr horizon (where present):
Type of bedrock—slightly weathered, soft sericite schist or phyllite

R layer:
Type of bedrock—hard sericite schist or phyllite

Catoctin Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from greenstone
Drainage class: Well drained
Slowest saturated hydraulic conductivity: High
Depth class: Moderately deep
Slope range: 7 to 75 percent

Associated Soils

- Fauquier soils, which have a red clay subsoil
- Myersville soils, which are very deep
- Edneytown and Peaks soils, which are weathered from granite
- Sylco and Sylvatus soils, which are weathered from phyllite

Taxonomic Classification

Loamy-skeletal, mixed, superactive, mesic Ruptic-Alfic Eutrudepts

Typical Pedon

Catoctin channery silt loam in an area of Catoctin-Rock outcrop complex, 7 to 15 percent slopes; located 1.4 miles northeast (36 degrees) of the intersection of National Forest Service Roads 38 and 594 and 1.5 miles south (190 degrees) of the intersection of National Forest Service Road 38 and Highway VA-60, in pasture; Buena Vista, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 42 minutes 3.00 seconds N. and long. 79 degrees 15 minutes 7.00 seconds W.

Ap—0 to 4 inches; dark yellowish brown (10YR 4/4) channery silt loam; weak fine granular structure; very friable, slightly sticky, slightly plastic; many very fine and fine roots; 20 percent greenstone channers; moderately acid; abrupt smooth boundary.

Bw—4 to 22 inches; strong brown (7.5YR 5/6) very channery silt loam interrupted by thin lenses and irregular shaped areas of yellowish brown (10YR 5/6) channery silty clay loam that has few distinct clay films on faces of peds; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; common very fine and fine roots; 40 percent greenstone channers; moderately acid; abrupt wavy boundary.

Cr—22 to 30 inches; slightly weathered, soft greenstone; common distinct black (10YR 2/1) manganese stains in weathered rock joints; strong brown (7.5YR 5/6) weathered greenstone fragments.

R—30 inches; hard greenstone bedrock.

Range in Characteristics

Solum thickness: 15 to 30 inches
Depth to hard bedrock: 20 to 40 inches
Rock fragment content: 15 to 35 percent in the A horizon, 5 to 35 percent in the E horizon, 15 to 55 percent in the Bw horizon, and 35 to 80 percent in the C horizon
Reaction: Strongly acid to slightly acid in the A, E, and Bw horizons and moderately acid to neutral in the C horizon, except where lime has been applied

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—2 to 4
Texture (fine-earth fraction)—loam or silt loam

Ap horizon:
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—2 to 4
Texture (fine-earth fraction)—silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 8
Texture (fine-earth fraction)—loam or silt loam

Bw horizon:
Hue—5YR to 2.5Y
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—loam or silt loam that has pockets of clay loam or silty clay loam

C horizon (where present):
Hue—5YR to 2.5Y
Value—2 to 8
Chroma—1 to 8; chroma of 2 or less related to parent material
Texture (fine-earth fraction)—loam, silt loam, silty clay loam, or clay loam

Cr horizon:
Type of bedrock—slightly weathered, soft greenstone

R layer:
Type of bedrock—hard greenstone

Clifford Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from granite, gneiss, or mica schist

Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 50 percent

Associated Soils

- Wintergreen soils, which formed from colluvial or alluvial materials
- Rhodhiss and Stott Knob soils, which have less clay in the subsoil

Taxonomic Classification

Fine, kaolinitic, mesic Typic Kanhapludults

Typical Pedon

Clifford loam, 2 to 7 percent slopes; in Amherst County, Virginia; 0.075 mile south-southeast (150 degrees) of the intersection of Highways US-29 and VA-151 and 0.5 mile north-northeast (25 degrees) of the intersection of Highways VA-608 and US- 29, in a hayfield; Amherst, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 37 minutes 12.00 seconds N. and long. 79 degrees 00 minutes 48.00 seconds W.

Ap—0 to 10 inches; brown (7.5YR 4/4) loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; common fine roots; 5 percent gravel; moderately acid; abrupt smooth boundary.
Bt1—10 to 30 inches; red (2.5YR 4/8) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; many distinct clay films on all faces of peds; few fine mica flakes; moderately acid; diffuse smooth boundary.
Bt2—30 to 50 inches; red (2.5YR 4/8) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; many distinct clay films on all faces of peds; few fine mica flakes; moderately acid; diffuse smooth boundary.
Bt3—50 to 72 inches; red (2.5YR 4/8) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; common distinct clay films on all faces of peds; few fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 30 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent throughout the profile
Reaction: Very strongly acid to moderately acid throughout the profile, except where lime has been applied

Ap horizon:
Hue—2.5YR to 10YR
Value—3 to 5
Chroma—2 to 6
Texture—loam; sandy clay loam or clay loam where eroded

A horizon (where present):
Hue—2.5YR to 10YR
Value—3 or 4
Chroma—2 to 4
Texture—fine sandy loam, sandy loam, or loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6

Chroma—3 to 8
Texture—fine sandy loam, sandy loam, or loam

Bt horizon:
Hue—10R or 2.5YR; 5YR in subhorizons of some pedons
Value—4 or 5
Chroma—6 to 8
Texture—clay loam or clay that has less than 30 percent silt

BC horizon (where present):
Hue—10R to 5YR
Value—4 to 6
Chroma—4 to 8
Texture—loam, sandy clay loam, or clay loam

C horizon (where present):
Hue—10R to 7.5YR or variegated
Value—4 to 6
Chroma—4 to 8
Texture—sandy loam, fine sandy loam, loam, sandy clay loam, or clay loam

Codorus Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, schist, or phyllite
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Craigsville soils, which have more cobbles throughout
- Suches soils, which are moderately well drained
- Comus soils, which are well drained

Taxonomic Classification

Fine-loamy, mixed, active, mesic Fluvaquentic Dystrudepts

Typical Pedon

Codorus silt loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 0.9 mile southeast (142 degrees) of the intersection of Highways VA-610 and VA-778 and 1.6 miles northeast (62 degrees) of the intersection of Highways US-60 and VA-778, in hayland; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 39 minutes 05.00 seconds N. and long. 79 degrees 05 minutes 38.00 seconds W.

Ap—0 to 7 inches; brown (10YR 4/3) loam; weak fine granular structure; friable; common fine roots; common fine mica flakes; moderately acid; abrupt smooth boundary.

Bw1—7 to 13 inches; brown (7.5YR 4/4) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; common medium prominent irregular yellowish red (5YR 5/8) and faint irregular yellowish brown (10YR 5/4) masses of oxidized iron; common fine mica flakes; strongly acid; clear smooth boundary.

Bw2—13 to 27 inches; dark yellowish brown (10YR 4/4) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; medium distinct irregular dark grayish brown (10YR 4/2) iron depletions; common fine and medium prominent irregular yellowish red (5YR 5/6) masses of oxidized iron; many fine mica flakes; moderately acid; clear smooth boundary.

Bg—27 to 40 inches; dark gray (10YR 4/1) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; many medium and coarse faint irregular grayish brown (10YR 5/2) iron depletions; many medium and coarse prominent irregular yellowish brown (10YR 5/8) masses of oxidized iron; many fine mica flakes; moderately acid; clear smooth boundary.

Cg1—40 to 58 inches; gray (N 5/) clay loam; massive; friable, slightly sticky, slightly plastic; many medium and coarse prominent irregular strong brown (7.5YR 5/8) masses of oxidized iron; common fine mica flakes; strongly acid; clear smooth boundary.

2Cg2—58 to 65 inches; gray (10YR 5/1) fine sandy loam; massive; friable; many medium and coarse prominent irregular strong brown (7.5YR 5/8) masses of oxidized iron; common fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 30 to 60 inches

Depth to bedrock: 72 inches or more

Rock fragment content: 0 to 15 percent in the A, Ap, Bw, and Bg horizons; 0 to 25 percent in the Cg and C horizons above 40 inches; and 0 to 70 percent in the Cg and C horizons below a depth of 40 inches

Reaction: Very strongly acid to moderately acid in the Ap, A, and upper Bw horizons and strongly acid to slightly acid in the lower Bw, Bg, Cg, and C horizons, except where lime has been applied

Ap horizon:

Hue—10YR
Value—4 to 6
Chroma—2 or 3
Texture—loam

A horizon (where present):

Hue—10YR
Value—3 to 6
Chroma—2 or 3
Texture—loam or silt loam

Bw horizon:

Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 or 4
Redoximorphic features—iron depletion in shades of brown and gray and masses of oxidized iron in shades of red, brown, and yellow
Texture—loam, silt loam, clay loam, or silty clay loam

Bg horizon:

Hue—7.5YR, 10YR, or neutral with value of 4 or 5
Value—4 or 5
Chroma—1 or 2
Redoximorphic features—iron depletions in shades of brown and gray and masses of oxidized iron in shades of red, brown, and yellow
Texture—loam, silt loam, clay loam, or silty clay loam

C horizon (where present):
Hue—7.5YR to 2.5Y
Value—3 to 5
Chroma—3 or 4
Redoximorphic features—iron depletion in shades of brown and gray and masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, silt loam, silty clay loam, clay loam, or fine sandy loam; stratified sand and gravel below 40 inches in some pedons

Cg horizon:
Hue—7.5YR, 2.5Y, or neutral with value of 3 to 6
Value—3 to 6
Chroma—1 or 2
Redoximorphic features—masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, silt loam, silty clay loam, clay loam, or fine sandy loam; stratified sand and gravel below 40 inches in some pedons

Colleen Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from anorthosite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope range: 2 to 25 percent

Associated Soils

- Sketerville soils, which are moderately well drained
- Pineywoods soils, which are poorly drained

Taxonomic Classification

Fine, kaolinitic, mesic Typic Hapludults

Typical Pedon

Colleen loam, 2 to 7 percent slopes; in Amherst County, Virginia; about 0.09 mile northwest (324 degrees) of the intersection of Highways VA-735 and VA-619 and 0.65 mile southeast (140 degrees) of Highways VA-735 and VA-665, in woodland; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 41 minutes 10.00 seconds N. and long. 79 degrees 03 minutes 13.00 seconds W.

Ap—0 to 6 inches; yellowish brown (10YR 5/6) loam; moderate fine and medium granular structure; friable, slightly sticky, slightly plastic; common fine roots; 5 percent quartz gravel; moderately acid; abrupt smooth boundary.
Bt1—6 to 25 inches; red (2.5YR 4/8) clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; many distinct clay films on all faces of peds; few fine mica flakes; 2 percent quartz gravel; few fine prominent reddish yellow (7.5YR 6/8) weathered anorthosite fragments; strongly acid; clear wavy boundary.
Bt2—25 to 50 inches; red (2.5YR 5/6) clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; many distinct clay films on all faces of peds; few fine mica flakes; 2 percent quartz gravel; common medium prominent reddish yellow (7.5YR 6/8) and pinkish white (5YR 8/2) weathered anorthosite fragments; strongly acid; clear wavy boundary.

C—50 to 65 inches; red (2.5YR 5/6) silty clay loam saprolite; massive; firm, slightly sticky, slightly plastic; common fine mica flakes; 2 percent quartz gravel; common medium prominent reddish yellow (10YR 6/8), pinkish white (5YR 8/2), and strong brown (7.5YR 5/6) weathered anorthosite fragments; strongly acid.

Range in Characteristics

Solum thickness: 40 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A horizon and 0 to 35 percent in the Bt and C horizons
Reaction: Very strongly acid to slightly acid in the A and Ap horizons, extremely acid to strongly acid in the Bt horizon, and very strongly acid to moderately acid in the C horizon, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture (fine-earth fraction)—loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—2 or 3
Chroma—2 to 4; where chroma is less than 4, horizon is less than 6 inches thick
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—5 to 8
Chroma—4 to 8
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

Bt horizon:
Hue—2.5YR to 7.5YR
Value—4 to 6
Chroma—6 to 8; high or low chroma colors inherited from parent material
Texture (fine-earth fraction)—clay loam, silty clay loam, or clay

C horizon:
Hue—2.5YR to 5Y or neutral with value of 4 to 6
Value—4 to 6
Chroma—1 to 8
Texture (fine-earth fraction)—sandy loam, loam, silt loam, clay loam, or silty clay loam saprolite

Combs Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, schist, phyllite, greenstone, limestone, sandstone, and/or shale
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Speedwell soils, which are well drained
- Sindion soils, which are moderately well drained
- Yogaville soils, which are poorly drained

Taxonomic Classification

Coarse-loamy, mixed, active, mesic Fluventic Hapludolls

Typical Pedon

Combs loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 1.6 miles northeast (68 degrees) of the junction of Highways VA-622 and VA-776 and 2.5 miles northeast (48 degrees) of the junction of Highways VA-622 and VA-624 on Pettyjohn Island, in a hayfield; Stonewall, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 29 minutes 40.00 seconds N. and long. 78 degrees 56 minutes 37.00 seconds W.

Ap—0 to 12 inches; very dark grayish brown (10YR 3/2) crushed loam, brown (10YR 5/3) dry; moderate medium granular structure; friable, slightly sticky, slightly plastic; common fine roots; few fine mica flakes; neutral; abrupt smooth boundary.

Bw1—12 to 44 inches; dark yellowish brown (10YR 4/4) loam; weak coarse subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; few fine mica flakes; neutral; clear smooth boundary.

Bw2—44 to 61 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak coarse subangular blocky structure; friable, slightly sticky, slightly plastic; few fine mica flakes; neutral; clear smooth boundary.

Bw3—61 to 72 inches; dark yellowish brown (10YR 4/4) loam; weak coarse subangular blocky structure; friable, slightly sticky, slightly plastic; few fine mica flakes; neutral.

Range in Characteristics

Solum thickness: 40 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent throughout the profile
Reaction: Moderately acid to neutral throughout, except where lime has been applied

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture—sandy loam, fine sandy loam, loam, or silt loam

Ap horizon:
Hue—7.5YR or 10YR
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture—loam

Bw horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 6
Texture—sandy loam, fine sandy loam, loam, or silt loam; sandy clay loam below a depth of 40 inches

C horizon (where present):
Hue—7.5YR or 10YR

Value—4 or 5
Chroma—4 to 6
Redoximorphic features—iron depletions in shades of brown and gray and masses of oxidized iron in shades of brown and yellow in some pedons
Texture—loam, sandy loam, silt loam, or sandy clay loam; horizon may be stratified with these textures in some pedons

Comus Series

Physiographic province: Blue Ridge and Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, schist, gabbro, diorite, and/or phyllite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Suches soils, which are moderately well drained
- Codorus soils, which are somewhat poorly drained

Taxonomic Classification

Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts

Typical Pedon

Comus fine sandy loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 1.0 mile north (6 degrees) of the intersection of Highways VA-689 and VA-690 and 1.3 miles east (88 degrees) of the intersection of Highways VA-617 and VA-689, in pasture; Amherst, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 37 minutes 04.00 seconds N. and long. 79 degrees 03 minutes 39.00 seconds W.

Ap—0 to 8 inches; dark yellowish brown (10YR 3/4) fine sandy loam; weak fine granular structure; loose; many fine roots; many fine mica flakes; strongly acid; clear smooth boundary.
Bw1—8 to 38 inches; strong brown (7.5YR 4/6) fine sandy loam; weak medium subangular blocky structure; friable; many fine roots; many fine mica flakes; strongly acid; abrupt smooth boundary.
Bw2—38 to 45 inches; brown (7.5YR 4/4) fine sandy loam; weak fine subangular blocky structure; very friable; common fine roots; many fine mica flakes; strongly acid; clear smooth boundary.
C—45 to 65 inches; brown (7.5YR 4/4) stratified fine sandy loam to loamy sand; single grain; very friable; few fine roots; many fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 24 to 40 inches
Depth to bedrock: 72 inches or more
Rock fragment content: 0 to 15 percent in the A and Bw horizons and 0 to 40 percent in the C horizon
Reaction: Very strongly acid to moderately acid throughout the profile, except where lime has been applied

A horizon (where present):
Hue—7.5YR or 10YR

Value—3 to 5
Chroma—1 to 4
Texture—fine sandy loam

Ap horizon:
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—2 to 4
Texture—fine sandy loam, loam, or silt loam

Bw horizon:
Hue—7.5YR or 10YR; 5YR in individual subhorizons
Value—4 or 5
Chroma—4 to 6
Texture—fine sandy loam, loam, or silt loam

C horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—2 to 6
Redoximorphic features—iron depletions in shades of brown and gray in some pedons below a depth of 40 inches
Texture—loamy fine sand, loamy sand, sandy loam, fine sandy loam, loam, or silty clay loam in fine-earth fraction; silty clay loam limited to thin layers and loamy sand and loamy fine sand textures limited to depths greater than 40 inches

Craigsville Series

Physiographic province: Blue Ridge and Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granodiorite, granite, gneiss, schist, phyllite, and/or greenstone
Drainage class: Well drained
Slowest saturated hydraulic conductivity: High
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Codorus soils, which are somewhat poorly drained
- Suches soils, which are moderately well drained

Taxonomic Classification

Loamy-skeletal, mixed, superactive, mesic Fluventic Dystrudepts

Typical Pedon

Craigsville very cobbly sandy loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 0.6 mile south (198 degrees) of the intersection of Highways US-60 and VA-631 and 1.0 mile west (260 degrees) of the intersection of Highways US-60 and VA-610, in pasture; Forks of Buffalo, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 39 minutes 25.00 seconds N. and long. 79 degrees 09 minutes 58.00 seconds W.

Ap—0 to 5 inches; dark yellowish brown (10YR 4/4) very cobbly sandy loam; weak fine granular structure; very friable; common fine roots; 15 percent cobbles and 25 percent gravel; very strongly acid; clear smooth boundary.

Bw1—5 to 14 inches; dark yellowish brown (10YR 4/6) very cobbly loam; weak fine granular structure; friable; common fine roots; 15 percent gravel and 20 percent cobbles; very strongly acid; abrupt smooth boundary.

Bw2—14 to 32 inches; yellowish brown (10YR 5/4) very cobbly loam; weak fine granular structure; friable; few fine roots; common fine prominent yellowish brown (10YR 5/8) masses of oxidized iron on surfaces along pores; 15 percent gravel and 35 percent cobbles; strongly acid; abrupt smooth boundary.

C1—32 to 54 inches; dark yellowish brown (10YR 4/6) extremely gravelly loamy sand; single grain; friable; common medium faint yellowish brown (10YR 5/6) masses of oxidized iron on surfaces along pores and common medium prominent black (10YR 2/1) manganese coatings on surfaces along pores; 20 percent cobbles and 45 percent gravel; strongly acid; abrupt smooth boundary.

2C2—54 to 72 inches; yellowish brown (10YR 5/6) extremely cobbly sandy loam; massive; friable; common medium faint yellowish brown (10YR 5/6) masses of oxidized iron on surfaces along pores; 5 percent gravel and 65 percent cobbles; strongly acid.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 35 to 60 percent in the A horizon and 35 to 70 percent in the B and C horizons
Reaction: Very strongly acid or strongly acid throughout the profile, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 to 4
Texture (fine-earth fraction)—sandy loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 to 4
Texture (fine-earth fraction)—sandy loam, fine sandy loam, loam, or silt loam

Bw horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—4 to 6
Redoximorphic features (where present)—masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—sandy loam or loam

C horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—3 to 6
Redoximorphic features (where present)—masses of oxidized iron in shades of red, brown, and yellow; black manganese coatings
Texture (fine-earth fraction)—loamy sand or sandy loam

2C horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—3 to 6

Redoximorphic features (where present)—masses of oxidized iron in shades of red, brown, and yellow; black manganese coatings
Texture (fine-earth fraction)—loamy sand or sandy loam

Dekalb Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from metasandstone or quartzite
Drainage class: Excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Moderately deep
Slope range: 15 to 75 percent

Associated Soils

- Deep, well drained Hazleton soils, which weathered from metasandstone
- Very deep, well drained Edneytown soils
- Very deep, well drained Clifford soils
- Moderately deep, well drained Sylco and Sylvatus soils, which formed in phyllite

Taxonomic Classification

Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts

Typical Pedon

Dekalb channery loam in an area of Dekalb-Hazleton complex, 15 to 35 percent slopes, very stony; in a national forest section of Amherst County, Virginia; about 1.5 miles southwest (222 degrees) from the intersection of Highway VA-607 and National Forest Service Road 311 and 2.5 miles west (280 degrees) from the intersection of Highway VA-607 and National Forest Service Road 1173, in woodland; Buena Vista, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 39 minutes 31.00 seconds N. and long. 79 degrees 20 minutes 56.00 seconds W.

Oi—0 to 1 inch; moderately decomposed plant material.
A—1 to 4 inches; black (10YR 2/1) channery loam; weak fine and medium granular structure; friable; many fine and medium roots; 22 percent channers; very strongly acid; clear smooth boundary.
Bw1—4 to 7 inches; dark yellowish brown (10YR 4/4) loam; weak fine granular structure; friable; common fine and medium roots; 10 percent channers; very strongly acid; clear smooth boundary.
Bw2—7 to 13 inches; dark yellowish brown (10YR 4/6) very channery loam; weak fine granular structure; friable; common fine and medium roots; 35 percent channers; very strongly acid; clear wavy boundary.
Bw3—13 to 20 inches; yellowish brown (10YR 5/6) very channery loam; weak fine granular structure; friable; common fine and medium roots; 45 percent channers; very strongly acid; clear wavy boundary.
BC—20 to 26 inches; yellowish brown (10YR 5/6) very flaggy loam; weak medium subangular blocky structure; friable; common fine and medium roots; 22 percent channers and 30 percent flagstones; very strongly acid; clear wavy boundary.
C—26 to 31 inches; yellowish brown (10YR 5/6) extremely flaggy loam; massive; friable; 28 percent channers and 50 percent flagstones; very strongly acid; abrupt wavy boundary.
R—31 inches; hard metasandstone.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to paralithic contact: 20 to 40 inches
Depth to bedrock: 20 to 40 inches
Rock fragment content: 10 to 60 percent in the A, E, and Bw horizons and 50 to 90 percent in the C horizon; weighted average greater than 35 percent
Reaction: Extremely acid to strongly acid throughout the profile, except where lime has been applied

A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture (fine-earth fraction)—loam

Ap horizon (where present):
Hue—10YR
Value—4
Chroma—2 to 4
Texture (fine-earth fraction)—sandy loam or loam

E horizon (where present):
Hue—10YR
Value—5 or 6
Chroma—1 to 4
Texture (fine-earth fraction)—sandy loam or loam

Bw horizon:
Hue—7.5YR or 10YR
Value—5 to 8
Chroma—4 to 8
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

BC horizon:
Hue—7.5YR or 10YR
Value—5 to 8
Chroma—4 to 8
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

C horizon:
Hue—7.5YR or 10YR
Value—5 or 6
Chroma—4 to 6
Texture (fine-earth fraction)—loam, loamy sand, or sandy loam

Cr horizon (where present):
Type of bedrock—slightly weathered, soft quartzite or metasandstone

R layer:
Type of bedrock—hard quartzite or metasandstone

Delanco Series

Physiographic province: Piedmont
Landform: Heads of drains, narrow concave colluvial areas, and small stream terraces

Parent material: Alluvium and/or colluvium derived from granite, gneiss, schist, diorite, gabbro, and/or phyllite
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 15 percent

Associated Soils

- Moderately well drained and somewhat poorly drained Codorus soils
- Moderately well drained Suches soils and well drained Comus soils on flood plains
- Well drained Elsinboro soils in similar landform positions

Taxonomic Classification

Fine-loamy, mixed, semiactive, mesic Aquic Hapludults

Typical Pedon

Delanco loam in an area of Delanco-Elsinboro complex, 2 to 7 percent slopes, rarely flooded; in Amherst County, Virginia; about 0.38 mile southwest (240 degrees) of the intersection of Highways VA-151 and VA-674, 1.6 miles south (175 degrees) of the intersection of Highways VA-151 and VA-665, in woodland; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 40 minutes 35.00 seconds N. and long. 79 degrees 01 minute 37.00 seconds W.

A—0 to 4 inches; dark yellowish brown (10YR 3/4) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine roots; few fine mica flakes; strongly acid; abrupt smooth boundary.
Bt1—4 to 25 inches; strong brown (7.5YR 5/8) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; common fine mica flakes; strongly acid; clear smooth boundary.
Bt2—25 to 35 inches; strong brown (7.5YR 4/6) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common fine and medium prominent irregular grayish brown (10YR 5/2) iron depletions that have diffuse boundaries in matrix; common fine mica flakes; strongly acid; clear smooth boundary.
C—35 to 60 inches; strong brown (7.5YR 5/6) silt loam; massive; friable, slightly sticky, slightly plastic; many fine and medium prominent irregular grayish brown (10YR 5/2) iron depletions that have diffuse boundaries throughout; common fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 26 to 46 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 5 percent in the A, Ap, and Bt horizons and 0 to 25 percent in the C horizon
Reaction: Extremely acid to strongly acid in the Ap, A, Bt, and C horizons, except where lime has been applied

A horizon:
Hue—5YR to 10YR
Value—3 to 5
Chroma—1 to 4
Texture—loam

Ap horizon (where present):
Hue—5YR to 10YR
Value—3 to 5

Chroma—1 to 4
Texture—loam, fine sandy loam, or silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—3 to 6
Chroma—4 to 8
Texture—loam, fine sandy loam, or silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 to 7
Chroma—6 to 8
Redoximorphic features (middle and lower parts)—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow
Texture—loam, silt loam, silty clay loam, clay loam, or sandy clay loam

C horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—3 to 6
Redoximorphic features—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—fine sandy loam, sandy loam, loam, silt loam, or stratified textures; saprolite below a depth of 40 inches in some pedons

Cg horizon (where present):
Hue—5YR to 10YR
Value—4 to 6
Chroma—1 or 2
Redoximorphic features—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—fine sandy loam, sandy loam, loam, silt loam, or stratified textures; saprolite below a depth of 40 inches in some pedons

Edneytown Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from granite, gneiss, or granodiorite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 75 percent

Associated Soils

- Peaks soils, which have more rock fragments throughout than the Edneytown soils
- Saunook soils, which have dark surface layers

Taxonomic Classification

Fine-loamy, mixed, active, mesic Typic Hapludults

Typical Pedon

Edneytown loam, 7 to 15 percent slopes; in Amherst County, Virginia; about 1.8 miles southwest (248 degrees) from the intersection of Highways VA-605 and the Blue Ridge Parkway and 0.4 mile northwest (342 degrees) from the intersection of the

Pedlar River and Big Branch, in woodland; Montebello, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 47 minutes 16.00 seconds N. and long. 79 degrees 14 minutes 57.00 seconds W.

Oi—0 to 1 inch; slightly decomposed plant material.
A—1 to 3 inches; dark yellowish brown (10YR 4/4) loam; moderate fine granular structure; friable; many fine, medium, and coarse roots; 5 percent gravel; very strongly acid; abrupt smooth boundary.
E—3 to 7 inches; yellowish brown (10YR 5/6) fine sandy loam; weak fine granular structure; friable; many fine, medium, and coarse roots; common fine mica flakes; 10 percent gravel; strongly acid; abrupt smooth boundary.
Bt—7 to 39 inches; strong brown (7.5YR 5/8) clay loam; moderate medium subangular blocky structure; friable; few fine and medium roots; common fine mica flakes; 10 percent gravel; strongly acid; clear smooth boundary.
C—39 to 61 inches; strong brown (7.5YR 5/8) and yellowish brown (10YR 5/8) loam saprolite; massive; friable; few fine roots; many fine mica flakes; 10 percent gravel; strongly acid.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to bedrock: More than 60 inches
Rock fragment content: 0 to 15 percent
Reaction: Very strongly acid to moderately acid in the A and E horizons and very strongly acid or strongly acid in the Bt and C horizons, except where lime has been applied

A horizon:
Hue—10YR
Value—3 to 6
Chroma—1 to 4
Texture—loam

Ap horizon (where present):
Hue—10YR
Value—4 to 6
Chroma—2 to 4
Texture—loamy fine sand, sandy loam, fine sandy loam, or loam

E horizon:
Hue—10YR
Value—4 to 7
Chroma—3 to 6
Texture—loamy fine sand, sandy loam, fine sandy loam, or loam

Bt horizon:
Hue—7.5YR or 10YR
Value—5 to 7
Chroma—4 to 8
Texture—fine sandy loam, sandy clay loam, or clay loam

C horizon:
Hue—7.5YR or 10YR
Value—5 to 8
Chroma—3 to 8
Texture—loamy sand, sandy loam, fine sandy loam, or loam saprolite

Cr horizon (where present):
Type of bedrock—weathered, soft gneiss, granite, or granodiorite

Elsinboro Series

Physiographic province: Piedmont
Landform: Heads of drains; narrow, concave colluvial areas; and small stream terraces
Parent material: Alluvium and/or colluvium derived from granite, gneiss, schist, diorite, gabbro, and/or phyllite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 15 percent

Associated Soils

- Moderately well drained and somewhat poorly drained Codorus soils
- Moderately well drained Suches soils and well drained Comus soils on flood plains
- Moderately well drained Delanco soils in similar landform positions

Taxonomic Classification

Fine-loamy, mixed, semiactive, mesic Typic Hapludults

Typical Pedon

Elsinboro loam in an area of Delanco-Elsinboro complex, 2 to 7 percent slopes, rarely flooded; in Amherst County, Virginia; about 0.45 mile north-northeast (25 degrees) of the intersection of Highways US-151 (US-29) and VA-681 and 0.65 mile south-southeast (156 degrees) of the intersection of Highways US-151 (US-29) and VA-766, in woodland; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 26 minutes 42.00 seconds N. and long. 79 degrees 07 minutes 0.00 seconds W.

A—0 to 8 inches; dark yellowish brown (10YR 4/4) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; few fine mica flakes; strongly acid; abrupt smooth boundary.
Bt1—8 to 20 inches; strong brown (7.5YR 4/6) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; few faint clay films on all faces of peds; common fine mica flakes; strongly acid; clear smooth boundary.
Bt2—20 to 38 inches; yellowish red (5YR 5/6) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine and medium roots; few faint clay films on all faces of peds; common fine mica flakes; strongly acid; clear smooth boundary.
C—38 to 60 inches; strong brown (7.5YR 5/6) sandy clay loam; massive; friable, slightly sticky, slightly plastic; common fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 28 to 50 inches
Depth to bedrock: 72 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons and 0 to 25 percent in the Bt and C horizons
Reaction: Very strongly acid or strongly acid in the Ap, A, Bt, and C horizons, except where lime has been applied

A horizon:
Hue—7.5YR or 10YR
Value—3 or 4

Chroma—2 to 4
Texture—loam

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 to 4
Texture—loam, sandy loam, fine sandy loam, or silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—2 to 4
Texture—loam, sandy loam, fine sandy loam, or silt loam

Bt horizon:
Hue—2.5YR to 10YR
Value—4 or 5
Chroma—4 to 8
Texture (fine-earth fraction)—loam, silt loam, silty clay loam, or clay loam

C horizon:
Hue—2.5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—fine sandy loam, sandy loam, loam, silt loam, sandy clay loam, or stratified textures; saprolite below 40 inches in some pedons

Fauquier Series

Physiographic province: Blue Ridge and Piedmont
Landform: Mountains slopes and hillslopes
Parent material: Residuum weathered from greenstone or gabbro
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Deep
Slope range: 7 to 50 percent

Associated Soils

- Minnieville soils in similar landform positions
- Myersville soils and Catoctin soils, which have less clay in the subsoil

Taxonomic Classification

Fine, mixed, active, mesic Ultic Hapludalfs

Typical Pedon

Fauquier loam, 15 to 25 percent slopes, very stony; in Amherst County, Virginia; about 1.1 miles southeast (134 degrees) from the intersection of National Forest Service Roads 38 and 594, and 1.4 miles southwest (206 degrees) of the junction of Highways VA-60 and VA-686, in an abandoned cropfield; Buena Vista, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 40 minutes 26.00 seconds N. and long. 79 degrees 15 minutes 15.00 seconds W.

Ap—0 to 4 inches; strong brown (7.5YR 4/6) loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; moderately acid; abrupt smooth boundary.

Bt1—4 to 25 inches; red (2.5YR 4/6) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; common fine roots; many distinct clay films on all faces of peds; moderately acid; clear smooth boundary.

Bt2—25 to 38 inches; red (2.5YR 4/6) silty clay loam; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; many distinct clay films on all faces of peds; few prominent brownish yellow (10YR 6/8) masses of soft rock; moderately acid; gradual smooth boundary.

C—38 to 55 inches; yellowish red (5YR 4/6), black (10YR 2/1), and yellowish brown (10YR 5/8) silt loam; massive; friable, slightly sticky, slightly plastic; 5 percent greenstone gravel; moderately acid; gradual smooth boundary.

Cr—55 to 60 inches; slightly weathered, soft greenstone.

Range in Characteristics

Solum thickness: 20 to 40 inches

Depth to bedrock: 40 inches or more

Rock fragment content: 0 to 15 percent in the A horizon, 0 to 25 percent in the upper Bt horizons, 0 to 35 percent in the lower Bt horizons, and 0 to 60 percent in the C horizon

Reaction: Very strongly acid to moderately acid in the A and Bt horizons and strongly acid or moderately acid in the C horizon, except where lime has been applied

Ap horizon:

Hue—2.5YR to 7.5YR
Value—3 or 4
Chroma—4 to 6
Texture—loam

A horizon (where present):

Hue—2.5YR to 7.5YR
Value—3 or 4
Chroma—4 to 6
Texture—loam, silt loam, or silty clay loam

Bt horizon:

Hue—10R to 5YR
Value—3 or 4
Chroma—4 to 8
Texture (fine-earth fraction)—silty clay loam, silty clay, or clay

C horizon:

Hue—10R to 10YR
Value—2 to 8
Chroma—1 to 8; chroma of 2 or less related to parent material
Texture (fine-earth fraction)—silt loam

Cr horizon:

Type of bedrock—slightly weathered, soft greenstone or gabbro

Haymarket Series

Physiographic province: Piedmont

Landform: Hillslopes

Parent material: Residuum weathered from gabbro, greenstone, or diorite

Drainage class: Well drained or moderately well drained

Slowest saturated hydraulic conductivity: Moderately high

Depth class: Very deep
Slope range: 2 to 15 percent

Associated Soils

- Moderately deep Spriggs soils, which have less clay in the subsoil
- Moderately deep Mirerock soils, which have very slow permeability

Taxonomic Classification

Fine, smectitic, mesic Typic Hapludalfs

Typical Pedon

Haymarket loam in an area of Haymarket-Mirerock complex, 7 to 15 percent slopes; in Amherst County, Virginia; 0.9 mile southwest (230 degrees) of the intersection of Highways VA-130 and VA-66 and 1.7 miles southeast (158 degrees) of the intersection of Highways VA-130 and VA-795, in pasture; Lynchburg, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 27 minutes 31.00 seconds N. and long. 79 degrees 08 minutes 47.00 seconds W.

Ap—0 to 7 inches; dark yellowish brown (10YR 4/4) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; common black (10YR 2/1) manganese coatings; 10 percent gravel; very strongly acid; clear smooth boundary.

Btss1—7 to 20 inches; yellowish brown (10YR 5/6) clay; weak coarse prismatic structure parting to moderate medium angular blocky; very firm, very sticky, very plastic; few fine and medium roots; common slickensides (pedogenic) and many distinct clay films on all faces of peds; common medium faint irregular strong brown (7.5YR 5/6) and yellowish red (5YR 5/6) masses of oxidized iron with clear boundaries in matrix; strongly acid; clear smooth boundary.

Btss2—20 to 35 inches; yellowish brown (10YR 5/6) clay; weak coarse prismatic structure parting to moderate medium angular blocky; very firm, very sticky, very plastic; few fine and medium roots; common slickensides (pedogenic) and common distinct clay films on all faces of peds; common fine and medium prominent irregular grayish brown (10YR 5/2) iron depletions with diffuse boundaries in matrix; common medium faint irregular yellowish red (5YR 5/6) and strong brown (7.5YR 5/6) and prominent irregular red (2.5YR 4/6) masses of oxidized iron with clear boundaries in matrix; strongly acid; abrupt smooth boundary.

BC—35 to 45 inches; yellowish brown (10YR 5/8), white (10YR 8/1), strong brown (7.5YR 5/6), and red (2.5YR 4/6) silty clay loam; weak coarse subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; few fine mica flakes; strongly acid; clear wavy boundary.

C—45 to 65 inches; yellowish red (5YR 5/6) and strong brown (7.5YR 5/8) loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine roots; common fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 24 to 48 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A, Ap, E, Bt, and BC horizons and 0 to 25 percent in the C horizon
Reaction: Very strongly acid to moderately acid in the A, Ap, E, Bt, and BC horizons and strongly acid to neutral in the C horizon, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR

Value—4 to 6
Chroma—3 to 8
Texture—loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—1 to 8
Texture—loam or silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 8
Texture—loam, silt loam, silty clay loam, or clay loam

Bt and Btss horizons:
Hue—5YR to 10YR
Value—4 or 5
Chroma—4 to 6; black to dark brown concretions and stains are few to many in individual subhorizons
Redoximorphic features—iron depletion in shades of brown and gray and masses of oxidized iron in shades of red, brown, and yellow
Texture—silty clay loam or clay

BC horizon:
Hue—2.5YR to 10YR
Value—4 or 5
Chroma—1 to 8
Texture—clay loam, loam, silty clay loam, or silt loam

C horizon:
Hue—5YR to 2.5Y
Value—4 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—sandy loam, loam, sandy clay loam, or clay loam saprolite

Hazleton Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from metasandstone or quartzite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: High
Depth class: Deep
Slope range: 15 to 75 percent

Associated Soils

- Moderately deep, excessively drained Dekalb soils
- Very deep, well drained Edneytown soils
- Very deep, well drained Clifford soils
- Well drained Sylco and Sylvatus soils, which formed in phyllite

Taxonomic Classification

Loamy-skeletal, siliceous, subactive, mesic Typic Dystrudepts

Typical Pedon

Hazleton loam in an area of Dekalb-Hazleton complex, 35 to 55 percent slopes, extremely stony; in a national forest area of Amherst County, Virginia; about 2.3 miles west (278 degrees) from the intersection of Highway US-60 and National Forest Service Road 1173 and 1.3 miles south-southwest (214 degrees) from the intersection of Highway VA-607 and National Forest Service Road 311, in woodland; Buena Vista, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 39 minutes 35.00 seconds N. and long. 79 degrees 20 minutes 41.00 seconds W.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 4 inches; black (10YR 2/1) loam; weak fine and medium granular structure; friable; many fine and medium roots; 10 percent channers; very strongly acid; clear wavy boundary.

Bw1—4 to 7 inches; brown (10YR 4/3) channery loam; weak fine granular structure; friable; common fine and medium roots; 25 percent channers; very strongly acid; clear wavy boundary.

Bw2—7 to 16 inches; strong brown (7.5YR 4/6) very channery loam; weak fine granular structure; friable; common fine and medium roots; 35 percent channers; very strongly acid; clear wavy boundary.

Bw3—16 to 24 inches; dark yellowish brown (10YR 4/6) very channery loam; weak fine granular structure; friable; common fine roots; 50 percent channers; very strongly acid; clear wavy boundary.

Bw4—24 to 31 inches; dark yellowish brown (10YR 4/6) extremely channery loam; weak fine subangular blocky structure; friable; few fine roots; 65 percent channers; very strongly acid; clear wavy boundary.

C—31 to 43 inches; dark yellowish brown (10YR 4/4) extremely channery loam; massive; friable; 75 percent channers; very strongly acid; abrupt wavy boundary.

R—43 inches; hard metasandstone.

Range in Characteristics

Solum thickness: 25 to 50 inches

Depth to bedrock: 40 to 72 inches or more

Rock fragment content: 5 to 15 percent in the A horizon, 5 to 70 percent in the E and Bw horizons, and 35 to 80 percent in the C horizon; weighted average greater than 35 percent

Reaction: Extremely acid to strongly acid throughout the profile, except where lime has been applied

A horizon:

Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture (fine-earth fraction)—loam

Ap horizon (where present):

Hue—10YR
Value—3 or 4
Chroma—2 or 3
Texture (fine-earth fraction)—fine sandy loam, sandy loam, or loam

E horizon (where present):

Hue—10YR
Value—4 or 5
Chroma—1 to 4
Texture (fine-earth fraction)—fine sandy loam, sandy loam, or loam

Bw horizon:
Hue—5YR to 10YR
Value—3 to 6
Chroma—3 to 8
Texture (fine-earth fraction)—fine sandy loam, sandy loam, or loam

C horizon:
Hue—5YR to 2.5Y
Value—3 to 6
Chroma—3 to 8
Texture (fine-earth fraction)—loamy sand, sandy loam, fine sandy loam, or loam

Cr horizon (where present):
Type of bedrock—slightly weathered, soft quartzite or metasandstone

R layer:
Type of bedrock—hard quartzite or metasandstone

Littlejoe Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from phyllite or sericite schist
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Deep
Slope range: 2 to 60 percent

Associated Soils

- Buffstat soils, which have a yellowish brown subsoil
- Shallow Bugley soils
- Wintergreen soils, which have a red clay subsoil and formed in colluvium and alluvium

Taxonomic Classification

Fine, mixed, subactive, mesic Typic Hapludults

Typical Pedon

Littlejoe silt loam, 7 to 15 percent slopes; in Amherst County, Virginia; about 0.9 mile east-northeast (80 degrees) of the intersection of Highways VA-669 and VA-663 and 1.0 mile southeast (124 degrees) of the intersection of Highways VA-613 and VA-663, in a cutover; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 25 minutes 5.00 seconds N. and long. 79 degrees 02 minutes 04.00 seconds W.

A—0 to 2 inches; brown (10YR 4/3) silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; 10 percent gravel; strongly acid; abrupt smooth boundary.
E—2 to 5 inches; light yellowish brown (10YR 6/4) silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; 10 percent gravel; strongly acid; clear smooth boundary.
Bt—5 to 38 inches; red (2.5YR 5/8) clay; moderate medium subangular blocky structure; friable, moderately sticky, moderately plastic; common fine and medium roots; common distinct clay films on all faces of peds; common fine mica flakes; 5 percent gravel; strongly acid; clear smooth boundary.
C—38 to 56 inches; brownish yellow (10YR 6/6) and red (2.5YR 4/6) silt loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine and medium

roots; many fine mica flakes; 10 percent gravel; strongly acid; abrupt smooth boundary.

Cr—56 inches; slightly weathered, soft sericite schist; many fine mica flakes.

Range in Characteristics

Solum thickness: 25 to 50 inches
Depth to bedrock: 40 to 60 inches
Rock fragment content: 0 to 15 percent in the A, Ap, E, and Bt horizons and 0 to 50 percent in the C horizon
Reaction: Very strongly acid or strongly acid throughout the profile, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—2 to 8
Texture—fine sandy loam, loam, or silt loam; clay loam or silty clay loam in eroded areas

A horizon:
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—2 to 4
Texture—silt loam

E horizon:
Hue—7.5YR or 10YR
Value—5 or 6
Chroma—3 to 6
Texture—fine sandy loam, loam, or silt loam

Bt horizon:
Hue—10R to 5YR
Value—4 or 5
Chroma—6 to 8
Texture—silty clay loam, silty clay, or clay; more than 30 percent silt in particle-size control section

C horizon:
Hue—2.5YR to 10YR
Value—4 to 8
Chroma—4 to 8
Texture (fine-earth fraction)—silt loam or silty clay loam saprolite

Cr horizon:
Type of bedrock—slightly weathered, soft sericite schist or phyllite

Minnieville Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from greenstone, gabbro, hornblende gneiss, hornblende schist, or diorite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 25 percent

Associated Soils

- Spriggs soils, which have less clay in the subsoil
- Fauquier soils, which are deep

Taxonomic Classification

Fine, kaolinitic, mesic Typic Hapludults

Typical Pedon

Minnieville loam, 7 to 15 percent slopes; in Amherst County, Virginia; about 1.5 miles north-northeast (30 degrees) of the intersection of Highways VA-130 and VA-652 and 1.2 miles northwest (324 degrees) of the intersection of Highways VA-675 and VA-652, in pasture; Tobacco Row Mountain, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 32 minutes 11.00 seconds N. and long. 79 degrees 10 minutes 55.00 seconds W.

Ap—0 to 6 inches; brown (7.5YR 4/4) loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; moderately acid; abrupt smooth boundary.

Bt1—6 to 46 inches; red (2.5YR 4/8) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; common fine and medium roots; many distinct clay films on all faces of peds; 2 percent gravel; moderately acid; clear smooth boundary.

Bt2—46 to 52 inches; yellowish red (5YR 5/8) clay; few fine distinct brownish yellow (10YR 6/8) mottles; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine and medium roots; many distinct clay films on all faces of peds; strongly acid; clear smooth boundary.

C—52 to 72 inches; yellowish brown (10YR 5/8), red (2.5YR 4/6), black (10YR 2/1), and strong brown (7.5YR 5/8) silty clay loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine and medium roots; few clay flows in relic rock joints; moderately acid.

Range in Characteristics

Solum thickness: 30 to 60 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 10 percent in the A, Ap, and upper Bt horizons and 0 to 25 percent in the lower Bt and C horizons
Reaction: Strongly acid or moderately acid throughout the profile, except where lime has been applied

Ap horizon:
Hue—5YR or 7.5YR
Value—3 to 5
Chroma—3 to 6
Texture—loam; clay loam in severely eroded areas

A horizon (where present):
Hue—5YR or 7.5YR
Value—3 to 5
Chroma—3 or 4
Texture—loam, silt loam, silty clay loam, or clay loam

E horizon (where present):
Hue—5YR or 7.5YR
Value—5 or 6
Chroma—3 to 6
Texture—loam or silt loam

Bt horizon:
Hue—10R to 5YR
Value—3 to 5
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—clay loam, silty clay, or clay

C horizon:
Hue—10R to 10YR
Value—4 to 8
Chroma—1 to 8; low chroma because of manganese from weathering processes in relic rock joints
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam saprolite

Mirerock Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from gabbro, diorite, greenstone, hornblende gneiss, hornblende schist, or chlorite-amphibole schist
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Moderately deep
Slope range: 2 to 15 percent

Associated Soils

- Moderately deep Spriggs soils that have less clay in the subsoil
- Very deep Haymarket soils

Taxonomic Classification

Fine, smectitic, mesic Typic Hapludalfs

Typical Pedon

Mirerock loam in an area of Haymarket-Mirerock complex, 2 to 7 percent slopes; in Amherst County, Virginia; 1.5 miles north (6 degrees) of the intersection of Highways VA-613 and VA-624 and 2.1 miles south (203 degrees) of the intersection of Highways VA-600 and US-60, in a loblolly pine plantation; Buffalo Ridge, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 31 minutes 57.00 seconds N. and long. 78 degrees 59 minutes 45.00 seconds W.

A—0 to 1 inch; dark brown (10YR 3/3) loam; moderate fine granular structure; very friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; strongly acid; clear smooth boundary.
E—1 to 5 inches; light olive brown (2.5Y 5/4) fine sandy loam; moderate fine granular structure; very friable, slightly sticky, slightly plastic; many fine and medium roots; strongly acid; clear smooth boundary.
Btss—5 to 30 inches; 40 percent pale brown (10YR 6/3) and 60 percent yellowish brown (10YR 5/8) silty clay; strong fine and medium subangular blocky structure; firm, very sticky, very plastic; common fine and medium roots; common slickensides (pedogenic) and many distinct clay films on all faces of peds; common fine black (10YR 2/1) manganese coatings throughout; neutral; clear smooth boundary.
Cr—30 inches; slightly weathered, soft chlorite-amphibole schist.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to bedrock: 20 to 40 inches
Rock fragment content: 0 to 15 percent in the A horizon and 0 to 35 percent in the E, Bt, and C horizons
Reaction: Strongly acid to neutral throughout, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 8
Texture—silt loam or loam

A horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 8
Texture—loam

E horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 8
Texture (fine-earth fraction)—fine sandy loam, silt loam, or loam

Bt or Btss horizon (where present):
Hue—7.5YR to 2.5Y
Value—4 or 5
Chroma—4 to 6; black to dark brown concretions and stains are few to many in individual subhorizons
Texture (fine-earth fraction)—silty clay loam, clay loam, silty clay, or clay

C horizon (where present):
Hue—7.5YR to 2.5Y
Value—4 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—loam, sandy clay loam, or clay loam

Cr horizon:
Type of bedrock—slightly weathered, soft chlorite-amphibole schist, gabbro, diorite, greenstone, hornblende gneiss, or hornblende schist

Myersville Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from greenstone
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Deep
Slope range: 7 to 75 percent

Associated Soils

- Fauquier soils, which have a red clay subsoil
- Catoctin soils, which have a high rock fragment content throughout
- Edneytown and Peaks soils, which are weathered from granite
- Sylco and Sylvatus soils, which are weathered from phyllite

Taxonomic Classification

Fine-loamy, mixed, active, mesic Ultic Hapludalfs

Typical Pedon

Myersville silt loam in an area of Myersville-Catoctin complex, 15 to 35 percent slopes, extremely stony; in Amherst County, Virginia; about 0.4 mile northwest (294 degrees) of the intersection of Highways VA-60 and VA-686 and 1.6 miles northwest (302 degrees) of the intersection of Highways VA-60 and VA-635, in pasture; Forks of Buffalo, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 41 minutes 36.00 seconds N. and long. 79 degrees 14 minutes 53.00 seconds W.

Ap—0 to 3 inches; dark yellowish brown (10YR 3/4) silt loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; common fine roots; 5 percent greenstone gravel; strongly acid; clear smooth boundary.

Bt1—3 to 20 inches; yellowish red (5YR 5/8) silty clay loam; moderate fine and medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; common distinct clay films on all faces of peds; 5 percent greenstone gravel; strongly acid; clear wavy boundary.

Bt2—20 to 28 inches; strong brown (7.5YR 5/8) silty clay loam; common medium faint yellowish red (5YR 5/8) and yellowish brown (10YR 5/8) and prominent red (2.5YR 4/6) mottles; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common distinct clay films on all faces of peds; 10 percent greenstone gravel; moderately acid; mottles are weathered greenstone; clear wavy boundary.

C—28 to 50 inches; strong brown (7.5YR 5/6), yellowish brown (10YR 5/8), black (10YR 2/1), red (2.5YR 4/6), and white (10YR 8/1) channery silt loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine roots; 10 percent greenstone gravel; strongly acid; few thin clay flows in relic rock joints; abrupt smooth boundary.

Cr—50 inches; slightly weathered, soft greenstone; many fine black (10YR 2/1) manganese coatings.

Range in Characteristics

Solum thickness: 20 to 40 inches

Depth to bedrock: 40 to 60 inches to soft bedrock; more than 60 inches to hard bedrock

Rock fragment content: 0 to 15 percent in the A horizon, 0 to 35 percent in the E and upper Bt horizons, 3 to 50 percent in the lower Bt horizon, and 5 to 75 percent in the C horizon

Reaction: Very strongly acid to moderately acid, except where lime has been applied

Ap horizon:

Hue—5YR to 10YR
Value—2 to 5
Chroma—2 to 4
Texture—silt loam

A horizon (where present):

Hue—5YR to 10YR
Value—2 to 5
Chroma—2 to 4
Texture—loam or silt loam

E horizon (where present):

Hue—5YR to 10YR
Value—4 or 5

Chroma—3 or 4
Texture (fine-earth fraction)—loam or silt loam

Bt horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam or individual subhorizons of clay

C horizon:
Hue—2.5YR to 10YR
Value—2 to 8
Chroma—1 to 8; chroma of 2 or less related to parent material
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam saprolite

Cr horizon:
Type of bedrock—slightly weathered, soft greenstone

Orenda Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from diorite, gabbro, hornblende gneiss, or hornblende schist
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 25 percent

Associated Soils

- Moderately deep Spriggs soils, which have less clay in the subsoil
- Well drained Haymarket and Mirerock soils, which have very slow permeability
- Well drained Minnieville soils, which have a red subsoil

Taxonomic Classification

Fine, mixed, active, mesic Ultic Hapludalfs

Typical Pedon

Orenda loam, 15 to 25 percent slopes; located 1.3 miles west-northwest (286 degrees) of the intersection of Highways VA-130 and VA-766 and 0.7 mile south-southeast (170 degrees) of the intersection of Highways VA-130 and VA-795, in pasture; Lynchburg, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 28 minutes 15.00 seconds N. and long. 79 degrees 09 minutes 22.00 seconds W.

Ap—0 to 6 inches; dark yellowish brown (10YR 4/4) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; 5 percent gravel; strongly acid; abrupt smooth boundary.
Bt1—6 to 20 inches; yellowish brown (10YR 5/8) clay; common medium faint irregular strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine and medium roots; common distinct clay films on all faces of peds; strongly acid; clear smooth boundary.
Bt2—20 to 40 inches; yellowish brown (10YR 5/8) clay loam; common medium prominent irregular yellowish red (5YR 5/6) and common medium faint irregular

strong brown (7.5YR 5/6) mottles; weak medium subangular blocky structure; firm, slightly sticky, slightly plastic; few fine and medium roots; few distinct clay films on all faces of peds; few fine prominent black (10YR 2/1) manganese coatings throughout; strongly acid; clear smooth boundary.

C—40 to 60 inches; grayish brown (10YR 5/2), black (10YR 2/1), strong brown (7.5YR 5/8), and yellowish red (5YR 5/8) sandy loam saprolite; massive; friable; few fine roots; strongly acid.

Range in Characteristics

Solum thickness: 24 to 50 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons and 0 to 25 percent in the Bt and C horizons
Reaction: Strongly acid or moderately acid, except where lime has been applied

Ap horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—2 to 6
Texture—loam

A horizon (where present):
Hue—5YR to 10YR
Value—4 or 5
Chroma—2 to 6
Texture—loam or silt loam

E horizon (where present):
Hue—5YR to 10YR
Value—4 to 6
Chroma—3 to 6
Texture—loam or silt loam

Bt horizon:
Hue—5YR to 10YR
Value—5 or 6
Chroma—4 to 8; high or low chroma colors inherited from parent material
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—clay or clay loam

C horizon:
Hue—2.5YR to 2.5Y
Value—2 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—loam, silt loam, sandy loam, or sandy clay loam saprolite

Peaks Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from granite, gneiss, or granodiorite
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Moderately deep
Slope range: 2 to 75 percent

Associated Soils

- Very deep Edneytown soils, which have fewer rock fragments throughout
- Well drained Clifford soils, which have a red clay subsoil

Taxonomic Classification

Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Typical Pedon

Peaks gravelly loam in an area of Edneytown-Peaks complex, 15 to 35 percent slopes, extremely stony; in Amherst County, Virginia; about 0.4 mile northwest (300 degrees) from the intersection of Highway VA-605 and the Blue Ridge Parkway and 2.0 miles south (188 degrees) from the intersection of Highways VA-633 and VA-634, in pasture; Montebello, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 48 minutes 0.00 seconds N. and long. 79 degrees 13 minutes 33.00 seconds W.

A—0 to 2 inches; brown (10YR 4/3) gravelly loam; moderate fine and medium granular structure; friable; many fine and medium roots; few fine mica flakes; 30 percent gravel; very strongly acid; abrupt smooth boundary.

E—2 to 6 inches; brownish yellow (10YR 6/6) gravelly fine sandy loam; weak fine granular structure; friable; common fine and medium roots; few fine mica flakes; 30 percent gravel; strongly acid; abrupt smooth boundary.

Bw—6 to 20 inches; yellowish brown (10YR 5/8) very gravelly sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; few fine mica flakes; 40 percent gravel; strongly acid; clear wavy boundary.

C—20 to 34 inches; yellowish brown (10YR 5/8) very gravelly sandy loam saprolite; few fine distinct strong brown (7.5YR 5/8) and brownish yellow (10YR 6/6) mottles from weathered gneiss; massive; friable; few fine roots; few fine mica flakes; 50 percent gravel; strongly acid; abrupt wavy boundary.

Cr—34 to 40 inches; slightly weathered, soft granodiorite.

R—40 inches; hard granodiorite.

Range in Characteristics

Solum thickness: 14 to 38 inches
Depth to bedrock: 20 to 40 inches
Rock fragment content: 15 to 35 percent in the A and E horizons, 35 to 60 percent in the Bw horizon, and 35 to 75 percent in the C horizon
Reaction: Very strongly acid to moderately acid throughout the profile, except where lime has been applied

A horizon:
Hue—10YR
Value—2 to 4
Chroma—2 or 3
Texture (fine-earth fraction)—loam

Ap horizon (where present):
Hue—10YR
Value—2 to 4
Chroma—2 or 3
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

E horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 6
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

Bw horizon:
Hue—7.5YR or 10YR
Value—3 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

C horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—loamy sand, sandy loam, fine sandy loam, or loam saprolite

Cr horizon:
Type of bedrock—slightly weathered, soft gneiss, granite, or granodiorite

R layer:
Type of bedrock—hard gneiss, granite, or granodiorite

Pineywoods Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from anorthosite
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Deep
Slope range: 0 to 7 percent

Associated Soils

- Moderately well drained Sketerville soils and well drained Colleen soils

Taxonomic Classification

Clayey over loamy, kaolinitic, mesic Kandic Albaquults

Typical Pedon

Pineywoods silt loam, 0 to 2 percent slopes; in Nelson County, Virginia; about 2,300 feet southeast (146 degrees) of the intersection of Highways VA-151 and VA-676, about 7,000 feet north (14 degrees) of the intersection of Highways VA-674 and VA-56 at Rose Union Church, in woodland; Arrington, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 44 minutes 16.00 seconds N. and long. 78 degrees 59 minutes 39.00 seconds W.

A—0 to 1 inch; dark gray (10YR 4/1) silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine, medium, and coarse roots; 5 percent quartz gravel; extremely acid; abrupt smooth boundary.
Eg—1 to 6 inches; light brownish gray (2.5Y 6/2) silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine and medium roots; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; 5 percent quartz gravel; extremely acid; clear smooth boundary.
Btg1—6 to 15 inches; light brownish gray (2.5Y 6/2) silty clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; common fine and medium roots; many distinct clay films on all faces of peds; common medium prominent brownish yellow (10YR 6/8) masses of oxidized iron; 2 percent quartz gravel; extremely acid; clear smooth boundary.

Btg2—15 to 22 inches; light brownish gray (2.5Y 6/2) clay; weak medium prismatic structure parting to moderate fine and medium angular blocky; firm, moderately sticky, moderately plastic; few fine and medium roots; many distinct clay films on all faces of peds; many coarse faint pale brown (10YR 6/3) iron-manganese masses; strongly acid; abrupt irregular boundary.

Cg—22 to 41 inches; white (10YR 8/1) loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine roots; common clay seams; many medium faint irregular gray (10YR 6/1) iron depletions; many medium prominent irregular reddish yellow (7.5YR 6/8) masses of oxidized iron; 5 percent quartz gravel; strongly acid; clear smooth boundary.

Cr—41 inches; soft anorthosite.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to soft bedrock: 40 to 60 inches
Depth to hard bedrock: 60 inches or more
Rock fragments: 0 to 15 percent in the A, Ap, and Eg horizons and 0 to 35 percent in the Btg and Cg horizons
Reaction: Extremely acid to slightly acid in the A, Ap, and Eg horizons; very strongly acid or strongly acid in the Btg horizon; and strongly acid to slightly acid in the Cg horizon, except where lime has been applied

Ap horizon (where present):
Hue—10YR or 2.5Y
Value—2 to 4
Chroma—1 to 4
Texture—silt loam

A horizon:
Hue—10YR or 2.5Y
Value—2 to 4
Chroma—1 to 4
Texture—silt loam

Eg horizon:
Hue—10YR or 2.5Y
Value—4 to 7
Chroma—1 or 2
Redoximorphic features—masses of oxidized iron in shades of red, brown, and yellow
Texture—fine sandy loam, loam, or silt loam

Btg horizon:
Hue—10YR to 5Y or neutral with value of 5 to 8
Value—5 to 8
Chroma—1 or 2
Redoximorphic features—masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—silty clay loam, clay loam, silty clay, or clay

Cg horizon:
Hue—10YR to 5Y or neutral with value of 5 to 8
Value—5 to 8
Chroma—1 or 2
Redoximorphic features—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow

Texture (fine-earth fraction)—sandy loam, loam, silt loam, silty clay loam, or clay loam saprolite

Cr horizon:
Type of bedrock—soft anorthosite

Rhodhiss Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from granite, gneiss, or mica schist
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 15 to 50 percent

Associated Soils

- Moderately deep Stott Knob soils
- Well drained Clifford soils, which have a red clay subsoil

Taxonomic Classification

Fine-loamy, mixed, semiactive, mesic Typic Hapludults

Typical Pedon

Rhodhiss loam in an area of Stott Knob-Rhodhiss complex, 15 to 25 percent slopes; in Amherst County, Virginia; about 0.36 mile southwest (238 degrees) from the intersection of Highways US-60 and VA-715 and 0.74 miles west-northwest (293 degrees) from the intersection of Highways US-60 and VA-615, in pasture; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 37 minutes 37.50 seconds N. and long. 79 degrees 07 minutes 26.30 seconds W.

Ap—0 to 8 inches; dark yellowish brown (10YR 4/4) loam; weak fine and medium granular structure; friable; common fine roots; few fine mica flakes; 2 percent gravel; very strongly acid; abrupt smooth boundary.
Bt1—8 to 30 inches; strong brown (7.5YR 5/6) clay loam; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common distinct clay films on all faces of peds and common distinct clay films on surfaces along pores; common fine mica flakes; 2 percent gravel; strongly acid; clear smooth boundary.
Bt2—30 to 40 inches; yellowish brown (10YR 5/6) clay loam; few fine faint strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common distinct clay films on surfaces along pores and common distinct clay films on all faces of peds; common fine mica flakes; 5 percent gravel; strongly acid; mottles are masses of weathered gneiss; clear smooth boundary.
C—40 to 60 inches; yellowish brown (10YR 5/4) loam saprolite; few fine prominent black (10YR 2/1) masses of weathered gneiss; massive; friable; few fine roots; common fine mica flakes; 2 percent gravel; strongly acid.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to paralithic contact: More than 60 inches
Depth to bedrock: More than 60 inches

Rock fragment content: 0 to 15 percent in the A horizon and 0 to 20 percent in the B and C horizons
Reaction: Very strongly acid to slightly acid, except where lime has been applied

A horizon (where present):
Hue—5YR to 2.5Y
Value—4 to 6
Chroma—3 to 8
Texture—loam

Ap horizon:
Hue—5YR to 10YR
Value—4 to 6
Chroma—3 to 6
Texture—loam

E horizon (where present):
Hue—5YR to 2.5Y
Value—4 to 6
Chroma—3 to 8
Texture—sandy loam or fine sandy loam

Bt horizon:
Hue—2.5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture—sandy loam, fine sandy loam, sandy clay loam, loam, or clay loam

C horizon:
Hue—2.5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Texture—sandy loam, fine sandy loam, loam, or sandy clay loam saprolite

Saunook Series

Physiographic province: Blue Ridge
Landform: Lower portions of mountain slopes and bases of mountain slopes
Parent material: Colluvium derived from granodiorite, granite, and gneiss
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 50 percent

Associated Soils

- Well drained Edneytown, Clifford, and Wintergreen soils

Taxonomic Classification

Fine-loamy, mixed, superactive, mesic Humic Hapludults

Typical Pedon

Saunook loam, 7 to 15 percent slopes; in Amherst County, Virginia; 0.6 mile west-northwest (290 degrees) of the intersection of Highways VA-636 and VA-653 and 1.9 miles south (192 degrees) of the intersection of Highways VA-636 and VA-643, in an apple orchard; Tobacco Row Mountain, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 33 minutes 18.80 seconds N. and long. 79 degrees 10 minutes 8.70 seconds W.

A—0 to 19 inches; dark yellowish brown (10YR 3/4) loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; common fine mica flakes; 10 percent gravel; moderately acid; clear smooth boundary.

Bt1—19 to 40 inches; strong brown (7.5YR 4/6) gravelly clay loam; moderate fine and medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine and medium roots; common distinct clay films on all faces of peds; common fine mica flakes; 15 percent gravel; strongly acid; diffuse smooth boundary.

Bt2—40 to 60 inches; strong brown (7.5YR 4/6) gravelly clay loam; moderate fine and medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine and medium roots; few distinct clay films on all faces of peds; common fine mica flakes; 15 percent gravel; strongly acid.

Range in Characteristics

Solum thickness: 40 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons, 0 to 35 percent in the Bt horizon, and 0 to 60 percent in the C horizon
Reaction: Extremely acid to moderately acid in the A and Ap horizons and very strongly acid to slightly acid in the Bt and C horizons, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—2 or 3; dry value is less than 6
Chroma—2 to 4
Texture—fine sandy loam, sandy loam, loam, or clay loam

A horizon:
Hue—7.5YR or 10YR
Value—2 or 3; dry value is less than 6
Chroma—2 to 4
Texture—loam

Bt horizon:
Hue—7.5YR or 10YR; 5YR in individual horizons of some pedons
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—loam, sandy clay loam, or clay loam

BC horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—fine sandy loam, sandy loam, loam, or sandy clay loam

C horizon (where present):
Hue—5YR to 10YR
Value—3 to 8
Chroma—3 to 8
Texture (fine-earth fraction)—fine sandy loam, sandy loam, loam, or sandy clay loam

Sindion Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, greenstone, schist, and/or phyllite
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Well drained Speedwell and Combs soils
- Poorly drained Yogaville soils

Taxonomic Classification

Fine-loamy, mixed, active, mesic Fluvaquentic Hapludolls

Typical Pedon

Sindion loam in an area of Sindion-Yogaville complex, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 2.7 miles southeast (130 degrees) of Highways VA-210 and US-29 and 2.3 miles south-southeast (154 degrees) of Highways VA-622 and County Road 1030, in pasture; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 23 minutes 51.00 seconds N. and long. 79 degrees 05 minutes 11.00 seconds W.

Ap—0 to 14 inches; dark brown (10YR 3/3) loam; moderate medium granular structure; friable, slightly sticky, slightly plastic; common fine roots; common fine mica flakes; moderately acid; abrupt smooth boundary.

Bw1—14 to 25 inches; yellowish brown (10YR 5/4) silty clay loam; weak coarse subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; few fine distinct irregular grayish brown (10YR 5/2) iron depletions that have clear boundaries in matrix; few fine distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron that have diffuse boundaries in matrix; common fine mica flakes; moderately acid; clear smooth boundary.

Bw2—25 to 35 inches; yellowish brown (10YR 5/4) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common fine and medium distinct irregular grayish brown (10YR 5/2) iron depletions that have clear boundaries in matrix; common fine and medium prominent irregular yellowish brown (10YR 5/8) masses of oxidized iron that have diffuse boundaries in matrix; common fine mica flakes; moderately acid; clear smooth boundary.

Bw3—35 to 62 inches; brown (10YR 5/3) loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; many fine and medium faint irregular grayish brown (10YR 5/2) iron depletions that have diffuse boundaries in matrix; many fine and medium distinct irregular yellowish brown (10YR 5/6) masses of oxidized iron that have diffuse boundaries in matrix; common fine mica flakes; moderately acid; clear smooth boundary.

C—62 to 72 inches; brown (10YR 5/3) sandy loam; massive; friable, slightly sticky, slightly plastic; many fine and medium faint irregular grayish brown (10YR 5/2) iron depletions that have diffuse boundaries in matrix; many fine and medium distinct irregular dark yellowish brown (10YR 4/6) masses of oxidized iron that have diffuse boundaries in matrix; common fine mica flakes; moderately acid.

Range in Characteristics

Solum thickness: 30 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons, 0 to 35 percent in the Bw horizon, and 0 to 80 percent in the C horizon
Reaction: Moderately acid to moderately alkaline, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR
Value—2 or 3 moist; 3 to 5 dry
Chroma—2 or 3
Texture—loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 moist; 3 to 5 dry
Chroma—2 or 3
Texture (fine-earth fraction)—sandy loam, fine sandy loam, loam, silt loam, silty clay loam, or clay loam

Bw horizon:
Hue—7.5YR to 5Y
Value—2 to 7
Chroma—1 to 6
Redoximorphic features—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, clay loam, silt loam, or silty clay loam

C horizon:
Hue—7.5YR to 5Y
Value—2 to 7
Chroma—3 or 4
Redoximorphic features—iron depletions in shades of brown and gray; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—sandy loam, loam, or clay loam; stratified in some pedons

Sketerville Series

Physiographic province: Piedmont and Blue Ridge
Landform: Hillslopes and mountain slopes
Parent material: Residuum weathered from anorthosite
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately low
Depth class: Very deep
Slope range: 2 to 7 percent

Associated Soils

- Poorly drained Pineywoods soils
- Well drained Colleen soils

Taxonomic Classification

Fine, kaolinitic, mesic Aquultic Hapludalfs

Typical Pedon

Sketerville silt loam, 2 to 7 percent slopes; in Nelson County, Virginia; about 3,000 feet northeast (45 degrees) of the intersection of Highways VA-778 and VA-676 and about 3,750 feet southwest (242 degrees) of the intersection of Highways VA-676 and VA-677, in a hayfield; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 43 minutes 36.70 seconds N. and long. 79 degrees 02 minutes 26.40 seconds W.

Ap—0 to 4 inches; 80 percent dark grayish brown (10YR 4/2), 10 percent dark brown (10YR 3/3), and 10 percent very pale brown (10YR 7/3) silt loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine and medium roots; extremely acid; abrupt smooth boundary.

Bt1—4 to 12 inches; light yellowish brown (10YR 6/4) clay; moderate fine and medium subangular blocky structure; friable, slightly sticky, moderately plastic; few fine roots; many distinct clay films on all faces of peds; few medium faint very pale brown (10YR 7/3) iron depletions; few medium faint irregular brownish yellow (10YR 6/6) iron-manganese masses; few fine mica flakes; 2 percent quartz gravel; extremely acid; clear smooth boundary.

Bt2—12 to 42 inches; yellowish brown (10YR 5/4) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; many distinct clay films on all faces of peds; common medium distinct light brownish gray (2.5Y 6/2) iron depletions; few medium distinct brownish yellow (10YR 6/6) iron-manganese masses; few fine mica flakes; very strongly acid; clear smooth boundary.

Cg1—42 to 52 inches; gray (10YR 5/1) clay saprolite; massive; firm, slightly sticky, slightly plastic; common medium faint light brownish gray (2.5Y 6/2) iron depletions; few medium prominent brownish yellow (10YR 6/8) iron-manganese masses; very strongly acid; clear smooth boundary.

Cg2—52 to 70 inches; white (N 8/0), silty clay loam saprolite; massive; friable, slightly sticky, slightly plastic; many medium distinct light brownish gray (2.5Y 6/2) and light gray (N 7/0) iron depletions; few medium prominent brownish yellow (10YR 6/8) iron-manganese masses; 10 percent quartz gravel; strongly acid.

R—70 inches; hard anorthosite.

Range in Characteristics

Thickness of the solum: 20 to 40 inches
Depth to bedrock: 60 inches or more
Rock fragments: 0 to 15 percent in the Ap, A, and E horizons; 0 to 35 percent in the Bt and Cg horizons
Reaction: Extremely acid to slightly acid in the A, Ap, and E horizons, except where lime has been applied; extremely acid to strongly acid in the Bt horizon; and very strongly acid to moderately acid in the Cg horizon

Ap horizon:
Hue—10YR or 2.5Y
Value—2 to 4
Chroma—2 to 4
Texture—silt loam

A horizon (where present):
Hue—10YR or 2.5Y
Value—2 to 4
Chroma—2 to 4
Texture—silt loam

E horizon (where present):
Hue—10YR or 2.5Y
Value—6 or 7
Chroma—3 to 6
Texture (fine-earth fraction)—fine sandy loam, loam, or silt loam

Bt horizon:
Hue—10YR or 2.5Y
Value—5 to 7
Chroma—4 to 8
Redoximorphic features—iron depletions in shades of gray and brown; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—clay loam, silty clay loam, silty clay, or clay

Cg horizon:
Hue—10YR to 5Y or neutral with value of 5 to 8
Value—5 to 8
Chroma—1 or 2
Redoximorphic features—iron depletions in shades of gray and brown; masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—sandy loam, loam, silt loam, clay loam, clay, or silty clay loam saprolite

Cr horizon (where present):
Type of bedrock—soft anorthosite

R horizon:
Type of bedrock—hard anorthosite

Speedwell Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, greenstone, schist, or phyllite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Well drained Combs soils
- Moderately well drained Sindion soils
- Poorly drained Yogaville soils

Taxonomic Classification

Fine-loamy, mixed, active, mesic Fluventic Hapludolls

Typical Pedon

Speedwell loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 1.9 miles southeast (120 degrees) of the junction of Highways VA-622 and County Road 1030 and 2.1 miles south-southeast (155 degrees) of the junction of Highways VA-622 and VA-677; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 25 minutes 0.00 seconds N. and long. 79 degrees 04 minutes 26.00 seconds W.

Ap—0 to 20 inches; dark brown (10YR 3/3) crushed loam, brown (10YR 5/3) dry; moderate medium granular structure; friable, slightly sticky, slightly plastic; common fine roots; few fine mica flakes; neutral; abrupt smooth boundary.

Bw1—20 to 26 inches; dark yellowish brown (10YR 4/4) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; few fine mica flakes; neutral; abrupt smooth boundary.

Bw2—26 to 44 inches; brown (10YR 4/3) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; few fine mica flakes; neutral; clear smooth boundary.

Bw3—44 to 72 inches; dark yellowish brown (10YR 4/4) loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine mica flakes; neutral.

Range in Characteristics

Solum thickness: 30 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A and Ap horizons, 0 to 35 percent in the Bw horizon, and 0 to 80 percent in the C horizon
Reaction: Slightly acid to moderately alkaline, except where lime has been applied

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture (fine-earth fraction)—sandy loam, fine sandy loam, loam, or silt loam

Ap horizon:
Hue—10YR
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture—loam

Bw horizon:
Hue—7.5YR or 10YR
Value—2 to 5
Chroma—2 to 6
Texture (fine-earth fraction)—loam, silt loam, sandy clay loam, clay loam, or silty clay loam

C horizon (where present):
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—3 to 6
Texture (fine-earth fraction)—coarse sandy loam, sandy loam, loam, silt loam, sandy clay loam, or clay loam; horizon may be stratified in these textures in some pedons

Spriggs Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from hornblende gneiss, gabbro, diorite, or greenstone
Drainage class: Well drained

Slowest saturated hydraulic conductivity: Moderately high
Depth class: Moderately deep
Slope range: 2 to 50 percent

Associated Soils

- Fauquier, Minnieville, and Orenda soils, which contain more clay in the subsoil

Taxonomic Classification

Fine-loamy, mixed, active, mesic Ultic Hapludalfs

Typical Pedon

Spriggs loam, 25 to 50 percent slopes; in Amherst County, Virgina; about 0.6 mile southwest (230 degrees) of the intersection of Highways VA-130 and VA-685 and 0.8 mile south (184 degrees) of the intersection of Highways VA-130 and VA-676, in woodland; Lynchburg, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 29 minutes 20.00 seconds N. and long. 79 degrees 11 minutes 08.00 seconds W.

A—0 to 3 inches; very dark grayish brown (10YR 3/2) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; few fine mica flakes; 5 percent gravel; strongly acid; abrupt smooth boundary.

E—3 to 6 inches; strong brown (7.5YR 5/6) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; few fine mica flakes; 5 percent gravel; strongly acid; clear smooth boundary.

Bt—6 to 18 inches; yellowish red (5YR 5/6) silty clay loam; few fine prominent olive brown (2.5Y 4/4) mottles from weathered hornblende gneiss fragments; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; few fine and medium roots; few distinct clay films on all faces of peds; few black (10YR 2/1) iron-manganese concretions; few fine mica flakes; 10 percent gravel; strongly acid; clear smooth boundary.

C—18 to 30 inches; olive brown (2.5Y 4/4) and yellowish red (5YR 5/6) silt loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine and medium roots; few black (10YR 2/1) iron-manganese concretions; few fine mica flakes; 10 percent gravel; moderately acid; abrupt smooth boundary.

Cr—30 to 41 inches; slightly weathered, soft hornblende gneiss.

R—41 inches; hard hornblende gneiss.

Range in Characteristics

Solum thickness: 12 to 24 inches
Depth to soft bedrock: 20 to 40 inches
Depth to hard bedrock: 40 to 60 inches
Rock fragment content: 1 to 5 percent in the A, Ap, E, and upper Bt horizons and 1 to 35 percent in the lower Bt and C horizons
Reaction: Very strongly acid to moderately acid, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR to 2.5Y
Value—3 or 4
Chroma—2 to 4
Texture—loam or silt loam

A horizon:
Hue—7.5YR to 2.5Y
Value—3 or 4

Chroma—2 to 4
Texture—loam

E horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 6
Texture—loam or silt loam

Bt horizon:
Hue—5YR to 10YR
Value—5 or 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam

C horizon:
Hue—2.5YR to 2.5Y
Value—4 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—sandy loam, loam, or silt loam saprolite

Cr horizon:
Type of bedrock—slightly weathered, soft diorite, greenstone, gabbro, or hornblende gneiss

R layer:
Type of bedrock—hard diorite, greenstone, gabbro, or hornblende gneiss

Stott Knob Series

Physiographic province: Piedmont
Landform: Hillslopes
Parent material: Residuum weathered from gneiss, granite, or granodiorite
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Moderately deep
Slope range: 15 to 50 percent

Associated Soils

- Very deep Rhodhiss soils
- Well drained Clifford soils, which have a red clay subsoil

Taxonomic Classification

Fine-loamy, parasesquic, mesic Typic Hapludults

Typical Pedon

Stott Knob loam in an area of Stott Knob-Rhodhiss complex, 25 to 50 percent slopes; in Amherst County, Virginia; about 1.85 miles east-southeast (102 degrees) from the intersection of Highways VA-604 and VA-659 and 1.7 miles east (96 degrees) from the intersection of Highways VA-624 and VA-670, in woodland; Amherst, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 31 minutes 43.00 seconds N. and long. 79 degrees 00 minutes 59.00 seconds W.

A—0 to 3 inches; very dark grayish brown (10YR 3/2) loam; moderate fine and medium granular structure; friable, slightly sticky, slightly plastic; many fine and medium roots; few fine mica flakes; 5 percent gravel; very strongly acid; abrupt smooth boundary.

E—3 to 9 inches; yellowish brown (10YR 5/4) loam; weak fine granular structure; friable, slightly sticky, slightly plastic; common fine and medium roots; common fine mica flakes; 5 percent gravel; strongly acid; abrupt smooth boundary.

Bt—9 to 21 inches; yellowish red (5YR 4/6) clay loam; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine and medium roots; common distinct clay films on all faces of peds; common fine mica flakes; 5 percent gravel; strongly acid; clear wavy boundary.

C—21 to 30 inches; strong brown (7.5YR 5/6) loam saprolite; common medium distinct brownish yellow (10YR 6/8) and yellowish brown (10YR 5/4) mottles from weathered gneiss; massive; friable, slightly sticky, slightly plastic; few fine roots; common fine mica flakes; 10 percent gravel; strongly acid; abrupt wavy boundary.

Cr—30 inches; slightly weathered, soft gneiss bedrock.

Range in Characteristics

Solum thickness: 20 to 39 inches
Depth to soft bedrock: 20 to 40 inches
Depth to hard bedrock: 40 inches or more
Rock fragment content: 0 to 15 percent in the A and E horizons and 0 to 35 percent in the B and C horizons
Reaction: Extremely acid to moderately acid, except where lime has been applied

A horizon:
Hue—5YR to 10YR
Value—3 to 5
Chroma—2 to 8
Texture—loam

Ap horizon (where present):
Hue—5YR to 10YR
Value—3 or 5
Chroma—2 to 6
Texture—sandy loam, fine sandy loam, or loam

E horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—4 to 8
Texture—sandy loam, fine sandy loam, or loam

Bt horizon:
Hue—2.5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Texture (fine-earth fraction)—sandy clay loam, loam, or clay loam

C horizon:
Hue—2.5YR to 10YR
Value—4 to 6
Chroma—4 to 8
Mottles (where present)—shades of red, brown, and yellow
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam saprolite

Cr horizon:
Type of bedrock—slightly weathered, soft gneiss, granite, or granodiorite

Suches Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, gabbro, schist, phyllite, or diorite
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Somewhat poorly drained Codorus soils
- Well drained Comus soils
- Craigsville soils, which have more rock fragments throughout than the Suches soils
- Moderately well drained Delanco soils and well drained Elsinboro soils in drainageways

Taxonomic Classification

Fine-loamy, mixed, semiactive, mesic Fluventic Dystrudepts

Typical Pedon

Suches loam, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 1.0 mile southeast (150 degrees) of the intersection of Highways VA-635 and VA-610 and 2.0 miles southwest (225 degrees) of the intersection of Highways VA-636 and VA-610, in cropland; Tobacco Row Mountain, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 35 minutes 52.00 seconds N. and long. 79 degrees 13 minutes 47.20 seconds W.

Ap—0 to 8 inches; dark yellowish brown (10YR 4/4) loam; weak fine granular structure; very friable, slightly sticky, slightly plastic; many fine and medium roots; many fine mica flakes; strongly acid; abrupt smooth boundary.

Bw1—8 to 35 inches; strong brown (7.5YR 4/6) loam; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; few fine and medium roots; many fine mica flakes; strongly acid; clear smooth boundary.

Bw2—35 to 45 inches; strong brown (7.5YR 4/6) silt loam; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; few fine distinct irregular dark yellowish brown (10YR 4/4) iron-manganese masses in matrix; common fine mica flakes; strongly acid; clear smooth boundary.

C—45 to 60 inches; 35 percent dark yellowish brown (10YR 4/4) and 65 percent strong brown (7.5YR 4/6) silt loam; massive; friable, slightly sticky, slightly plastic; common fine mica flakes; strongly acid.

Range in Characteristics

Solum thickness: 40 to 60 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 5 percent in the A and Bw horizons and 0 to 15 percent in the C horizon
Reaction: Very strongly acid to moderately acid throughout the profile, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR
Value—4 to 6

Chroma—2 to 4
Texture—loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—2 to 4
Texture—fine sandy loam or loam

Bw horizon (upper part):
Hue—7.5YR or 10YR
Value—4 to 7
Chroma—3 to 8
Redoximorphic features (where present)—masses of oxidized iron in shades of red, brown, and yellow
Texture—loam, sandy loam, fine sandy loam, sandy clay loam, clay loam, or silty clay loam

Bw horizon (lower part):
Hue—7.5YR or 10YR
Value—3 to 7
Chroma—3 to 8
Redoximorphic features—iron depletions in shades of brown and gray below a depth of 40 inches in some pedons; masses of oxidized iron in shades of red, brown, and yellow
Texture—loam, sandy loam, fine sandy loam, sandy clay loam, clay loam, or silt loam

C horizon:
Hue—7.5YR or 10YR
Value—3 to 7
Chroma—3 to 8
Redoximorphic features (where present)—iron depletions in shades of brown and gray below a depth of 40 inches; masses of oxidized iron in shades of red, brown, and yellow
Texture—loamy sand, sandy loam, fine sandy loam, sandy clay loam, silt loam, loam, or clay loam

Sylco Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from phyllite, siltstone, or slate
Drainage class: Somewhat excessively drained
Slowest saturated hydraulic conductivity: High
Depth class: Moderately deep
Slope range: 7 to 75 percent

Associated Soils

- Sylvatus soils, which are less than 20 inches to bedrock

Taxonomic Classification

Loamy-skeletal, mixed, active, mesic Typic Dystrudepts

Typical Pedon

Sylco channery silt loam, in an area of Sylco-Sylvatus complex, 7 to 15 percent slopes, extremely stony; in Amherst County, Virginia; about 0.05 mile east (82 degrees) of the intersection of National Forest Service Roads FS-39 and FS-315 and 1.21 miles south-southwest (190 degrees) of the intersection of National Forest Service Roads FS-39 and FS-38, in woodland; Buena Vista, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 40 minutes 40.00 seconds N. and long. 79 degrees 16 minutes 54.00 seconds W.

Oi—0 to 1 inch; slightly decomposed plant material.

A—1 to 3 inches; dark yellowish brown (10YR 3/4) channery silt loam; weak fine granular structure; friable, slightly sticky, nonplastic; many fine, medium, and coarse roots; 30 percent phyllite channers; very strongly acid; abrupt smooth boundary.

E—3 to 7 inches; yellowish brown (10YR 5/4) channery silt loam; weak fine granular structure; friable, slightly sticky, nonplastic; common fine, medium, and coarse roots; 25 percent phyllite channers; very strongly acid; abrupt smooth boundary.

Bw—7 to 26 inches; yellowish brown (10YR 5/6) very channery silty clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine and medium roots; 40 percent phyllite channers; very strongly acid; clear wavy boundary.

C—26 to 33 inches; yellowish brown (10YR 5/6) extremely channery silt loam saprolite; common medium prominent light gray (N 7/0) and common medium distinct light yellowish brown (10YR 6/4) weathered masses of phyllite rock fragments; massive; friable, slightly sticky, slightly plastic; few fine and medium roots; 60 percent phyllite channers; very strongly acid; abrupt wavy boundary.

R—33 inches; hard phyllite.

Range in Characteristics

Solum thickness: 20 to 40 inches
Depth to bedrock: 20 to 40 inches
Rock fragment content: 10 to 30 percent in the A horizon, 15 to 45 percent in the Bw horizon, and 40 to 70 percent in the C horizon
Reaction: Very strongly acid to strongly acid, except where lime has been applied

A horizon:
Hue—10YR
Value—3 or 4
Chroma—2 to 4
Texture (fine-earth fraction)—silt loam

Ap horizon (where present):
Hue—10YR
Value—3 or 4
Chroma—2 to 4
Texture (fine-earth fraction)—silt loam

E horizon:
Hue—10YR
Value—4 or 5
Chroma—3 or 4
Texture (fine-earth fraction)—loam or silt loam

Bw horizon:
Hue—7.5YR or 10YR
Value—4 or 5

Chroma—3 to 6
Texture (fine-earth fraction)—silt loam, loam, or silty clay loam

C horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Mottles (where present)—shades of gray, red, brown, and yellow
Texture (fine-earth fraction)—silt loam, loam, or silty clay loam saprolite

Cr horizon (where present):
Type of bedrock—slightly weathered, soft phyllite, siltstone, or slate

R layer:
Type of bedrock—hard phyllite, siltstone, or slate

Sylvatus Series

Physiographic province: Blue Ridge
Landform: Mountain slopes
Parent material: Residuum weathered from phyllite, siltstone, or slate
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Shallow
Slope range: 7 to 75 percent

Associated Soils

- Sylco soils, which are 20 to 40 inches to bedrock

Taxonomic Classification

Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts

Typical Pedon

Sylvatus very channery silt loam in an area of Sylco-Sylvatus complex, 15 to 35 percent slopes, extremely stony; 1.0 miles southeast (148 degrees) of the junction of National Forest Service Roads 38 and 594 and 1.4 miles east-southeast (104 degrees) of the junction of National Forest Service Roads 39 and 315, in woodland:

Oi—0 to 1 inch; slightly decomposed plant material.
A—1 to 3 inches; very dark grayish brown (10YR 3/2) very channery silt loam; weak fine granular structure; friable, slightly sticky, nonplastic; many fine, medium, and coarse roots; 35 percent phyllite channers; very strongly acid; abrupt smooth boundary.
E—3 to 5 inches; very pale brown (10YR 7/3) channery silt loam; weak fine granular structure; friable, slightly sticky, nonplastic; many fine, medium, and coarse roots; 25 percent phyllite channers; very strongly acid; abrupt smooth boundary.
Bw—5 to 14 inches; yellowish brown (10YR 5/4) very channery silt loam; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; common fine, medium, and coarse roots; 45 percent phyllite channers; very strongly acid; abrupt smooth boundary.
C—14 to 16 inches; reddish yellow (7.5YR 6/6), light gray (10YR 7/1), and yellowish brown (10YR 5/6) very channery silt loam saprolite; massive; friable, slightly sticky, slightly plastic; few fine and medium roots; 55 percent phyllite channers; very strongly acid; abrupt wavy boundary.
R—16 inches; hard, fractured phyllite.

Range in Characteristics

Solum thickness: 10 to 18 inches
Depth to bedrock: 10 to 20 inches
Rock fragment content: 15 to 35 percent in the A horizon, 25 to 80 percent in the Bw horizon, and 45 to 90 percent in the C horizon
Reaction: Extremely acid or very strongly acid, except where lime has been applied

A horizon:
Hue—10YR
Value—2 to 5
Chroma—1 to 4
Texture (fine-earth fraction)—silt loam

E horizon:
Hue—10YR
Value—2 to 8
Chroma—1 to 6
Texture (fine-earth fraction)—loam or silt loam

Bw horizon:
Hue—7.5YR or 10YR
Value—5 or 6
Chroma—4 to 8
Texture (fine-earth fraction)—silt loam, loam, clay loam, or silty clay loam

C horizon:
Hue—5YR to 10YR
Value—3 to 6
Chroma—1 to 8
Mottles (where present)—shades of gray, red, brown, and yellow
Texture (fine-earth fraction)—silt loam, loam, silty clay loam, or clay loam saprolite

Cr horizon (where present):
Type of bedrock—slightly weathered, soft phyllite, siltstone, or slate

R layer:
Type of bedrock—hard phyllite, siltstone, or slate

Udorthents

Physiographic province: Piedmont and Blue Ridge
Landform: Variable
Parent material: Fill material from variable sources
Drainage class: Unspecified
Slowest saturated hydraulic conductivity: Unspecified
Depth class: Shallow to very deep

Taxonomic Classification

Udorthents

Typical Pedon

Because of the variability of these soils, a typical pedon is not given. Excavation or filling has destroyed all discernible diagnostic horizons.

Range in Characteristics

Depth to bedrock: 10 to more than 72 inches
Rock fragments: 0 to 90 percent
Reaction: Extremely acid to slightly acid throughout the profile, except where lime has been applied

A horizon:
Hue—2.5YR to 2.5Y
Value—4 to 8
Chroma—3 to 8
Texture (fine-earth fraction)—loamy sand to clay

C horizon:
Hue— 2.5YR to 5Y or neutral with value of 3 to 8
Value—3 to 8
Chroma—3 to 8
Texture (fine-earth fraction)—loamy sand to clay

Unison Series

Physiographic province: Blue Ridge and Piedmont
Landform: Colluvial areas at the bases of mountain slopes and on stream terraces
Parent material: Colluvium and/or alluvium derived from granite, gneiss, granodiorite, phyllite, schist, and/or greenstone
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 15 percent

Associated Soils

- Wintergreen soils, which have a red clay subsoil

Taxonomic Classification

Fine, mixed, semiactive Typic Hapludults

Typical Pedon

Unison loam, 2 to 7 percent slopes; in Amherst County, Virginia; 0.6 mile southwest (212 degrees) of the intersection of Highways VA-723 and VA-629 and 1.0 mile northeast (64 degrees) of the intersection of Highways VA-625 and VA-621, in cropland; Piney River, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 43 minutes 24.50 seconds N. and long. 79 degrees 05 minutes 29.10 seconds W.

Ap—0 to 6 inches; dark yellowish brown (10YR 4/6) loam; moderate fine granular structure; friable, slightly sticky, slightly plastic; few fine roots; 2 percent gravel; moderately acid; abrupt smooth boundary.
Bt1—6 to 30 inches; yellowish red (5YR 5/8) clay; moderate fine and medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; common distinct clay films on all faces of peds; 5 percent gravel; strongly acid; clear smooth boundary.
Bt2—30 to 62 inches; yellowish red (5YR 5/8) clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; common distinct clay films on all faces of peds; few fine prominent irregular brown (7.5YR 4/4) iron-manganese masses that have clear boundaries in matrix; few fine mica flakes; 5 percent gravel; strongly acid.

Range in Characteristics

Solum thickness: 30 to 60 inches
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent in the A, Ap, and E horizons; 0 to 35 percent in the Bt horizon; and 0 to 75 percent in the C horizon
Reaction: Very strongly acid to moderately acid throughout the profile, except where lime has been applied

Ap horizon:
Hue—7.5YR or 10YR; 5YR in eroded pedons
Value—3 to 5
Chroma—3 to 6
Texture—loam

A horizon (where present):
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—3 to 6
Texture—fine sandy loam, loam, or silt loam

E horizon (where present):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—fine sandy loam, loam, or silt loam

Bt horizon:
Hue—5YR to 10YR
Value—4 or 5
Chroma—3 to 8
Redoximorphic features (where present)—masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—clay loam, silty clay loam, silty clay, or clay

C horizon (where present):
Hue—2.5YR to 7.5YR
Value—4 to 8
Chroma—3 to 6
Texture (fine-earth fraction)—loam, silt loam, clay loam, or silty clay loam

Wintergreen Series

Physiographic province: Blue Ridge and Piedmont
Landform: Fans, drainageways, coves, and other colluvial areas at the base of slopes of the Blue Ridge mountains and stream terraces in the Piedmont
Parent material: Colluvium and/or alluvium derived from granite, gneiss, granodiorite, schist, and/or greenstone
Drainage class: Well drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 2 to 25 percent

Associated Soils

- Well drained Clifford soils, which formed in biotite gneiss
- Well drained Littlejoe soils, which formed in sericite schist

- Well drained Minnieville soils, which formed in gabbro and diorite
- Well drained Unison soils, which have a yellowish brown to yellowish red subsoil

Taxonomic Classification

Fine, mixed, subactive, mesic Typic Paleudults

Typical Pedon

Wintergreen loam, 2 to 7 percent slopes; in Nelson County, Virginia; about 0.5 mile east (80 degrees) of the intersection of Highways VA-668 and VA-653 and about 0.9 mile northwest (300 degrees) of the intersection of Highways VA-653 and VA-650, in woodland.

A—0 to 3 inches; brown (7.5YR 4/4) loam; weak fine granular structure; friable, slightly sticky; many fine, medium, and coarse roots; very strongly acid; abrupt wavy boundary.

E—3 to 7 inches; strong brown (7.5YR 4/6) loam; weak fine subangular blocky structure; friable; common fine, medium, and coarse roots; very strongly acid; clear smooth boundary.

Bt1—7 to 24 inches; red (2.5YR 4/6) clay; moderate fine subangular blocky structure; friable, moderately sticky, moderately plastic; few fine and medium roots; many distinct clay films on all faces of peds; very strongly acid; clear smooth boundary.

Bt2—24 to 35 inches; red (2.5YR 4/6) clay; weak medium subangular blocky structure; firm, moderately sticky, moderately plastic; few fine roots; many distinct clay films on all faces of peds; very strongly acid; clear smooth boundary.

Bt3—35 to 62 inches; red (2.5YR 4/6) clay; few fine prominent pinkish white (7.5YR 8/2) and strong brown (7.5YR 5/6) mottles below a depth of 50 inches; weak coarse platy structure parting to weak medium subangular blocky; firm, moderately sticky, moderately plastic; common distinct clay films on all faces of peds; very strongly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragments: 0 to 15 percent in the A, Ap, and E horizons; 0 to 35 percent in the BE horizon and the upper part of the Bt horizon; 0 to 60 percent in the lower part of the Bt horizon and in the C horizon
Surface stoniness: 0 to 3 percent
Reaction: Extremely acid to strongly acid throughout the profile, except where lime has been applied

Ap horizon (where present):
Hue—7.5YR or 10YR
Value—2 to 5
Chroma—1 to 6
Texture (fine-earth fraction)—loam; clay loam in eroded areas

A horizon:
Hue—7.5YR or 10YR
Value—2 to 4
Chroma—1 to 6
Texture (fine-earth fraction)—loam

E horizon
Hue—7.5YR or 10YR
Value—4 to 6

Chroma—3 to 8
Texture (fine-earth fraction)—sandy loam, fine sandy loam, or loam

BE horizon (where present):
Hue—2.5YR to 7.5YR
Value—4 or 5
Chroma—4 to 8
Texture (fine-earth fraction)—sandy clay loam, clay loam, or clay

Bt horizon:
Hue—10R or 2.5YR
Value—3 to 5; 3 only in individual subhorizons
Chroma—6 to 8
Mottles (where present)—shades of white, red, brown, and yellow
Texture (fine-earth fraction)—clay loam, sandy clay, or clay

C horizon (where present):
Hue—10R to 7.5YR
Value—3 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—sandy loam, loam, sandy clay loam, clay loam, silty clay loam, clay, or sandy clay

2C horizon (where present):
Hue—10R to 7.5YR
Value—3 to 8
Chroma—1 to 8
Texture (fine-earth fraction)—sandy loam, loam, sandy clay loam, clay loam, silty clay loam, clay, or sandy clay

Yogaville Series

Physiographic province: Piedmont
Landform: Flood plains
Parent material: Alluvium derived from granite, gneiss, greenstone, schist, and/or phyllite
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Moderately high
Depth class: Very deep
Slope range: 0 to 3 percent

Associated Soils

- Well drained Speedwell and Combs soils
- Moderately well drained Sindion soils

Taxonomic Classification

Fine-loamy, mixed, active, mesic Fluvaquentic Endoaquolls

Typical Pedon

Yogaville loam in an area of Sindion-Yogaville complex, 0 to 3 percent slopes, frequently flooded; in Amherst County, Virginia; about 2.7 miles southeast (131 degrees) of Highways VA-210 and US-29 and 2.3 miles south-southeast (155 degrees) of Highway VA-622 and County Road 1030, in pasture; Kelly, VA, 7.5-minute USGS topographic quadrangle; lat. 37 degrees 23 minutes 51.00 seconds N. and long. 79 degrees 05 minutes 11.00 seconds W.

Ap—0 to 16 inches; dark brown (10YR 3/3) loam; moderate medium granular structure; friable, slightly sticky, slightly plastic; common fine roots; few fine mica flakes; moderately acid; abrupt smooth boundary.

Bg1—16 to 21 inches; dark gray (10YR 4/1) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots; common medium prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron in matrix; few fine mica flakes; neutral; clear smooth boundary.

Bg2—21 to 50 inches; gray (10YR 5/1) clay loam; weak coarse subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; common fine and medium prominent irregular yellowish brown (10YR 5/8) and strong brown (7.5YR 4/6) masses of oxidized iron in matrix and common medium prominent black (10YR 2/1) manganese coatings throughout; few fine mica flakes; neutral; clear smooth boundary.

Bg3—50 to 72 inches; gray (10YR 5/1) loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common medium prominent black (10YR 2/1) manganese coatings throughout and common medium and coarse prominent irregular strong brown (7.5YR 4/6) and yellowish brown (10YR 5/6) masses of oxidized iron in matrix; few fine mica flakes; neutral.

Range in Characteristics

Solum thickness: 30 to 60 inches or more
Depth to bedrock: 60 inches or more
Rock fragment content: 0 to 15 percent throughout the profile; may range to 80 percent in Cg horizon below a depth of 40 inches
Reaction: Strongly acid to neutral, except where lime has been applied

Ap horizon:
Hue—10YR to 5Y or neutral with value of 3
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture—loam

A horizon (where present):
Hue—10YR to 5Y or neutral with value of 3
Value—3 moist; 4 or 5 dry
Chroma—2 or 3
Texture—sandy loam, fine sandy loam, loam, or silt loam

Bg horizon:
Hue—10YR to 5Y or neutral with value of 4 to 6
Value—4 to 6
Chroma—1 or 2
Redoximorphic features—masses of oxidized iron in shades of red, brown, and yellow
Texture—sandy loam, fine sandy loam, loam, clay loam, silt loam, or silty clay loam

Cg horizon (where present):
Hue—10YR to 5Y or neutral with value of 4 to 7
Value—4 to 7
Chroma—1 or 2
Redoximorphic features—masses of oxidized iron in shades of red, brown, and yellow
Texture (fine-earth fraction)—sand, loamy sand, sandy loam, or fine sandy loam

Formation of the Soils

This section describes the factors of soil formation as they relate to the soils of Amherst County and explains the major processes of soil horizon development.

Factors of Soil Formation

The five major factors of soil formation are parent material, topography, climate, livings organisms, and time. Topography and parent material are modified over time by the active factors of climate and living organisms (Jenny, 1941). The continuing interaction of all of the factors generally determines the kind of soil that forms. In some soils, one factor may dominate and determine most of the properties.

Parent Material

Parent material is the unconsolidated material in which a soil forms. Both residual and transported materials are in the survey area.

Residual material is material that has weathered in place. Properties of the residual parent material are directly related to the makeup of the underlying bedrock. Clifford and Peaks soils are examples of soils formed in residuum.

Transported material consists of alluvial sediments and colluvial sediments. The alluvial sediments were moved by water and were deposited as mixtures or layers of rock fragments, sand, silt, and clay. They are on flood plains and terraces. Craigsville, Codorus, Comus, Elsinboro, Delanco, and Suches soils are on flood plains and formed in recent alluvium. Soils that formed in colluvial sediments, sediments that were moved by gravity with water as the lubricant, are on terraces at the bases of mountains, at the heads of drainageways, in depressions, and on footslopes. Examples of these kinds of soils are Saunook, Unison, and Wintergreen soils.

Igneous and metamorphic rocks are the two primary rock types in the county. Igneous rock formed from the cooling of molten rock material. Examples of igneous rock in Amherst County are granite, granodiorite, diabase, and anorthosite. Metamorphic rock is igneous or sedimentary rock that was altered by varying degrees of heat and pressure below the earth’s surface. Granite gneiss, biotite gneiss, and greenstone are examples of metamorphic rock in Amherst County.

Metasedimentary rock is partly metamorphosed sedimentary rock that generally is altered at lower temperatures or pressures than metamorphic rock.

Igneous and metamorphic rocks are subdivided into felsic (acidic) and mafic (basic) rock types. This classification is based on the nature and amount of specific minerals that make up the rock. Mafic rocks are generally richer in calcium and magnesium than felsic rocks. Mafic rocks generally contain a wide range of minerals, whereas felsic rocks generally have quartz as a major constituent.

Examples of soils that formed in felsic rocks, such as granite, granite gneiss, and biotite gneiss, are Hayesville and Edneytown soils. Catoctin and Myersville soils formed in mafic rock material, such as greenstone.

Topography

Topography affects the formation of soils by influencing the rate of infiltration, runoff, soil drainage, geologic erosion, and soil temperature. Topography can alter the effect of the other soil-forming factors to such a degree that different soils may form in the same parent material. Differences in topography can cause the same parent material to weather at different rates, thus affecting the impact of plants and animals on soil formation.

Physiographically, two-thirds of Amherst County is in the Southern Piedmont and one-third is in the Blue Ridge. The elevation of the county ranges from about 400 to 1,000 feet above sea level in the Piedmont and from 1,000 to 4,098 feet above sea level in the Blue Ridge. The gradient of the Piedmont is about 40 to 50 feet per mile and the gradient of the Blue Ridge is about 350 to 650 feet per mile. Stream gradients in the survey area generally are about 10 to 20 feet per mile. The Piedmont consists of gently sloping and strongly sloping interfluves and strongly slopping to very steep side slopes. The Blue Ridge has broad, dome-shaped to narrow mountaintops and steep and very steep mountain flanks. The soils in both areas are mostly well drained and have a loamy or clayey subsoil. The gently sloping and strongly sloping areas have medium to rapid runoff and a good rate of water infiltration. The steep and very steep areas commonly have very rapid surface runoff and a poor rate of water infiltration. The steeper soils have less subsoil development than the less sloping soils.

Climate

Climate, to a large extent, determines the rate and degree of weathering of the parent material. It also determines the kind and amount of organism activity and influences the type of weathering, chemical or physical, a parent material undergoes. Chemical weathering of parent material occurs more rapidly in a warm and humid environment, such as Amherst County, than in a cold and dry climate, and physical weathering is more pronounced in the colder, dryer climates. Although landscape position and slope slightly modify the influence of climate, their effects do not account for major differences in the soils in this survey area.

The amount of precipitation and the movement of the water through the soil greatly affect the translocation of clays and the movement of minerals out of the zone of biological activity.

The climate of the Piedmont area causes rapid weathering of the parent material and thus promotes the movement of clays and minerals. The Blue Ridge is less conducive to translocation of clays and leaching of minerals because of lower temperatures, but it is more favorable to continued physical weathering. Weathering, translocation of clays, and leaching of minerals take place most of the year. The relative influence of each on the soil determines the main characteristics of the soil.

Living Organisms

Plants are the main source of organic matter in the soil. Organic matter decomposes and is incorporated into the soil by the action of micro-organisms and earthworms and, to a lesser degree, by windblown trees and burrowing animals. The content of organic matter is greater in the soils of the Blue Ridge than in those of the Piedmont section of the county. The warm, humid environment, the adequate supply of moisture, and the abundance of micro-organisms prevent the accumulation of large amounts of organic matter in the Piedmont.

Earthworms, burrowing animals, and plant roots help to keep the soil aerated. Plant roots also aid in parent material formation by penetrating cracks and breaking up the underlying bedrock.

Cultivation, drainage, irrigation, use of new types of vegetation, applications of lime and fertilizer, and the use of herbicides and pesticides are some of the ways humans have influenced the rate of soil development in the survey area. In most areas of the county, human influence has caused an increase in erosion.

Time

Time is needed for changes to take place in the parent material. Because of the other factors, however, soils that form in the same type of parent material may not develop equally in the same amount of time. Runoff and erosion are greater on steeper slopes, lessening the development of well expressed soil horizons. Thus, soils on steeper slopes generally are less developed than soils on lesser slopes, even though the parent material is the same. Examples of this are the moderately deep Cowee soils on moderately steep and steep side slopes and the very deep Clifford soils on the gently sloping and strongly sloping summits.

Processes of Soil Horizon Differentiation

Several processes are involved in the formation of the soil horizons. Among these are the accumulation of organic matter, the leaching of soluble salts, the reduction and transfer of iron, the formation of soil structure, and the formation and translocation of clay minerals. These processes are continuous and simultaneous and have been going on for thousands of years.

Organic matter accumulates as plant and animal matter decomposes. Organic matter darkens the surface layer and helps to form the A horizon. Replacement of lost organic matter takes a long time. The content of organic matter in the surface layer of the soils in Amherst County averages about 2 percent.

Before the development of a distinct subsoil, it is believed that some of the lime and soluble salts must be leached to allow the translocation of clay minerals. Some of the factors that affect this leaching are the kinds of salts originally present, the depth to which the soil solution percolates, and the texture of the soil profile.

Well drained and moderately well drained soils in Amherst County have a yellowish brown to red subsoil. These colors are caused primarily by thin coatings of iron oxides on sand and silt grains, but in some soils the colors are inherited from the materials in which the soils formed. The structure in these soils is weak to strong subangular blocky to angular blocky and the subsoil contains more clay than the surface layer.

The reduction and transfer of iron, called gleying, is primarily associated with wet, somewhat poorly drained and poorly drained soils. Moderately well drained soils and somewhat poorly drained soils have mottles of red, yellowish red, and yellowish brown. This indicates the segregation of iron due to a fluctuating water table. In poorly drained soils, such as Pineywoods and Yogaville soils, the subsoil and underlying material are gray, which indicates reduction and transfer of iron in solution.

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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.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial 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.

Alpha,alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6

Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

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).

Bedding plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

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.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

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.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

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.

Cable yarding. A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

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.)

Canyon. A long, deep, narrow valley with high, precipitous walls in an area of high local relief.
Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.
Catena. A sequence, or “chain,” of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.
Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.
Cement rock. Shaly limestone used in the manufacture of cement.
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.
Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.
Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.
Clay depletions. 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 subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.
Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.
Coarse 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 cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the “Soil Survey Manual.”

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

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.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cryoturbate. A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

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.

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.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

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.

Earthy fill. See Mine spoil.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

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 pavement. A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

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.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

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.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to 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).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

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.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

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.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A generic term for an 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 include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. 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.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. 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.

Karst (topography). A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

Knoll. A small, low, rounded hill rising above adjacent landforms.

Ksat. See Saturated hydraulic conductivity.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

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.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

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.

Mesa. A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. 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.

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

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.

Pedisediment. A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

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.

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.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

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.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

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 native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

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.

Regolith. All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

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.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturated hydraulic conductivity (Ksat). The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as Ksat. Terms describing saturated hydraulic conductivity are *very high*, 100 or more micrometers per second (14.17 or more inches per hour); *high*, 10 to 100 micrometers per second (1.417 to 14.17 inches per hour); *moderately high*, 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour); *moderately low*, 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour); *low*, 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour); and *very low*, less than 0.01 micrometer per second (less than 0.001417 inch per hour). To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

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.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

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.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.
Shale. Sedimentary rock that formed 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.
Shrub-coppice dune. A small, streamlined dune that forms around brush and clump vegetation.
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.
Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.
Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
Siltstone. 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.
Sinkhole. A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.
Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
Slickensides (pedogenic). Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.
Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Level	0 to 2 percent
Gently sloping	2 to 7 percent
Strongly sloping	7 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 35 percent
Very steep	35 percent and higher

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 water transmission in the soil.

Slow water movement (in tables). Restricted downward movement of water through the soil. See Saturated hydraulic conductivity.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^{+} to Ca^{++} + Mg^{++}. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief 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.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

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.

Strath terrace. A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

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.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

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.

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.

Terracettes. Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

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.

Tuff. A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

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 fill. The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

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.

Well graded. Refers to soil material consisting of coarse-grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an 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.—Temperature and Precipitation

(Recorded in the period 1961-90 at Lynchburg, Virginia)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average daily	2 years in 10 will have-- Maximum temp. higher than--	2 years in 10 will have-- Minimum temp. lower than--	Average number of growing degree days*	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snow-fall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January--	43.6	24.9	34.2	69	-1	7	2.87	1.49	4.07	6	6.6
February-	47.1	27.5	37.3	74	6	17	3.04	1.63	4.28	6	6.5
March----	57.3	35.6	46.4	83	15	74	3.47	1.91	4.86	6	3.1
April----	67.6	44.0	55.8	89	25	212	3.09	1.64	4.37	6	0.3
May------	75.6	52.8	64.2	91	34	441	3.91	2.33	5.33	7	0.0
June-----	82.6	60.8	71.7	95	44	651	3.45	1.37	5.20	5	0.0
July-----	86.0	65.1	75.6	98	52	792	4.16	2.35	5.77	7	0.0
August---	84.8	64.4	74.6	96	51	763	3.59	1.88	5.08	5	0.0
September	78.4	57.8	68.1	93	40	543	3.24	0.95	5.10	5	0.0
October--	68.3	45.8	57.0	85	25	245	3.70	1.49	5.56	4	0.1
November-	58.1	37.3	47.7	79	15	78	3.14	1.68	4.43	5	1.0
December-	47.5	29.1	38.3	72	6	20	3.24	1.59	4.66	5	3.3
Yearly:											
Average	66.4	45.4	55.9	---	---	---	---	---	---	---	---
Extreme	102	-10	---	98	-2	---	---	---	---	---	---
Total--	---	---	---	---	---	3,843	40.90	33.22	48.20	67	20.8

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (50 degrees F).

Table 2.—Freeze Dates in Spring and Fall

(Recorded in the period 1961-90 at Lynchburg, Virginia)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Apr. 5	Apr. 14	Apr. 29
2 years in 10 later than--	Mar. 29	Apr. 10	Apr. 23
5 years in 10 later than--	Mar. 16	Apr. 1	Apr. 12
First freezing temperature in fall:			
1 year in 10 earlier than--	Oct. 30	Oct. 16	Oct. 7
2 years in 10 earlier than--	Nov. 5	Oct. 22	Oct. 12
5 years in 10 earlier than-	Nov. 19	Nov. 3	Oct. 21

Table 3.—Growing Season

(Recorded in the period 1961-90 at Lynchburg, Virginia)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
9 years in 10	216	193	169
8 years in 10	226	200	176
5 years in 10	246	215	191
2 years in 10	266	231	205
1 year in 10	277	238	213

Table 4.—Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
1B	Buffstat silt loam, 2 to 7 percent slopes	21	*
1C	Buffstat silt loam, 7 to 15 percent slopes	284	*
1D	Buffstat silt loam, 15 to 25 percent slopes	279	*
2C	Bugley-Littlejoe complex, 7 to 15 percent slopes	716	0.2
2D	Bugley-Littlejoe complex, 15 to 25 percent slopes	2,262	0.7
2E	Bugley-Littlejoe complex, 25 to 60 percent slopes	9,668	3.2
3C	Catoctin-Rock outcrop complex, 7 to 15 percent slopes	122	*
3D	Catoctin-Rock outcrop complex, 15 to 25 percent slopes	125	*
3E	Catoctin-Rock outcrop complex, 25 to 75 percent slopes	491	0.2
4B	Clifford clay loam, 2 to 7 percent slopes, severely eroded	431	0.1
4C	Clifford clay loam, 7 to 15 percent slopes, severely eroded	4,666	1.5
4D	Clifford clay loam, 15 to 25 percent slopes, severely eroded	5,742	1.9
4E	Clifford clay loam, 25 to 50 percent slopes, severely eroded	2,438	0.8
5B	Clifford loam, 2 to 7 percent slopes	15,417	5.0
5C	Clifford loam, 7 to 15 percent slopes	36,695	12.0
5D	Clifford loam, 15 to 25 percent slopes	18,133	5.9
5E	Clifford loam, 25 to 50 percent slopes	8,425	2.8
6B	Clifford loam, 2 to 7 percent slopes, very stony	40	*
6C	Clifford loam, 7 to 15 percent slopes, very stony	760	0.2
6D	Clifford loam, 15 to 25 percent slopes, very stony	1,663	0.5
6E	Clifford loam, 25 to 50 percent slopes, very stony	2,669	0.9
7A	Codorus silt loam, 0 to 3 percent slopes, frequently flooded	1,941	0.6
8B	Colleen loam, 2 to 7 percent slopes	411	0.1
8C	Colleen loam, 7 to 15 percent slopes	389	0.1
8D	Colleen loam, 15 to 25 percent slopes	90	*
9A	Combs loam, 0 to 3 percent slopes, frequently flooded	1,473	0.5
10A	Comus fine sandy loam, 0 to 3 percent slopes, frequently flooded	3,621	1.2
11A	Craigsville very cobbly sandy loam, 0 to 3 percent slopes, frequently flooded	1,879	0.6
12D	Dekalb-Hazleton complex, 15 to 35 percent slopes, very stony	688	0.2
12E	Dekalb-Hazleton complex, 35 to 55 percent slopes, extremely stony	437	0.1
12F	Dekalb-Hazleton complex, 55 to 75 percent slopes, extremely stony	655	0.2
13E	Dekalb-Rock outcrop complex, 35 to 55 percent slopes	117	*
13F	Dekalb-Rock outcrop complex, 55 to 75 percent slopes	655	0.2
14B	Delanco loam, 2 to 7 percent slopes, rarely flooded	157	*
15B	Delanco-Elsinboro complex, 2 to 7 percent slopes, rarely flooded	8,309	2.7
15C	Delanco-Elsinboro complex, 7 to 15 percent slopes, rarely flooded	275	*
16C	Edneytown loam, 7 to 15 percent slopes	1,244	0.4
16D	Edneytown loam, 15 to 25 percent slopes	2,572	0.8
16E	Edneytown loam, 25 to 50 percent slopes	4,231	1.4
17B	Edneytown-Peaks complex, 2 to 7 percent slopes, very stony	25	*
17C	Edneytown-Peaks complex, 7 to 15 percent slopes, extremely stony	2,164	0.7
17D	Edneytown-Peaks complex, 15 to 35 percent slopes, extremely stony	7,500	2.4
17E	Edneytown-Peaks complex, 35 to 55 percent slopes, extremely stony	26,313	8.6
17F	Edneytown-Peaks complex, 55 to 75 percent slopes, extremely stony	3,768	1.2
18B	Elsinboro loam, 2 to 7 percent slopes, rarely flooded	140	*
19C	Fauquier loam, 7 to 15 percent slopes, very stony	190	*
19D	Fauquier loam, 15 to 25 percent slopes, very stony	258	*
19E	Fauquier loam, 25 to 50 percent slopes, very stony	217	*
20B	Haymarket-Mirerock complex, 2 to 7 percent slopes	448	0.1
20C	Haymarket-Mirerock complex, 7 to 15 percent slopes	209	*
21B	Littlejoe silt loam, 2 to 7 percent slopes	733	0.2
21C	Littlejoe silt loam, 7 to 15 percent slopes	4,115	1.3
21D	Littlejoe silt loam, 15 to 25 percent slopes	892	0.3
22B	Minnieville clay loam, 2 to 7 percent slopes, severely eroded	254	*
22C	Minnieville clay loam, 7 to 15 percent slopes, severely eroded	988	0.3
22D	Minnieville clay loam, 15 to 25 percent slopes, severely eroded	736	0.2
23B	Minnieville loam, 2 to 7 percent slopes	2,217	0.7
23C	Minnieville loam, 7 to 15 percent slopes	5,204	1.7
23D	Minnieville loam, 15 to 25 percent slopes	1,796	0.6
24C	Myersville-Catoctin complex, 7 to 15 percent slopes, extremely stony	193	*
24D	Myersville-Catoctin complex, 15 to 35 percent slopes, extremely stony	776	0.3

See footnote at end of table.

Table 4.—Acreage and Proportionate Extent of the Soils—Continued

Map symbol	Soil name	Acres	Percent
24E	Myersville-Catoctin complex, 35 to 55 percent slopes, extremely stony	626	0.2
24F	Myersville-Catoctin complex, 55 to 75 percent slopes, extremely stony	48	*
25B	Orenda loam, 2 to 7 percent slopes	67	*
25C	Orenda loam, 7 to 15 percent slopes	562	0.2
25D	Orenda loam, 15 to 25 percent slopes	329	0.1
26C	Peaks-Rock outcrop complex, 7 to 15 percent slopes	483	0.2
26D	Peaks-Rock outcrop complex, 15 to 35 percent slopes	1,147	0.4
26E	Peaks-Rock outcrop complex, 35 to 55 percent slopes	4,467	1.5
26F	Peaks-Rock outcrop complex, 55 to 75 percent slopes	7,911	2.6
27A	Pineywoods silt loam, 0 to 2 percent slopes	67	*
27B	Pineywoods silt loam, 2 to 7 percent slopes	474	0.2
28	Pits, quarry	171	*
29B	Saunook loam, 2 to 7 percent slopes	373	0.1
29C	Saunook loam, 7 to 15 percent slopes	556	0.2
29D	Saunook loam, 15 to 25 percent slopes	282	*
30B	Saunook loam, 2 to 7 percent slopes, very stony	617	0.2
30C	Saunook loam, 7 to 15 percent slopes, very stony	3,611	1.2
30D	Saunook loam, 15 to 25 percent slopes, very stony	3,703	1.2
30E	Saunook loam, 25 to 50 percent slopes, very stony	572	0.2
31A	Sindion-Yogaville complex, 0 to 3 percent slopes, frequently flooded	385	0.1
32B	Sketerville silt loam, 2 to 7 percent slopes	769	0.3
33A	Speedwell loam, 0 to 3 percent slopes, frequently flooded	725	0.2
34C	Spriggs loam, 7 to 15 percent slopes	155	*
34D	Spriggs loam, 15 to 25 percent slopes	316	0.1
34E	Spriggs loam, 25 to 50 percent slopes	1,035	0.3
35B	Spriggs loam, 2 to 7 percent slopes, very stony	146	*
35C	Spriggs loam, 7 to 15 percent slopes, very stony	354	0.1
35D	Spriggs loam, 15 to 25 percent slopes, very stony	153	*
35E	Spriggs loam, 25 to 50 percent slopes, very stony	647	0.2
36D	Stott Knob-Rhodhiss complex, 15 to 25 percent slopes	2,106	0.7
36E	Stott Knob-Rhodhiss complex, 25 to 50 percent slopes	20,954	6.8
37D	Stott Knob-Rhodhiss complex, 15 to 25 percent slopes, very stony	702	0.2
37E	Stott Knob-Rhodhiss complex, 25 to 50 percent slopes, very stony	11,067	3.6
38A	Suches loam, 0 to 3 percent slopes, frequently flooded	4,087	1.3
39C	Sylco-Sylvatus complex, 7 to 15 percent slopes	1,236	0.4
39D	Sylco-Sylvatus complex, 15 to 35 percent slopes	2,627	0.9
39E	Sylco-Sylvatus complex, 35 to 55 percent slopes	2,808	0.9
39F	Sylco-Sylvatus complex, 55 to 75 percent slopes	373	0.1
40C	Sylco-Sylvatus complex, 7 to 15 percent slopes, extremely stony	203	*
40D	Sylco-Sylvatus complex, 15 to 35 percent slopes, extremely stony	684	0.2
40E	Sylco-Sylvatus complex, 35 to 55 percent slopes, extremely stony	2,469	0.8
40F	Sylco-Sylvatus complex, 55 to 75 percent slopes, extremely stony	2,775	0.9
41E	Sylvatus-Rock outcrop complex, 35 to 55 percent slopes, extremely stony	186	*
41F	Sylvatus-Rock outcrop complex, 55 to 75 percent slopes, extremely stony	393	0.1
42	Udorthents, smoothed	856	0.3
43B	Unison loam, 2 to 7 percent slopes	408	0.1
43C	Unison loam, 7 to 15 percent slopes	661	0.2
44B	Unison loam, 2 to 7 percent slopes, very stony	23	*
44C	Unison loam, 7 to 15 percent slopes, very stony	756	0.2
45B	Wintergreen clay loam, 2 to 7 percent slopes, severely eroded	1,583	0.5
45C	Wintergreen clay loam, 7 to 15 percent slopes, severely eroded	3,415	1.1
45D	Wintergreen clay loam, 15 to 25 percent slopes, severely eroded	703	0.2
46B	Wintergreen loam, 2 to 7 percent slopes	5,241	1.7
46C	Wintergreen loam, 7 to 15 percent slopes	5,032	1.6
46D	Wintergreen loam, 15 to 25 percent slopes	507	0.2
47B	Wintergreen loam, 2 to 7 percent slopes, very stony	208	*
47C	Wintergreen loam, 7 to 15 percent slopes, very stony	682	0.2
47D	Wintergreen loam, 15 to 25 percent slopes, very stony	299	*
W	Water	3,178	1.0
	Total	306,300	100.0

* Less than 0.1 percent.

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
1B:							
Buffstat----------	2e	V	4.0	100	3.5	5.0	35
1C:							
Buffstat----------	3e	V	3.5	88	3.1	4.4	31
1D:							
Buffstat----------	4e	V	3.2	80	2.8	4.0	28
2C:							
Bugley------------	6s	JJ	---	---	---	3.5	---
Littlejoe---------	3e	V	3.5	88	3.1	4.4	31
2D:							
Bugley------------	6s	JJ	---	---	---	3.2	---
Littlejoe---------	4e	V	3.2	80	2.8	4.0	28
2E:							
Bugley------------	7e	JJ	---	---	---	---	---
Littlejoe---------	6e	V	---	---	---	4.0	---
3C:							
Catoctin----------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
3D:							
Catoctin----------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
3E:							
Catoctin----------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
4B:							
Clifford, severely eroded-----------	3e	X	2.8	70	2.4	3.5	25
4C:							
Clifford, severely eroded-----------	4e	X	2.5	62	2.2	3.1	22
4D:							
Clifford, severely eroded-----------	6e	X	---	---	---	2.8	---
4E:							
Clifford, severely eroded-----------	7e	X	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
5B:							
Clifford----------	2e	X	4.0	100	3.5	5.0	35
5C:							
Clifford----------	3e	X	3.5	90	3.1	4.4	30
5D:							
Clifford----------	4e	X	3.2	80	2.8	4.0	28
5E:							
Clifford----------	7e	X	---	---	---	---	---
6B:							
Clifford, very stony------------	6s	X	---	---	---	3.8	---
6C:							
Clifford, very stony------------	6s	X	---	---	---	3.3	---
6D:							
Clifford, very stony------------	7s	X	---	---	---	---	---
6E:							
Clifford, very stony------------	7e	X	---	---	---	---	---
7A:							
Codorus-----------	6w	A	---	---	---	9.0	---
8B:							
Colleen-----------	2e	KK	---	85	3.0	4.0	20
8C:							
Colleen-----------	3e	KK	---	57	2.6	3.5	18
8D:							
Colleen-----------	4e	KK	---	52	2.4	3.2	16
9A:							
Combs-------------	2w	A	5.1	136	3.8	9.0	43
10A:							
Comus-------------	2w	A	6.0	160	4.5	9.0	50
11A:							
Craigsville-------	4s	CC	---	60	2.4	3.5	18
12D:							
Dekalb------------	7s	FF	---	---	---	---	---
Hazleton----------	7s	JJ	---	---	---	---	---
12E:							
Dekalb------------	7e	FF	---	---	---	---	---
Hazleton----------	7e	JJ	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
12F:							
Dekalb------------	7e	FF	---	---	---	---	---
Hazleton----------	7e	JJ	---	---	---	---	---
13E:							
Dekalb------------	7s	FF	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
13F:							
Dekalb------------	7s	FF	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
14B:							
Delanco-----------	2e	B	5.5	160	4.5	9.0	50
15B:							
Delanco-----------	2e	B	5.5	160	4.5	9.0	50
Elsinboro---------	2e	L	5.5	130	4.0	7.5	40
15C:							
Delanco-----------	3e	B	4.8	140	4.0	7.9	45
Elsinboro---------	3e	L	4.8	115	3.5	6.6	35
16C:							
Edneytown---------	3e	L	4.8	114	3.5	6.6	35
16D:							
Edneytown---------	4e	L	4.4	104	3.2	6.0	32
16E:							
Edneytown---------	7e	L	---	---	---	---	---
17B:							
Edneytown---------	6s	L	---	---	---	5.6	---
Peaks-------------	6s	JJ	---	---	---	3.0	---
17C:							
Edneytown---------	7s	L	---	---	---	---	---
Peaks-------------	7s	JJ	---	---	---	---	---
17D:							
Edneytown---------	7s	L	---	---	---	---	---
Peaks-------------	7s	JJ	---	---	---	---	---
17E:							
Edneytown---------	7e	L	---	---	---	---	---
Peaks-------------	7e	JJ	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
17F:							
Edneytown----------	7e	L	---	---	---	---	---
Peaks-------------	7e	JJ	---	---	---	---	---
18B:							
Elsinboro---------	2e	L	5.5	130	4.0	7.5	40
19C:							
Fauquier----------	6s	N	---	---	---	5.0	---
19D:							
Fauquier----------	7s	N	---	---	---	---	---
19E:							
Fauquier----------	7s	N	---	---	---	---	---
20B:							
Haymarket---------	2e	KK	---	65	3.0	4.0	20
Mirerock----------	2e	KK	---	65	3.0	4.0	20
20C:							
Haymarket---------	3e	KK	---	57	2.6	3.5	13
Mirerock----------	3e	KK	---	57	2.6	3.5	18
21B:							
Littlejoe---------	2e	V	4.0	100	3.5	5.0	35
21C:							
Littlejoe---------	3e	V	3.5	88	3.1	4.4	31
21D:							
Littlejoe---------	4e	V	3.2	80	2.8	4.0	28
22B:							
Minnieville, severely eroded--	3e	N	3.8	90	2.8	5.2	28
22C:							
Minnieville, severely eroded--	4e	N	3.4	80	2.5	4.6	25
22D:							
Minnieville, severely eroded--	6e	N	---	---	---	4.2	---
23B:							
Minnieville-------	2e	N	5.5	130	4.0	7.5	40
23C:							
Minnieville-------	3e	N	4.8	115	3.5	6.6	35
23D:							
Minnieville-------	4e	N	4.4	105	3.2	6.0	32

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
24C:							
Myersville--------	7s	D	---	---	---	---	---
Catoctin----------	7s	JJ	---	---	---	---	---
24D:							
Myersville--------	7s	D	---	---	---	---	---
Catoctin----------	7s	JJ	---	---	---	---	---
24E:							
Myersville--------	7e	D	---	---	---	---	---
Catoctin----------	7e	JJ	---	---	---	---	---
24F:							
Myersville--------	7e	D	---	---	---	---	---
Catoctin----------	7e	JJ	---	---	---	---	---
25B:							
Orenda------------	2e	Y	---	100	3.5	5.0	35
25C:							
Orenda------------	3e	Y	---	88	3.1	4.4	31
25D:							
Orenda------------	4e	Y	---	80	2.8	4.0	28
26C:							
Peaks-------------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
26D:							
Peaks-------------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
26E:							
Peaks-------------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
26F:							
Peaks-------------	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
27A:							
Pineywoods--------	4w	NN	---	65	---	3.0	20
27B:							
Pineywoods--------	4w	NN	---	65	---	3.0	20
28:							
Pits, quarry------	8s	---	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
29B:							
Saunook-----------	2e	L	5.5	130	4.0	7.5	40
29C:							
Saunook-----------	3e	L	4.8	114	3.5	6.6	35
29D:							
Saunook-----------	4e	L	4.4	104	3.2	6.0	32
30B:							
Saunook, very stony------------	6s	L	---	---	---	5.6	---
30C:							
Saunook, very stony------------	6s	L	---	---	---	5.0	---
30D:							
Saunook, very stony------------	7s	L	---	---	---	---	---
30E:							
Saunook, very stony------------	7e	L	---	---	---	---	---
31A:							
Sindion-----------	3w	G	5.5	140	4.5	9.0	40
Yogaville---------	6w	MM	---	---	---	4.0	---
32B:							
Sketerville-------	2e	KK	---	65	3.0	4.0	20
33A:							
Speedwell---------	2w	A	6.0	160	4.5	9.0	50
34C:							
Spriggs-----------	3e	JJ	---	57	2.6	3.5	18
34D:							
Spriggs-----------	4e	JJ	---	52	2.4	3.2	16
34E:							
Spriggs-----------	7e	JJ	---	---	---	---	---
35B:							
Spriggs, very stony------------	6s	JJ	---	---	---	3.0	---
35C:							
Spriggs, very stony------------	6s	JJ	---	---	---	2.6	---
35D:							
Spriggs, very stony------------	7s	JJ	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
35E:							
Spriggs, very stony	7e	JJ	---	---	---	---	---
36D:							
Stott Knob	4e	N	4.4	104	3.2	6.0	32
Rhodhiss	4e	X	3.2	80	2.8	4.0	28
36E:							
Stott Knob	7e	N	---	---	---	---	---
Rhodhiss	7e	X	---	---	---	---	---
37D:							
Stott Knob, very stony	7s	N	---	---	---	---	---
Rhodhiss, very stony	7s	X	---	---	---	---	---
37E:							
Stott Knob, very stony	7e	N	---	---	---	---	---
Rhodhiss, very stony	7e	X	---	---	---	---	---
38A:							
Suches	3w	A	6.0	160	4.5	9.0	50
39C:							
Sylco	3e	JJ	---	57	2.6	3.5	18
Sylvatus	6s	JJ	---	---	---	3.0	---
39D:							
Sylco	6e	JJ	---	---	---	3.2	---
Sylvatus	6e	JJ	---	---	---	2.7	---
39E:							
Sylco	7e	JJ	---	---	---	---	---
Sylvatus	7e	JJ	---	---	---	---	---
39F:							
Sylco	7e	JJ	---	---	---	---	---
Sylvatus	7e	JJ	---	---	---	---	---
40C:							
Sylco, extremely stony	7s	JJ	---	---	---	---	---
Sylvatus, extremely stony	7s	JJ	---	---	---	---	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
40D:							
Sylco, extremely stony------------	7s	JJ	---	---	---	---	---
Sylvatus, extremely stony--	7s	JJ	---	---	---	---	---
40E:							
Sylco, extremely stony------------	7e	JJ	---	---	---	---	---
Sylvatus, extremely stony--	7e	JJ	---	---	---	---	---
40F:							
Sylco, extremely stony------------	7e	JJ	---	---	---	---	---
Sylvatus, extremely stony--	7e	JJ	---	---	---	---	---
41E:							
Sylvatus, extremely stony--	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
41F:							
Sylvatus, extremely stony--	7s	JJ	---	---	---	---	---
Rock outcrop------	8	---	---	---	---	---	---
42.							
Udorthents							
43B:							
Unison------------	2e	L	5.5	130	4.0	7.5	40
43C:							
Unison------------	3e	L	4.8	114	3.5	6.6	35
44B:							
Unison, very stony	6s	L	---	---	---	5.6	---
44C:							
Unison, very stony	6s	L	---	---	---	5.0	---
45B:							
Wintergreen, severely eroded--	3e	O	3.8	91	2.8	5.2	28
45C:							
Wintergreen, severely eroded--	4e	O	3.4	80	2.4	4.6	24
45D:							
Wintergreen, severely eroded--	6e	O	---	---	---	4.2	---

Table 5.—Land Capability, Virginia Soil Management Group, and Yields per Acre of Crops and Pasture—Continued

Map symbol and soil name	Land capability	Virginia soil management group	Alfalfa hay	Corn	Grass-legume hay	Pasture	Soybeans
			Tons	Bu	Tons	AUM	Bu
46B: Wintergreen-------	2e	O	5.5	130	4.0	7.5	40
46C: Wintergreen-------	3e	O	4.8	114	3.5	6.6	35
46D: Wintergreen-------	4e	O	4.4	104	3.2	6.0	32
47B: Wintergreen, very stony------------	6s	O	---	---	---	5.6	---
47C: Wintergreen, very stony------------	6s	O	---	---	---	5.0	---
47D: Wintergreen, very stony------------	7s	O	---	---	---	---	---
W. Water							

Table 6.—Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Map unit name
1B	Buffstat silt loam, 2 to 7 percent slopes
5B	Clifford loam, 2 to 7 percent slopes
8B	Colleen loam, 2 to 7 percent slopes
9A	Combs loam, 0 to 3 percent slopes, frequently flooded (if protected from flooding or not frequently flooded during the growing season)
10A	Comus fine sandy loam, 0 to 3 percent slopes, frequently flooded (if protected from flooding or not frequently flooded during the growing season)
14B	Delanco loam, 2 to 7 percent slopes, rarely flooded
15B	Delanco-Elsinboro complex, 2 to 7 percent slopes, rarely flooded
18B	Elsinboro loam, 2 to 7 percent slopes, rarely flooded
21B	Littlejoe silt loam, 2 to 7 percent slopes
23B	Minnieville loam, 2 to 7 percent slopes
25B	Orenda loam, 2 to 7 percent slopes
29B	Saunook loam, 2 to 7 percent slopes
33A	Speedwell loam, 0 to 3 percent slopes, frequently flooded (if protected from flooding or not frequently flooded during the growing season)
38A	Suches loam, 0 to 3 percent slopes, frequently flooded (if protected from flooding or not frequently flooded during the growing season)
43B	Unison loam, 2 to 7 percent slopes
46B	Wintergreen loam, 2 to 7 percent slopes

Table 7.—Agricultural Waste Management, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1B:					
Buffstat------------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
1C:					
Buffstat------------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Slope	0.37	Slope	0.37
1D:					
Buffstat------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.37	Too acid	0.96
2C:					
Bugley--------------	70	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Too acid	0.89	Too acid	1.00
Littlejoe-----------	35	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Slope	0.37	Slope	0.37
2D:					
Bugley--------------	70	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
Littlejoe-----------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.37	Too acid	0.96
2E:					
Bugley--------------	70	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
Littlejoe-----------	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.37	Too acid	0.96
3C:					
Catoctin------------	55	Very limited		Somewhat limited	
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
		Depth to bedrock	0.97	Too acid	0.42
Rock outcrop--------	30	Not rated		Not rated	

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
3D:					
Catoctin	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
Rock outcrop	30	Not rated		Not rated	
3E:					
Catoctin	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
Rock outcrop	30	Not rated		Not rated	
4B:					
Clifford, severely eroded	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.73	Low adsorption	0.53
		Too acid	0.11	Too acid	0.42
4C:					
Clifford, severely eroded	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.73	Low adsorption	0.53
		Slope	0.37	Too acid	0.42
		Too acid	0.11	Slope	0.37
4D:					
Clifford, severely eroded	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.73	Low adsorption	0.53
		Too acid	0.11	Too acid	0.42
4E:					
Clifford, severely eroded	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.73	Low adsorption	0.53
		Too acid	0.11	Too acid	0.42
5B:					
Clifford	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.57	Too acid	0.42
		Too acid	0.11	Low adsorption	0.06
5C:					
Clifford	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.57	Too acid	0.42
		Slope	0.37	Slope	0.37
		Too acid	0.11	Low adsorption	0.06

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
5D:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.57	Too acid	0.42
		Too acid	0.11	Low adsorption	0.06
5E:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.57	Too acid	0.42
		Too acid	0.11	Low adsorption	0.06
6B:					
Clifford, very stony	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.57	Too acid	0.42
		Large stones content	0.47	Low adsorption	0.06
		Too acid	0.11		
6C:					
Clifford, very stony	90	Somewhat limited		Somewhat limited	
		Low adsorption	0.57	Too acid	0.42
		Large stones content	0.47	Slope	0.37
				Low adsorption	0.06
		Slope	0.37		
6D:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.57	Too acid	0.42
		Large stones content	0.47	Low adsorption	0.06
6E:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.57	Too acid	0.42
		Large stones content	0.47	Low adsorption	0.06
7A:					
Codorus-------------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Too acid	0.11	Too acid	0.42
8B:					
Colleen-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Low adsorption	0.59	Too acid	0.42
		Too acid	0.11	Low adsorption	0.24
8C:					
Colleen-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Low adsorption	0.59	Too acid	0.42
		Slope	0.37	Slope	0.37

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
8D:					
Colleen-------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Slow water movement	1.00
		Low adsorption	0.59	Too acid	0.42
9A:					
Combs---------------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
10A:					
Comus---------------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Too acid	0.32	Too acid	0.91
11A:					
Craigsville---------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Filtering capacity	0.99	Too acid	1.00
		Large stones content	0.76	Filtering capacity	0.99
12D:					
Dekalb--------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Hazleton------------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.73	Filtering capacity	0.99
12E:					
Dekalb--------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00
Hazleton------------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
12F:					
Dekalb--------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
12F:					
Hazleton------------	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
13E:					
Dekalb--------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Rock outcrop--------	35	Not rated		Not rated	
13F:					
Dekalb--------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Rock outcrop--------	35	Not rated		Not rated	
14B:					
Delanco-------------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.37	Too acid	0.96
		Slow water movement	0.30	Flooding	0.40
15B:					
Delanco-------------	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.37	Too acid	0.96
		Slow water movement	0.30	Flooding	0.40
Elsinboro-----------	40	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
				Flooding	0.40
15C:					
Delanco-------------	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.37	Too acid	0.96
		Slope	0.37	Flooding	0.40
Elsinboro-----------	40	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Slope	0.37	Flooding	0.40
				Slope	0.37

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
16C:					
Edneytown	90	Somewhat limited		Very limited	
		Too acid	0.62	Too acid	1.00
		Slope	0.37	Slope	0.37
16D:					
Edneytown	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
16E:					
Edneytown	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
17B:					
Edneytown	55	Somewhat limited		Very limited	
		Too acid	0.62	Too acid	1.00
		Large stones content	0.47		
Peaks	35	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.62	Filtering capacity	0.99
17C:					
Edneytown	55	Very limited		Very limited	
		Large stones content	1.00	Too acid	1.00
		Too acid	0.62	Slope	0.37
		Slope	0.37		
Peaks	35	Very limited		Very limited	
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00
		Filtering capacity	0.99	Filtering capacity	0.99
17D:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Too acid	0.62		
Peaks	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00
17E:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Too acid	0.62		

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
17E:					
Peaks---------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00
17F:					
Edneytown-----------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Too acid	0.62		
Peaks---------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	1.00
		Droughty	1.00	Too acid	1.00
18B:					
Elsinboro-----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
				Flooding	0.40
19C:					
Fauquier------------	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.67
		Slope	0.37	Slope	0.37
		Too acid	0.18		
19D:					
Fauquier------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.67
		Too acid	0.18		
19E:					
Fauquier------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.67
		Too acid	0.18		
20B:					
Haymarket-----------	55	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Slow water movement	0.50	Slow water movement	0.37
		Runoff	0.40		
Mirerock------------	40	Somewhat limited		Somewhat limited	
		Droughty	0.62	Too acid	0.91
		Slow water movement	0.50	Droughty	0.62
		Depth to bedrock	0.46	Depth to bedrock	0.46

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
20C:					
Haymarket-----------	55	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Slow water movement	0.50	Slow water movement	0.37
		Runoff	0.40	Slope	0.37
Mirerock------------	40	Somewhat limited		Somewhat limited	
		Droughty	0.62	Too acid	0.91
		Slow water movement	0.50	Droughty	0.62
		Depth to bedrock	0.46	Depth to bedrock	0.46
21B:					
Littlejoe-----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
21C:					
Littlejoe-----------	90	Somewhat limited		Somewhat limited	
		Too acid	0.37	Too acid	0.96
		Slope	0.37	Slope	0.37
21D:					
Littlejoe-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.37	Too acid	0.96
22B:					
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited	
		Low adsorption	0.42	Too acid	0.67
		Too acid	0.18	Low adsorption	0.57
22C:					
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited	
		Low adsorption	0.42	Too acid	0.67
		Slope	0.37	Low adsorption	0.57
		Too acid	0.18	Slope	0.37
22D:					
Minnieville, severely eroded----	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.42	Too acid	0.67
		Too acid	0.18	Low adsorption	0.57
23B:					
Minnieville---------	85	Somewhat limited		Somewhat limited	
		Low adsorption	0.31	Too acid	0.67
		Too acid	0.18	Low adsorption	0.18
23C:					
Minnieville---------	85	Somewhat limited		Somewhat limited	
		Slope	0.37	Too acid	0.67
		Low adsorption	0.31	Slope	0.37
		Too acid	0.18	Low adsorption	0.18

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
23D:					
Minnieville----------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Low adsorption	0.31	Too acid	0.67
		Too acid	0.18	Low adsorption	0.18
24C:					
Myersville----------	50	Very limited		Somewhat limited	
		Large stones content	1.00	Too acid	0.91
		Slope	0.37	Slope	0.37
		Too acid	0.32		
Catoctin------------	35	Very limited		Somewhat limited	
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
		Depth to bedrock	0.97	Too acid	0.42
24D:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	0.91
		Too acid	0.32		
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
24E:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	0.91
		Too acid	0.32		
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97
24F:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	0.91
		Too acid	0.32		
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Droughty	0.98
		Droughty	0.98	Depth to bedrock	0.97

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
25B:					
Orenda---------------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.30	Too acid	0.85
		Too acid	0.27	Slow water movement	0.22
25C:					
Orenda---------------	85	Somewhat limited		Somewhat limited	
		Slope	0.37	Too acid	0.85
		Slow water movement	0.30	Slope	0.37
		Too acid	0.27	Slow water movement	0.22
25D:					
Orenda---------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.30	Too acid	0.85
		Too acid	0.27	Slow water movement	0.22
26C:					
Peaks----------------	60	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
		Too acid	0.62	Filtering capacity	0.99
Rock outcrop---------	35	Not rated		Not rated	
26D:					
Peaks----------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Rock outcrop---------	35	Not rated		Not rated	
26E:					
Peaks----------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Rock outcrop---------	35	Not rated		Not rated	
26F:					
Peaks----------------	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	1.00	Droughty	1.00
		Filtering capacity	0.99	Too acid	1.00
Rock outcrop---------	35	Not rated		Not rated	

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
27A:					
Pineywoods----------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Too acid	0.43	Too acid	0.99
27B:					
Pineywoods----------	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slow water movement	1.00
		Too acid	0.43	Too acid	0.99
28:					
Pits, quarry--------	100	Not rated		Not rated	
29B:					
Saunook-------------	85	Somewhat limited		Somewhat limited	
		Too acid	0.11	Too acid	0.42
29C:					
Saunook-------------	85	Somewhat limited		Somewhat limited	
		Slope	0.37	Too acid	0.42
		Too acid	0.11	Slope	0.37
29D:					
Saunook-------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.11	Too acid	0.42
30B:					
Saunook, very stony-	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.42
		Too acid	0.11		
30C:					
Saunook, very stony-	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.42
		Slope	0.37	Slope	0.37
		Too acid	0.11		
30D:					
Saunook, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.42
		Too acid	0.11		
30E:					
Saunook, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.42
		Too acid	0.11		

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
31A:					
Sindion	45	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95
		Too acid	0.11	Too acid	0.42
Yogaville	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00
		Ponding	1.00	Ponding	1.00
32B:					
Sketerville	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Low adsorption	0.63	Too acid	0.99
33A:					
Speedwell	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
34C:					
Spriggs	85	Somewhat limited		Somewhat limited	
		Depth to bedrock	0.46	Too acid	0.91
		Slope	0.37	Depth to bedrock	0.46
		Too acid	0.32	Slope	0.37
34D:					
Spriggs	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.46	Too acid	0.91
		Too acid	0.32	Depth to bedrock	0.46
34E:					
Spriggs	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.46	Too acid	0.91
		Too acid	0.32	Depth to bedrock	0.46
35B:					
Spriggs, very stony	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.91
		Depth to bedrock	0.46	Depth to bedrock	0.46
		Too acid	0.32	Droughty	0.26
35C:					
Spriggs, very stony	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.91
		Depth to bedrock	0.46	Depth to bedrock	0.46
		Slope	0.37	Slope	0.37

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
35D:					
Spriggs, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.91
		Depth to bedrock	0.46	Depth to bedrock	0.46
35E:					
Spriggs, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	0.47	Too acid	0.91
		Depth to bedrock	0.46	Depth to bedrock	0.46
36D:					
Stott Knob----------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
		Droughty	0.57	Droughty	0.57
Rhodhiss-----------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.68	Too acid	1.00
36E:					
Stott Knob----------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
		Droughty	0.57	Droughty	0.57
Rhodhiss-----------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.68	Too acid	1.00
37D:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
		Droughty	0.57	Droughty	0.57
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.68	Too acid	1.00
		Large stones content	0.47		
37E:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.62	Too acid	1.00
		Droughty	0.57	Droughty	0.57
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.68	Too acid	1.00
		Large stones content	0.47		

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
38A:					
Suches	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.46	Too acid	0.91
		Too acid	0.32	Depth to saturated zone	0.46
39C:					
Sylco	60	Somewhat limited		Very limited	
		Droughty	0.93	Too acid	1.00
		Too acid	0.73	Droughty	0.93
		Cobble content	0.68	Cobble content	0.68
Sylvatus	35	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Too acid	1.00
		Cobble content	0.75	Depth to bedrock	1.00
39D:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.93	Too acid	1.00
		Too acid	0.73	Droughty	0.93
Sylvatus	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Depth to bedrock	1.00	Too acid	1.00
39E:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.93	Too acid	1.00
		Too acid	0.73	Droughty	0.93
Sylvatus	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Depth to bedrock	1.00	Too acid	1.00
39F:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Droughty	0.93	Too acid	1.00
		Too acid	0.73	Droughty	0.93
Sylvatus	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Depth to bedrock	1.00	Too acid	1.00
40C:					
Sylco, extremely stony	60	Very limited		Very limited	
		Large stones content	1.00	Too acid	1.00
		Droughty	0.93	Droughty	0.93
		Too acid	0.73	Cobble content	0.68

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste: Rating class and limiting features	Value	Application of sewage sludge: Rating class and limiting features	Value
40C:					
Sylvatus, extremely stony	35	Very limited		Very limited	
		Droughty	1.00	Droughty	1.00
		Large stones content	1.00	Too acid	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
40D:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Droughty	0.93	Droughty	0.93
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
40E:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Droughty	0.93	Droughty	0.93
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
40F:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
		Droughty	0.93	Droughty	0.93
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
41E:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
41E:					
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Droughty	1.00
		Droughty	1.00	Slope	1.00
		Large stones content	1.00	Too acid	1.00
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Somewhat limited		Somewhat limited	
		Too acid	0.18	Too acid	0.67
43C:					
Unison	85	Somewhat limited		Somewhat limited	
		Slope	0.37	Too acid	0.67
		Too acid	0.18	Slope	0.37
44B:					
Unison, very stony	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.67
		Too acid	0.18		
44C:					
Unison, very stony	85	Somewhat limited		Somewhat limited	
		Large stones content	0.47	Too acid	0.67
				Slope	0.37
		Slope	0.37		
		Too acid	0.18		
45B:					
Wintergreen, severely eroded	90	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
45C:					
Wintergreen, severely eroded	90	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Slope	0.37	Slope	0.37
45D:					
Wintergreen, severely eroded	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.73	Too acid	1.00
46B:					
Wintergreen	85	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00

Table 7.—Agricultural Waste Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46C:					
Wintergreen---------	90	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Slope	0.37	Slope	0.37
46D:					
Wintergreen---------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.73	Too acid	1.00
47B:					
Wintergreen, very stony--------------	85	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Large stones content	0.47		
47C:					
Wintergreen, very stony--------------	85	Somewhat limited		Very limited	
		Too acid	0.73	Too acid	1.00
		Large stones content	0.47	Slope	0.37
		Slope	0.37		
47D:					
Wintergreen, very stony--------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Too acid	0.73	Too acid	1.00
		Large stones content	0.47		
W:					
Water---------------	100	Not rated		Not rated	

Table 7.—Agricultural Waste Management, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
1B:					
Buffstat	90	Somewhat limited		Very limited	
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
				Depth to bedrock	0.42
1C:					
Buffstat	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	0.96
				Too steep for surface application	0.94
		Too acid	0.96		
		Too steep for sprinkler application	0.60		
1D:					
Buffstat	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Too acid	0.96
		Too acid	0.96		
2C:					
Bugley	70	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too acid	1.00
Littlejoe	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	0.96
				Too steep for surface application	0.94
		Too acid	0.96		
		Too steep for sprinkler application	0.60		
2D:					
Bugley	70	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
2D:					
Littlejoe	35	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.96	Too acid	0.96
2E:					
Bugley	70	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
Littlejoe	30	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.96	Too acid	0.96
3C:					
Catoctin	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Droughty	0.98	Depth to bedrock	1.00
		Depth to bedrock	0.97	Too steep for surface application	0.94
Rock outcrop	30	Not rated		Not rated	
3D:					
Catoctin	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.98	Depth to bedrock	1.00
Rock outcrop	30	Not rated		Not rated	
3E:					
Catoctin	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.98	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
3E:					
Rock outcrop	30	Not rated		Not rated	
4B:					
Clifford, severely eroded	90	Somewhat limited		Very limited	
		Low adsorption	0.73	Seepage	1.00
		Too acid	0.42	Low adsorption	0.73
		Too steep for surface application	0.32	Too acid	0.42
4C:					
Clifford, severely eroded	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Low adsorption	0.73	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Low adsorption	0.73
4D:					
Clifford, severely eroded	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Low adsorption	0.73	Low adsorption	0.73
4E:					
Clifford, severely eroded	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Low adsorption	0.73	Low adsorption	0.73
5B:					
Clifford	90	Somewhat limited		Very limited	
		Low adsorption	0.57	Seepage	1.00
		Too acid	0.42	Low adsorption	0.57
		Too steep for surface application	0.32	Too acid	0.42

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
5C:					
Clifford-----------	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
		Low adsorption	0.57	Low adsorption	0.57
5D:					
Clifford-----------	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Low adsorption	0.57	Low adsorption	0.57
5E:					
Clifford-----------	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Low adsorption	0.57	Low adsorption	0.57
6B:					
Clifford, very stony	90	Somewhat limited		Very limited	
		Low adsorption	0.57	Seepage	1.00
		Too acid	0.42	Low adsorption	0.57
		Too steep for surface application	0.32	Too acid	0.42
6C:					
Clifford, very stony	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
		Low adsorption	0.57	Low adsorption	0.57
6D:					
Clifford, very stony	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Low adsorption	0.57	Low adsorption	0.57

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
6E:					
Clifford, very stony	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Low adsorption	0.57	Low adsorption	0.57
7A:					
Codorus	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Too acid	0.42	Seepage	1.00
8B:					
Colleen	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Low adsorption	0.59	Low adsorption	0.59
		Too acid	0.42	Too acid	0.42
8C:					
Colleen	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Too steep for surface application	1.00	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Low adsorption	0.59
8D:					
Colleen	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Slow water movement	1.00	Low adsorption	0.59
9A:					
Combs	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
				Seepage	1.00
10A:					
Comus	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Too acid	0.91	Seepage	1.00
				Too acid	0.91

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
11A:					
Craigsville	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Too acid	1.00	Seepage	1.00
		Filtering capacity	0.99	Cobble content	1.00
12D:					
Dekalb	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Too acid	1.00
12E:					
Dekalb	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Too acid	1.00
12F:					
Dekalb	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
12F:					
Hazleton------------	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Too acid	1.00
13E:					
Dekalb--------------	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Rock outcrop--------	35	Not rated		Not rated	
13F:					
Dekalb--------------	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Rock outcrop--------	35	Not rated		Not rated	
14B:					
Delanco-------------	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
15B:					
Delanco-------------	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
Elsinboro-----------	40	Somewhat limited		Very limited	
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
				Flooding	0.40

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
15C:					
Delanco	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	0.96
		Too acid	0.96		
Elsinboro	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	0.96
				Too steep for surface application	0.94
		Too acid	0.96		
		Too steep for sprinkler application	0.60		
16C:					
Edneytown	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	1.00
				Too steep for surface application	0.94
		Too acid	1.00		
		Too steep for sprinkler application	0.60		
16D:					
Edneytown	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
				Too acid	1.00
		Too acid	1.00		
16E:					
Edneytown	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00		
				Too acid	1.00
		Too acid	1.00		
17B:					
Edneytown	55	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Too steep for surface application	0.32	Too acid	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
17B:					
Peaks	35	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
		Filtering capacity	0.99	Too acid	1.00
17C:					
Edneytown	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too acid	1.00
				Too steep for surface application	0.94
		Too acid	1.00		
		Too steep for sprinkler application	0.60		
Peaks	35	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
				Too acid	1.00
		Too acid	1.00		
17D:					
Edneytown	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	1.00
		Too acid	1.00		
Peaks	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Droughty	1.00		
17E:					
Edneytown	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Too acid	1.00
		Too acid	1.00		

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
17E:					
Peaks	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
17F:					
Edneytown	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Too acid	1.00
Peaks	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
18B:					
Elsinboro	90	Somewhat limited		Very limited	
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
				Flooding	0.40
19C:					
Fauquier	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.67	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.67
19D:					
Fauquier	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
19E:					
Fauquier	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67
20B:					
Haymarket	55	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Slow water movement	0.37	Too acid	1.00
		Too steep for surface application	0.32		
Mirerock	40	Somewhat limited		Very limited	
		Too acid	0.91	Seepage	1.00
		Droughty	0.62	Depth to bedrock	1.00
		Depth to bedrock	0.46	Too acid	0.91
20C:					
Haymarket	55	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
Mirerock	40	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.91	Depth to bedrock	1.00
		Droughty	0.62	Too steep for surface application	0.94
21B:					
Littlejoe	90	Somewhat limited		Very limited	
		Too acid	0.96	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.96
				Depth to bedrock	0.05
21C:					
Littlejoe	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.96	Too acid	0.96
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
21D:					
Littlejoe----------	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.96	Too acid	0.96
22B:					
Minnieville, severely eroded----	85	Somewhat limited		Very limited	
		Too acid	0.67	Seepage	1.00
		Low adsorption	0.42	Too acid	0.67
		Too steep for surface application	0.32	Low adsorption	0.42
22C:					
Minnieville, severely eroded----	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.67	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.67
22D:					
Minnieville, severely eroded----	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67
23B:					
Minnieville---------	85	Somewhat limited		Very limited	
		Too acid	0.67	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.67
		Low adsorption	0.31	Low adsorption	0.31
23C:					
Minnieville---------	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.67	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.67

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
23D:					
Minnieville---------	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.67	Too acid	0.67
24C:					
Myersville----------	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.91	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.91
Catoctin------------	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Droughty	0.98	Depth to bedrock	1.00
		Depth to bedrock	0.97	Too steep for surface application	0.94
24D:					
Myersville----------	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.91	Too acid	0.91
Catoctin------------	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.98	Depth to bedrock	1.00
24E:					
Myersville----------	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.91	Too acid	0.91

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
24E:					
Catoctin	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.98	Depth to bedrock	1.00
24F:					
Myersville	50	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.91	Too acid	0.91
Catoctin	35	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	0.98	Depth to bedrock	1.00
25B:					
Orenda	85	Somewhat limited		Very limited	
		Too acid	0.85	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.85
		Slow water movement	0.22		
25C:					
Orenda	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.85	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.85
25D:					
Orenda	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	0.85	Too acid	0.85

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
26C:					
Peaks	60	Very limited		Very limited	
		Droughty	1.00	Seepage	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00
		Too acid	1.00	Too acid	1.00
Rock outcrop	35	Not rated		Not rated	
26D:					
Peaks	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
26E:					
Peaks	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00		1.00
				Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
26F:					
Peaks	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Droughty	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
27A:					
Pineywoods	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.99	Too acid	0.99

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation		Overland flow of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
27B:					
Pineywoods----------	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	1.00
		Too acid	0.99	Too acid	0.99
28:					
Pits, quarry--------	100	Not rated		Not rated	
29B:					
Saunook-------------	85	Somewhat limited		Very limited	
		Too acid	0.42	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.42
29C:					
Saunook-------------	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
		Too acid	0.42	Too acid	0.42
29D:					
Saunook-------------	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.42	Too acid	0.42
30B:					
Saunook, very stony-	85	Somewhat limited		Very limited	
		Too acid	0.42	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.42
30C:					
Saunook, very stony-	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
		Too acid	0.42	Too acid	0.42

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
30D:					
Saunook, very stony-	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.42	Too acid	0.42
30E:					
Saunook, very stony-	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	0.42	Too acid	0.42
31A:					
Sindion-------------	45	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.95	Seepage	1.00
		Too acid	0.42	Depth to saturated zone	0.95
					0.95
Yogaville-----------	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Seepage	1.00
32B:					
Sketerville---------	90	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99
		Too acid	0.99	Too acid	0.99
33A:					
Speedwell-----------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
				Seepage	1.00
34C:					
Spriggs-------------	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.91	Depth to bedrock	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
34D:					
Spriggs	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Depth to bedrock	1.00
		Too acid	0.91		
34E:					
Spriggs	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Depth to bedrock	1.00
		Too acid	0.91		
35B:					
Spriggs, very stony	85	Somewhat limited		Very limited	
		Too acid	0.91	Seepage	1.00
		Depth to bedrock	0.46	Depth to bedrock	1.00
		Too steep for surface application	0.32	Too acid	0.91
35C:					
Spriggs, very stony	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Depth to bedrock	1.00
				Too steep for surface application	0.94
		Too acid	0.91		
		Too steep for sprinkler application	0.60		
35D:					
Spriggs, very stony	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Depth to bedrock	1.00
		Too acid	0.91		
35E:					
Spriggs, very stony	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Depth to bedrock	1.00
		Too acid	0.91		

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
36D:					
Stott Knob	55	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
Rhodhiss	35	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
36E:					
Stott Knob	55	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
Rhodhiss	35	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
37D:					
Stott Knob, very stony	55	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
Rhodhiss, very stony	35	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
37E:					
Stott Knob, very stony	55	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Depth to bedrock	1.00
		Too acid	1.00		
Rhodhiss, very stony	35	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
				Too acid	1.00
		Too acid	1.00		
38A:					
Suches	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Too acid	0.91	Seepage	1.00
		Depth to saturated zone	0.46	Too acid	0.91
39C:					
Sylco	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Depth to bedrock	1.00
				Too acid	1.00
		Too acid	1.00		
		Droughty	0.93		
Sylvatus	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too acid	1.00	Seepage	1.00
		Depth to bedrock	1.00	Too acid	1.00
39D:					
Sylco	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
				Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Depth to bedrock	1.00
		Too acid	1.00		
Sylvatus	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
39E:					
Sylco	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Depth to bedrock	1.00
Sylvatus	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
39F:					
Sylco	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Depth to bedrock	1.00
Sylvatus	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
40C:					
Sylco, extremely stony	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Depth to bedrock	1.00
		Droughty	0.93	Too acid	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too acid	1.00	Seepage	1.00
		Depth to bedrock	1.00	Too acid	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
40D:					
Sylco, extremely stony	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Depth to bedrock	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
40E:					
Sylco, extremely stony	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Depth to bedrock	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
40F:					
Sylco, extremely stony	60	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too steep for sprinkler application	1.00	Too steep for surface application	1.00
		Too acid	1.00	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
40F:					
Sylvatus, extremely stony	35	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
41E:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Droughty	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Somewhat limited		Very limited	
		Too acid	0.67	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.67
43C:					
Unison	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.67	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.67

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
44B:					
Unison, very stony--	85	Somewhat limited		Very limited	
		Too acid	0.67	Seepage	1.00
		Too steep for surface application	0.32	Too acid	0.67
44C:					
Unison, very stony--	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	0.67	Too steep for surface application	0.94
		Too steep for sprinkler application	0.60	Too acid	0.67
45B:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Too steep for surface application	0.32	Too acid	1.00
45C:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
45D:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
46B:					
Wintergreen---------	85	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Too steep for surface application	0.32	Too acid	1.00

Table 7.—Agricultural Waste Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Disposal of wastewater by irrigation: Rating class and limiting features	Value	Overland flow of wastewater: Rating class and limiting features	Value
46C:					
Wintergreen	90	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
46D:					
Wintergreen	90	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
47B:					
Wintergreen, very stony	85	Very limited		Very limited	
		Too acid	1.00	Seepage	1.00
		Too steep for surface application	0.32	Too acid	1.00
47C:					
Wintergreen, very stony	85	Very limited		Very limited	
		Too steep for surface application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
		Too steep for sprinkler application	0.60	Too steep for surface application	0.94
47D:					
Wintergreen, very stony	85	Very limited		Very limited	
		Too steep for surface application	1.00	Too steep for surface application	1.00
		Too steep for sprinkler application	1.00	Seepage	1.00
		Too acid	1.00	Too acid	1.00
W:					
Water	100	Not rated		Not rated	

Table 7.—Agricultural Waste Management, Part III

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
1B:					
Buffstat	90	Very limited		Somewhat limited	
		Depth to bedrock	1.00	Too acid	0.96
		Slow water movement	1.00	Depth to bedrock	0.42
		Too acid	0.14	Too steep for surface application	0.32
1C:					
Buffstat	90	Very limited		Very limited	
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too acid	0.96
		Slope	1.00	Too steep for sprinkler irrigation	0.94
1D:					
Buffstat	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.96
2C:					
Bugley	70	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
		Too acid	0.55	Too acid	1.00
Littlejoe	35	Very limited		Very limited	
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too acid	0.96
		Slope	1.00	Too steep for sprinkler irrigation	0.94
2D:					
Bugley	70	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Too acid	0.55	Too steep for sprinkler irrigation	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
2D:					
Littlejoe-----------	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.96
2E:					
Bugley--------------	70	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Too acid	0.55	Too steep for sprinkler irrigation	1.00
Littlejoe-----------	30	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.96
3C:					
Catoctin------------	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.64	Too steep for sprinkler irrigation	0.94
Rock outcrop--------	30	Not rated		Not rated	
3D:					
Catoctin------------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.64	Depth to bedrock	1.00
Rock outcrop--------	30	Not rated		Not rated	

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
3E:					
Catoctin------------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.64	Depth to bedrock	1.00
Rock outcrop--------	30	Not rated		Not rated	
4B:					
Clifford, severely eroded-------------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Low adsorption	0.73
		Slope	0.12	Too acid	0.42
				Too steep for surface application	0.32
4C:					
Clifford, severely eroded-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Low adsorption	0.73
4D:					
Clifford, severely eroded-------------	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.73
4E:					
Clifford, severely eroded-------------	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.73
5B:					
Clifford------------	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Low adsorption	0.57
		Slope	0.12	Too acid	0.42
				Too steep for surface application	0.32

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
5C:					
Clifford------------	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Low adsorption	0.57
5D:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.57
5E:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.57
6B:					
Clifford, very stony	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Low adsorption	0.57
				Too acid	0.42
		Slope	0.12	Too steep for surface application	0.32
6C:					
Clifford, very stony	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Low adsorption	0.57
6D:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.57

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
6E:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Low adsorption	0.57
7A:					
Codorus	85	Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.42
8B:					
Colleen	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slow water movement	0.94
		Slope	0.12	Low adsorption	0.59
				Too acid	0.42
8C:					
Colleen	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Slow water movement	0.94
8D:					
Colleen	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Slow water movement	0.94
9A:					
Combs	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.62		
10A:					
Comus	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Too acid	0.91

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
11A:					
Craigsville	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Cobble content	1.00	Too acid	1.00
				Filtering capacity	0.99
12D:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Stone content	0.97	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.99	Too acid	1.00
12E:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Stone content	0.97	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.99	Too acid	1.00
12F:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Stone content	0.97	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
12F:					
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.99	Too acid	1.00
13E:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Stone content	0.97	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
13F:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Stone content	0.97	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
14B:					
Delanco	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.96
		Slope	0.12	Too steep for surface application	0.32
15B:					
Delanco	60	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.96
		Slope	0.12	Too steep for surface application	0.32
Elsinboro	40	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Too acid	0.96
		Slow water movement	1.00	Too steep for surface application	0.32
		Slope	0.12		

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
15C:					
Delanco	60	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	0.96
Elsinboro	40	Very limited		Very limited	
		Depth to saturated zone	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too acid	0.96
		Slope	1.00	Too steep for sprinkler irrigation	0.94
16C:					
Edneytown	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
				Too steep for sprinkler irrigation	0.94
16D:					
Edneytown	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
16E:					
Edneytown	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
17B:					
Edneytown	55	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.12	Too steep for surface application	0.32
Peaks	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.12	Too acid	1.00
				Filtering capacity	0.99

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
17C:					
Edneytown	55	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
				Too steep for sprinkler irrigation	0.94
Peaks	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
				Too acid	1.00
17D:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
Peaks	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00
17E:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
Peaks	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
17F:					
Edneytown-----------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
Peaks---------------	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00
18B:					
Elsinboro-----------	90	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Too acid	0.96
		Slow water movement	1.00	Too steep for surface application	0.32
		Slope	0.12		
19C:					
Fauquier------------	85	Very limited		Very limited	
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	0.94
		Slope	1.00	Too acid	0.67
19D:					
Fauquier------------	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.67
19E:					
Fauquier------------	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.67

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
20B:					
Haymarket-----------	55	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Slope	0.12	Too steep for surface application	0.32
				Slow water movement	0.26
Mirerock------------	40	Very limited		Very limited	
		Slow water movement	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too acid	0.91
		Slope	0.12	Too steep for surface application	0.32
20C:					
Haymarket-----------	55	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
				Too steep for sprinkler irrigation	0.94
Mirerock------------	40	Very limited		Very limited	
		Slow water movement	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
21B:					
Littlejoe-----------	90	Very limited		Somewhat limited	
		Depth to bedrock	1.00	Too acid	0.96
		Slow water movement	1.00	Too steep for surface application	0.32
		Slope	0.12	Depth to bedrock	0.05
21C:					
Littlejoe-----------	90	Very limited		Very limited	
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too acid	0.96
		Slope	1.00	Too steep for sprinkler irrigation	0.94

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
21D:					
Littlejoe	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.96
22B:					
Minnieville, severely eroded	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.67
		Slope	0.12	Low adsorption	0.42
				Too steep for surface application	0.32
22C:					
Minnieville, severely eroded	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.67
22D:					
Minnieville, severely eroded	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.67
23B:					
Minnieville	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.67
		Slope	0.12	Too steep for surface application	0.32
				Low adsorption	0.31
23C:					
Minnieville	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.67

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
23D:					
Minnieville	85	Very limited Slope Slow water movement	 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 0.67
24C:					
Myersville	50	Very limited Depth to bedrock Slow water movement Slope	 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 0.94 0.91
Catoctin	35	Very limited Depth to bedrock Slope Cobble content	 1.00 1.00 0.64	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler irrigation	 1.00 1.00 0.94
24D:					
Myersville	50	Very limited Slope Depth to bedrock Slow water movement	 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 0.91
Catoctin	35	Very limited Slope Depth to bedrock Cobble content	 1.00 1.00 0.64	Very limited Too steep for surface application Too steep for sprinkler irrigation Depth to bedrock	 1.00 1.00 1.00
24E:					
Myersville	50	Very limited Slope Depth to bedrock Slow water movement	 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler irrigation Too acid	 1.00 1.00 0.91

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
24E:					
Catoctin	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.64	Depth to bedrock	1.00
24F:					
Myersville	50	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Too acid	0.91
Catoctin	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.64	Depth to bedrock	1.00
25B:					
Orenda	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.85
		Slope	0.12	Too steep for surface application	0.32
				Slow water movement	0.15
25C:					
Orenda	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.85
25D:					
Orenda	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.85

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
26C:					
Peaks	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
				Too acid	1.00
Rock outcrop	35	Not rated		Not rated	
26D:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
26E:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
26F:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
				Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated	
27A:					
Pineywoods	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.99
		Depth to bedrock	1.00	Depth to bedrock	0.99
27B:					
Pineywoods	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Too acid	0.99
		Depth to bedrock	1.00	Depth to bedrock	0.99

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
28:					
Pits, quarry	100	Not rated		Not rated	
29B:					
Saunook	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Slope	0.12	Too steep for surface application	0.32
29C:					
Saunook	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.42
29D:					
Saunook	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.42
30B:					
Saunook, very stony	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.42
		Slope	0.12	Too steep for surface application	0.32
30C:					
Saunook, very stony	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.42
30D:					
Saunook, very stony	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.42

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
30E:					
Saunook, very stony	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	0.42
31A:					
Sindion	45	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.95
		Slow water movement	1.00	Too acid	0.42
Yogaville	40	Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	1.00
		Slow water movement	1.00	Ponding	1.00
32B:					
Sketerville	90	Very limited		Very limited	
		Slow water movement	1.00	Slow water movement	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.99
		Too acid	0.14	Too acid	0.99
33A:					
Speedwell	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00		
34C:					
Spriggs	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
34D:					
Spriggs	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
34E:					
Spriggs	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
35B:					
Spriggs, very stony	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too acid	0.91
		Slope	0.12	Too steep for surface application	0.32
35C:					
Spriggs, very stony	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
35D:					
Spriggs, very stony	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
35E:					
Spriggs, very stony	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
36D:					
Stott Knob	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
36D:					
Rhodhiss-----------	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
36E:					
Stott Knob----------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
Rhodhiss-----------	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
37D:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
37E:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Slow water movement	1.00	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
37E:					
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
				Too acid	1.00
38A:					
Suches	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Too acid	0.91
		Slow water movement	1.00	Depth to saturated zone	0.46
39C:					
Sylco	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.93	Too acid	1.00
Sylvatus	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too acid	1.00
		Slope	1.00	Too steep for surface application	1.00
39D:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00
Sylvatus	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
39E:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
39E:					
Sylvatus------------	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
39F:					
Sylco---------------	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00
Sylvatus------------	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
40C:					
Sylco, extremely stony--------------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.93	Too acid	1.00
Sylvatus, extremely stony--------------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slow water movement	1.00	Too acid	1.00
		Slope	1.00	Too steep for surface application	1.00
40D:					
Sylco, extremely stony--------------	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
40D:					
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
40E:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
40F:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	1.00	Too steep for sprinkler irrigation	1.00
		Cobble content	0.93	Depth to bedrock	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
41E:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.67
		Slope	0.12	Too steep for surface application	0.32
43C:					
Unison	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.67
44B:					
Unison, very stony	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Too acid	0.67
		Slope	0.12	Too steep for surface application	0.32

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater: Rating class and limiting features	Value	Slow rate treatment of wastewater: Rating class and limiting features	Value
44C:					
Unison, very stony--	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too steep for sprinkler irrigation	0.94
				Too acid	0.67
45B:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.14	Too steep for surface application	0.32
		Slope	0.12		
45C:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	0.94
45D:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.14	Too acid	1.00
46B:					
Wintergreen---------	85	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.14	Too steep for surface application	0.32
		Slope	0.12		
46C:					
Wintergreen---------	90	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	0.94

Table 7.—Agricultural Waste Management, Part III—Continued

Map symbol and soil name	Pct. of map unit	Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value
46D:					
Wintergreen	90	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.14	Too acid	1.00
47B:					
Wintergreen, very stony	85	Very limited		Very limited	
		Slow water movement	1.00	Too acid	1.00
		Too acid	0.14	Too steep for surface application	0.32
		Slope	0.12		
47C:					
Wintergreen, very stony	85	Very limited		Very limited	
		Slow water movement	1.00	Too steep for surface application	1.00
		Slope	1.00	Too acid	1.00
		Too acid	0.14	Too steep for sprinkler irrigation	0.94
47D:					
Wintergreen, very stony	85	Very limited		Very limited	
		Slope	1.00	Too steep for surface application	1.00
		Slow water movement	1.00	Too steep for sprinkler irrigation	1.00
		Too acid	0.14	Too acid	1.00
W:					
Water	100	Not rated		Not rated	

Table 8.—Forestland Productivity

(Absence of an entry indicates that data were not available)

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
1B:				
Buffstat	loblolly pine	80	114	eastern white pine, loblolly pine, northern red oak
	northern red oak	66	43	
	shortleaf pine	66	100	
	Virginia pine	69	114	
1C:				
Buffstat	loblolly pine	80	114	eastern white pine, loblolly pine, northern red oak
	northern red oak	66	43	
	shortleaf pine	66	100	
	Virginia pine	69	114	
1D:				
Buffstat	loblolly pine	80	114	eastern white pine, loblolly pine, northern red oak
	northern red oak	66	43	
	shortleaf pine	66	100	
	Virginia pine	69	114	
2C:				
Bugley	loblolly pine	70	86	loblolly pine, northern red oak, shortleaf pine
	northern red oak	65	43	
	shortleaf pine	60	86	
	Virginia pine	65	100	
Littlejoe	loblolly pine	78	114	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	78	57	
	Virginia pine	68	100	
	yellow-poplar	83	72	
2D:				
Bugley	loblolly pine	70	86	loblolly pine, northern red oak, shortleaf pine
	northern red oak	65	43	
	shortleaf pine	60	86	
	Virginia pine	65	100	
Littlejoe	loblolly pine	78	114	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	78	57	
	Virginia pine	68	100	
	yellow-poplar	83	72	
2E:				
Bugley	loblolly pine	70	86	loblolly pine, northern red oak, shortleaf pine
	northern red oak	65	43	
	shortleaf pine	60	86	
	Virginia pine	65	100	
Littlejoe	loblolly pine	78	114	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	78	57	
	Virginia pine	68	100	
	yellow-poplar	83	72	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
3C:				
Catoctin	northern red oak	60	43	eastern white pine,
	shortleaf pine	60	86	northern red oak,
	Virginia pine	60	86	shortleaf pine,
	yellow-poplar	70	57	yellow-poplar
Rock outcrop.				
3D:				
Catoctin	northern red oak	60	43	eastern white pine,
	shortleaf pine	60	86	northern red oak,
	Virginia pine	60	86	shortleaf pine,
	yellow-poplar	70	57	yellow-poplar
Rock outcrop.				
3E:				
Catoctin	northern red oak	60	43	eastern white pine,
	shortleaf pine	60	86	northern red oak,
	Virginia pine	60	86	shortleaf pine,
	yellow-poplar	70	57	yellow-poplar
Rock outcrop.				
4B:				
Clifford, severely eroded	eastern white pine	85	157	eastern white pine,
	northern red oak	81	72	loblolly pine,
	shortleaf pine	70	114	northern red oak,
	yellow-poplar	93	100	shortleaf pine,
				yellow-poplar
4C:				
Clifford, severely eroded	eastern white pine	85	157	eastern white pine,
	northern red oak	81	72	loblolly pine,
	shortleaf pine	70	114	northern red oak,
	yellow-poplar	93	100	shortleaf pine,
				yellow-poplar
4D:				
Clifford, severely eroded	eastern white pine	85	157	eastern white pine,
	northern red oak	81	72	loblolly pine,
	shortleaf pine	70	114	northern red oak,
	yellow-poplar	93	100	shortleaf pine,
				yellow-poplar
4E:				
Clifford, severely eroded	eastern white pine	85	157	eastern white pine,
	northern red oak	81	72	loblolly pine,
	shortleaf pine	70	114	northern red oak,
	yellow-poplar	93	100	shortleaf pine,
				yellow-poplar

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
5B:				
Clifford----------------	eastern white pine--	85	157	eastern white pine,
	northern red oak----	81	72	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	93	100	shortleaf pine,
				yellow-poplar
5C:				
Clifford----------------	eastern white pine--	85	157	eastern white pine,
	northern red oak----	81	72	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	93	100	shortleaf pine,
				yellow-poplar
5D:				
Clifford----------------	eastern white pine--	85	157	eastern white pine,
	northern red oak----	81	72	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	93	100	shortleaf pine,
				yellow-poplar
5E:				
Clifford----------------	eastern white pine--	85	157	eastern white pine,
	northern red oak----	81	72	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	93	100	shortleaf pine,
				yellow-poplar
6B:				
Clifford, very stony----	eastern white pine--	85	157	eastern white pine,
	northern red oak----	74	57	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	90	86	shortleaf pine,
				yellow-poplar
6C:				
Clifford, very stony----	eastern white pine--	85	157	eastern white pine,
	northern red oak----	74	57	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	90	86	shortleaf pine,
				yellow-poplar
6D:				
Clifford, very stony----	eastern white pine--	85	157	eastern white pine,
	northern red oak----	74	57	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	90	86	shortleaf pine,
				yellow-poplar
6E:				
Clifford, very stony----	eastern white pine--	85	157	eastern white pine,
	northern red oak----	74	57	loblolly pine,
	shortleaf pine------	70	114	northern red oak,
	yellow-poplar-------	90	86	shortleaf pine,
				yellow-poplar

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
7A:				
Codorus	black walnut	100	---	black walnut, eastern white pine, northern red oak, sugar maple, white ash, yellow-poplar
	eastern white pine	100	143	
	northern red oak	90	72	
	sugar maple	90	57	
	white ash	90	72	
	yellow-poplar	100	114	
8B:				
Colleen	chestnut oak	59	43	eastern white pine, northern red oak, yellow-poplar
	northern red oak	60	43	
	shortleaf pine	52	70	
	Virginia pine	62	100	
8C:				
Colleen	chestnut oak	59	43	eastern white pine, northern red oak, yellow-poplar
	northern red oak	60	43	
	shortleaf pine	52	70	
	Virginia pine	62	100	
8D:				
Colleen	chestnut oak	59	43	eastern white pine, northern red oak, yellow-poplar
	northern red oak	60	43	
	shortleaf pine	52	70	
	Virginia pine	62	100	
9A:				
Combs	loblolly pine	96	143	black walnut, eastern white pine, loblolly pine, yellow-poplar
	sweetgum	85	86	
	yellow-poplar	15	129	
10A:				
Comus	northern red oak	85	57	black walnut, eastern white pine, northern red oak, yellow-poplar
	yellow-poplar	95	100	
11A:				
Craigsville	eastern white pine	90	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	57	
	Virginia pine	80	114	
	yellow-poplar	95	100	
12D:				
Dekalb	northern red oak	52	29	northern red oak
Hazleton	northern red oak	70	57	northern red oak, yellow-poplar
	yellow-poplar	80	72	
12E:				
Dekalb	northern red oak	52	29	northern red oak
Hazleton	northern red oak	70	57	northern red oak, yellow-poplar
	yellow-poplar	80	72	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
12F:				
Dekalb	northern red oak	52	29	northern red oak
Hazleton	northern red oak	70	57	northern red oak,
	yellow-poplar	80	72	yellow-poplar
13E:				
Dekalb	northern red oak	52	29	northern red oak
Rock outcrop.				
13F:				
Dekalb	northern red oak	52	29	northern red oak
Rock outcrop.				
14B:				
Delanco	black oak	80	57	black oak, eastern
	yellow-poplar	90	86	white pine,
				yellow-poplar
15B:				
Delanco	black oak	80	57	black oak, eastern
	yellow-poplar	90	86	white pine,
				yellow-poplar
Elsinboro	black oak	80	57	black oak, eastern
	Virginia pine	80	114	white pine,
	yellow-poplar	90	86	loblolly pine,
				yellow-poplar
15C:				
Delanco	black oak	80	57	black oak, eastern
	yellow-poplar	90	86	white pine,
				yellow-poplar
Elsinboro	black oak	80	57	black oak, eastern
	Virginia pine	80	114	white pine,
	yellow-poplar	90	86	loblolly pine,
				yellow-poplar
16C:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
16D:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
16E:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
17B:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
Peaks	northern red oak	62	43	eastern white pine,
	Virginia pine	57	86	northern red oak
17C:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
Peaks	northern red oak	62	43	eastern white pine,
	Virginia pine	57	86	northern red oak
17D:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
Peaks	northern red oak	67	43	eastern white pine,
	Virginia pine	60	86	northern red oak
17E:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
Peaks	northern red oak	67	43	eastern white pine,
	Virginia pine	60	86	northern red oak
17F:				
Edneytown	eastern white pine	100	185	eastern white pine,
	loblolly pine	80	112	loblolly pine,
	northern red oak	80	55	northern red oak,
	white oak	60	43	white oak, yellow-
	yellow-poplar	90	85	poplar
Peaks	northern red oak	67	43	eastern white pine,
	Virginia pine	60	86	northern red oak

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
18B:				
Elsinboro	black oak	80	57	black oak, eastern white pine, loblolly pine, yellow-poplar
	Virginia pine	80	114	
	yellow-poplar	90	86	
19C:				
Fauquier	northern red oak	100	57	black walnut, eastern white pine, loblolly pine, northern red oak, yellow-poplar
	yellow-poplar	120	143	
19D:				
Fauquier	northern red oak	100	57	black walnut, eastern white pine, loblolly pine, northern red oak, yellow-poplar
	yellow-poplar	120	143	
19E:				
Fauquier	northern red oak	100	57	black walnut, eastern white pine, loblolly pine, northern red oak, yellow-poplar
	yellow-poplar	120	143	
20B:				
Haymarket	loblolly pine	85	86	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	114	
	Virginia pine	70	114	
	yellow-poplar	70	57	
Mirerock	Virginia pine	65	---	northern red oak, white oak, yellow-poplar, loblolly pine, eastern white pine
	yellow-poplar	70	---	
	white oak	65	---	
	northern red oak	60	---	
	loblolly pine	80	---	
20C:				
Haymarket	loblolly pine	85	86	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	114	
	Virginia pine	70	114	
	yellow-poplar	70	57	
Mirerock	Virginia pine	65	---	northern red oak, white oak, yellow-poplar, loblolly pine, eastern white pine
	yellow-poplar	70	---	
	white oak	65	---	
	northern red oak	60	---	
	loblolly pine	80	---	
21B:				
Littlejoe	loblolly pine	78	114	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	78	57	
	Virginia pine	68	100	
	yellow-poplar	83	72	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
21C:				
Littlejoe	loblolly pine	78	114	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	78	57	
	Virginia pine	68	100	
	yellow-poplar	83	72	
21D:				
Littlejoe	chestnut oak	68	57	loblolly pine, white oak
	loblolly pine	78	114	
	Virginia pine	68	100	
	white oak	65	43	
22B:				
Minnieville, severely eroded	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	
22C:				
Minnieville, severely eroded	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	
22D:				
Minnieville, severely eroded	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	
23B:				
Minnieville	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	
23C:				
Minnieville	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	
23D:				
Minnieville	northern red oak	70	57	eastern white pine, northern red oak, white oak, yellow-poplar
	shortleaf pine	70	114	
	Virginia pine	80	114	
	white oak	70	57	
	yellow-poplar	70	57	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
24C:				
Myersville	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	yellow-poplar	95	100	
Catoctin	northern red oak	60	43	eastern white pine, northern red oak, shortleaf pine, yellow-poplar
	shortleaf pine	60	86	
	Virginia pine	60	86	
	yellow-poplar	70	57	
24D:				
Myersville	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	yellow-poplar	95	100	
Catoctin	northern red oak	60	43	eastern white pine, northern red oak, shortleaf pine, yellow-poplar
	shortleaf pine	60	86	
	Virginia pine	60	86	
	yellow-poplar	70	57	
24E:				
Myersville	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	yellow-poplar	95	100	
Catoctin	northern red oak	60	43	eastern white pine, northern red oak, shortleaf pine, yellow-poplar
	shortleaf pine	60	86	
	Virginia pine	60	86	
	yellow-poplar	70	57	
24F:				
Myersville	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	yellow-poplar	95	100	
Catoctin	northern red oak	60	43	eastern white pine, northern red oak, shortleaf pine, yellow-poplar
	shortleaf pine	60	86	
	Virginia pine	60	86	
	yellow-poplar	70	57	
25B:				
Orenda	northern red oak	70	57	northern red oak, shortleaf pine
	shortleaf pine	63	100	
	Virginia pine	74	114	
25C:				
Orenda	northern red oak	70	57	northern red oak, shortleaf pine
	shortleaf pine	63	100	
	Virginia pine	74	114	
25D:				
Orenda	northern red oak	70	57	northern red oak, shortleaf pine
	shortleaf pine	63	100	
	Virginia pine	74	114	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
26C:				
Peaks------------------	northern red oak----	62	43	eastern white pine, northern red oak
	Virginia pine-------	57	86	
Rock outcrop.				
26D:				
Peaks------------------	northern red oak----	67	43	eastern white pine, northern red oak
	Virginia pine-------	60	86	
Rock outcrop.				
26E:				
Peaks------------------	northern red oak----	67	43	eastern white pine, northern red oak
	Virginia pine-------	60	86	
Rock outcrop.				
26F:				
Peaks------------------	northern red oak----	67	43	eastern white pine, northern red oak
	Virginia pine-------	60	86	
Rock outcrop.				
27A:				
Pineywoods-------------	northern red oak----	60	43	eastern white pine, loblolly pine, northern red oak
	red maple-----------	55	43	
	Virginia pine-------	60	85	
	willow oak----------	60	43	
27B:				
Pineywoods-------------	northern red oak----	60	43	eastern white pine, loblolly pine, northern red oak
	red maple-----------	55	43	
	Virginia pine-------	60	85	
	willow oak----------	60	43	
28. Pits, quarry				
29B:				
Saunook----------------	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
29C:				
Saunook----------------	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
29D:				
Saunook----------------	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
30B:				
Saunook, very stony-----	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
30C:				
Saunook, very stony-----	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
30D:				
Saunook, very stony-----	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
30E:				
Saunook, very stony-----	eastern white pine--	103	157	eastern white pine, northern red oak, white oak, yellow-poplar
	northern red oak----	80	55	
	red maple-----------	80	55	
	white oak-----------	83	55	
	yellow-poplar-------	107	112	
31A:				
Sindion-----------------	northern red oak----	80	57	eastern white pine, northern red oak, yellow-poplar
	Virginia pine-------	70	114	
	yellow-poplar-------	95	100	
Yogaville---------------	sweetgum------------	94	114	American sycamore, loblolly pine, sweetgum, yellow-poplar
	yellow-poplar-------	100	114	
32B:				
Sketerville-------------	northern red oak----	55	43	eastern white pine, loblolly pine, northern red oak
	shortleaf pine------	65	100	
	Virginia pine-------	65	100	
33A:				
Speedwell---------------	northern red oak----	80	57	black walnut, eastern white pine, northern red oak, yellow-poplar
	yellow-poplar-------	90	86	
34C:				
Spriggs-----------------	northern red oak----	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine-------	60	86	
	white oak-----------	60	43	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
34D:				
Spriggs	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
34E:				
Spriggs	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
35B:				
Spriggs, very stony	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
35C:				
Spriggs, very stony	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
35D:				
Spriggs, very stony	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
35E:				
Spriggs, very stony	northern red oak	62	43	eastern white pine, loblolly pine, northern red oak, white oak
	Virginia pine	60	86	
	white oak	60	43	
36D:				
Stott Knob	eastern white pine	78	143	chestnut oak, eastern white pine, scarlet oak, shortleaf pine, yellow-poplar
	pitch pine	52	---	
	Virginia pine	63	100	
	yellow-poplar	80	72	
	scarlet oak	54	43	
	chestnut oak	55	43	
Rhodhiss	shortleaf pine	75	120	shortleaf pine, yellow-poplar
	eastern white pine	86	157	
	Virginia pine	78	119	
	yellow-poplar	98	104	
36E:				
Stott Knob	eastern white pine	78	143	chestnut oak, eastern white pine, scarlet oak, shortleaf pine, yellow-poplar
	pitch pine	52	---	
	Virginia pine	63	100	
	yellow-poplar	80	72	
	scarlet oak	54	43	
	chestnut oak	55	43	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
36E:				
Rhodhiss----------------	shortleaf pine------	75	120	shortleaf pine, yellow-poplar
	eastern white pine--	86	157	
	Virginia pine-------	78	119	
	yellow-poplar-------	98	104	
37D:				
Stott Knob, very stony--	eastern white pine--	78	143	chestnut oak, eastern white pine, scarlet oak, shortleaf pine, yellow-poplar
	pitch pine----------	52	---	
	Virginia pine-------	63	100	
	yellow-poplar-------	80	72	
	scarlet oak---------	54	43	
	chestnut oak--------	55	43	
Rhodhiss, very stony----	shortleaf pine------	75	120	shortleaf pine, yellow-poplar
	eastern white pine--	86	157	
	Virginia pine-------	78	119	
	yellow-poplar-------	98	104	
37E:				
Stott Knob, very stony--	eastern white pine--	78	143	chestnut oak, eastern white pine, scarlet oak, shortleaf pine, yellow-poplar
	pitch pine----------	52	---	
	Virginia pine-------	63	100	
	yellow-poplar-------	80	72	
	scarlet oak---------	54	43	
	chestnut oak--------	55	43	
Rhodhiss, very stony----	shortleaf pine------	75	120	shortleaf pine, yellow-poplar
	eastern white pine--	86	157	
	Virginia pine-------	78	119	
	yellow-poplar-------	98	104	
38A:				
Suches------------------	black walnut--------	100	---	black walnut, eastern white pine, loblolly pine, northern red oak, shortleaf pine, yellow-poplar
	eastern white pine--	100	186	
	loblolly pine-------	90	129	
	northern red oak----	90	57	
	shortleaf pine------	80	129	
	yellow-poplar-------	105	114	
39C:				
Sylco-------------------	chestnut oak--------	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine--	70	114	
	shortleaf pine------	60	86	
	Virginia pine-------	60	86	
Sylvatus----------------	chestnut oak--------	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine------	55	79	
	Virginia pine-------	45	57	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
39D:				
Sylco	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
39E:				
Sylco	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
39F:				
Sylco	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
40C:				
Sylco, extremely stony	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
40D:				
Sylco, extremely stony	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
40D:				
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
40E:				
Sylco, extremely stony	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
40F:				
Sylco, extremely stony	chestnut oak	55	39	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	eastern white pine	70	114	
	shortleaf pine	60	86	
	Virginia pine	60	86	
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
41E:				
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
Rock outcrop.				
41F:				
Sylvatus, extremely stony	chestnut oak	50	35	chestnut oak, eastern white pine, shortleaf pine, Virginia pine
	shortleaf pine	55	79	
	Virginia pine	45	57	
Rock outcrop.				
42.				
Udorthents				

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
43B:				
Unison	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	Virginia pine	80	114	
	yellow-poplar	95	100	
43C:				
Unison	northern red oak	85	72	eastern white pine, northern red oak, yellow-poplar
	Virginia pine	80	114	
	yellow-poplar	95	100	
44B:				
Unison, very stony	northern red oak	85	57	eastern white pine, northern red oak, yellow-poplar
	Virginia pine	80	114	
	yellow-poplar	95	100	
44C:				
Unison, very stony	northern red oak	85	57	eastern white pine, northern red oak, yellow-poplar
	Virginia pine	80	114	
	yellow-poplar	95	100	
45B:				
Wintergreen, severely eroded	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	
45C:				
Wintergreen, severely eroded	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	
45D:				
Wintergreen, severely eroded	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	
46B:				
Wintergreen	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	
46C:				
Wintergreen	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	
46D:				
Wintergreen	eastern white pine	95	172	eastern white pine, loblolly pine, northern red oak, yellow-poplar
	northern red oak	80	55	
	yellow-poplar	90	85	

Table 8.—Forestland Productivity—Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
47B:				
Wintergreen, very stony-	eastern white pine--	95	172	eastern white pine,
	northern red oak----	80	55	loblolly pine,
	yellow-poplar-------	90	85	northern red oak,
				yellow-poplar
47C:				
Wintergreen, very stony-	eastern white pine--	95	172	eastern white pine,
	northern red oak----	80	55	loblolly pine,
	yellow-poplar-------	90	85	northern red oak,
				yellow-poplar
47D:				
Wintergreen, very stony-	eastern white pine--	95	172	eastern white pine,
	northern red oak----	80	55	loblolly pine,
	yellow-poplar-------	90	85	northern red oak,
				yellow-poplar
W.				
Water				

Table 9.—Forestland Management, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
1B:							
Buffstat	90	Slight		Moderately suited		Severe	
				Low strength	0.50	Low strength	1.00
1C:							
Buffstat	90	Slight		Moderately suited		Severe	
				Slope	0.50	Low strength	1.00
				Low strength	0.50		
1D:							
Buffstat	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
2C:							
Bugley	70	Severe		Moderately suited		Moderate	
		Restrictive layer	1.00	Slope	0.50	Low strength	0.50
Littlejoe	35	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
2D:							
Bugley	70	Severe		Poorly suited		Moderate	
		Restrictive layer	1.00	Slope	1.00	Low strength	0.50
		Slope	0.50				
Littlejoe	35	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
2E:							
Bugley	70	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
Littlejoe	30	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
3C:							
Catoctin	55	Moderate		Moderately suited		Severe	
		Restrictive layer	0.50	Slope	0.50	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	Moderate		Poorly suited		Severe	
		Restrictive layer	0.50	Slope	1.00	Low strength	1.00
		Slope	0.50	Rock fragments	0.50		
		Stoniness	0.50	Low strength	0.50		
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
3E:							
Catoctin------------	55	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Rock outcrop--------	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded-------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
4C:							
Clifford, severely eroded-------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
4D:							
Clifford, severely eroded-------------	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
4E:							
Clifford, severely eroded-------------	90	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
5B:							
Clifford------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
5C:							
Clifford------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
5D:							
Clifford------------	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
5E:							
Clifford------------	90	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
6B:							
Clifford, very stony	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
6C:							
Clifford, very stony	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
6D:							
Clifford, very stony	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
6E:							
Clifford, very stony	90	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
7A:							
Codorus-------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
				Wetness	0.50		
8B:							
Colleen-------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
8C:							
Colleen-------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
8D:							
Colleen-------------	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
9A:							
Combs---------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
10A:							
Comus---------------	85	Severe		Poorly suited		Moderate	
		Flooding	1.00	Flooding	1.00	Low strength	0.50
11A:							
Craigsville---------	85	Severe		Poorly suited		Slight	
		Flooding	1.00	Flooding	1.00	Strength	0.10
12D:							
Dekalb--------------	60	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Low strength	0.50		
Hazleton------------	40	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Low strength	0.50		
12E:							
Dekalb--------------	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
12E:							
Hazleton	40	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
				Low strength	0.50		
12F:							
Dekalb	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Hazleton	40	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
				Low strength	0.50		
13E:							
Dekalb	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
15B:							
Delanco	60	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
Elsinboro	40	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
15C:							
Delanco	60	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
Elsinboro	40	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
16C:							
Edneytown	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
16D:							
Edneytown	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
16E:							
Edneytown-----------	90	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
17B:							
Edneytown-----------	55	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
Peaks---------------	35	Slight		Well suited		Slight	
						Strength	0.10
17C:							
Edneytown-----------	55	Moderate		Moderately suited		Severe	
		Stoniness	0.50	Slope	0.50	Low strength	1.00
		Low strength	0.50	Rock fragments	0.50		
				Low strength	0.50		
Peaks---------------	35	Moderate		Moderately suited		Slight	
		Stoniness	0.50	Slope	0.50	Strength	0.10
				Rock fragments	0.50		
17D:							
Edneytown-----------	55	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
				Low strength	0.50		
Peaks---------------	35	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
		Restrictive layer	0.50	Rock fragments	0.50		
		Stoniness	0.50				
17E:							
Edneytown-----------	55	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Peaks---------------	35	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00	Strength	0.10
		Stoniness	0.50	Rock fragments	0.50		
17F:							
Edneytown-----------	55	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Peaks---------------	35	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00	Strength	0.10
		Stoniness	0.50	Rock fragments	0.50		
18B:							
Elsinboro-----------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
19C:							
Fauquier------------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
19D:							
Fauquier------------	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
19E:							
Fauquier------------	85	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
20B:							
Haymarket-----------	55	Slight		Well suited		Moderate	
						Low strength	0.50
Mirerock------------	40	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
20C:							
Haymarket-----------	55	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
Mirerock------------	40	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
21B:							
Littlejoe-----------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
21C:							
Littlejoe-----------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
21D:							
Littlejoe-----------	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
22B:							
Minnieville, severely eroded----	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
22C:							
Minnieville, severely eroded----	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
22D:							
Minnieville, severely eroded----	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
23B:							
Minnieville----------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
23C:							
Minnieville----------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
23D:							
Minnieville----------	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
24C:							
Myersville-----------	50	Moderate		Moderately suited		Severe	
		Stoniness	0.50	Slope	0.50	Low strength	1.00
		Low strength	0.50	Rock fragments	0.50		
				Low strength	0.50		
Catoctin------------	35	Moderate		Moderately suited		Severe	
		Restrictive layer	0.50	Slope	0.50	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
24D:							
Myersville-----------	50	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
				Low strength	0.50		
Catoctin------------	35	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Rock fragments	0.50		
		Stoniness	0.50	Low strength	0.50		
24E:							
Myersville-----------	50	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Catoctin------------	35	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
24F:							
Myersville-----------	50	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Catoctin------------	35	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
25B:							
Orenda--------------	85	Moderate		Well suited		Moderate	
		Low strength	0.50			Low strength	0.50
25C:							
Orenda--------------	85	Moderate		Moderately suited		Moderate	
		Low strength	0.50	Slope	0.50	Low strength	0.50
25D:							
Orenda--------------	85	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
26C:							
Peaks---------------	60	Slight		Moderately suited		Slight	
				Slope	0.50	Strength	0.10
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26D:							
Peaks---------------	60	Moderate		Poorly suited		Slight	
		Slope	0.50	Slope	1.00	Strength	0.10
		Restrictive layer	0.50				
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26E:							
Peaks---------------	60	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00	Strength	0.10
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26F:							
Peaks---------------	60	Severe		Poorly suited		Slight	
		Slope	1.00	Slope	1.00	Strength	0.10
Rock outcrop--------	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods----------	85	Moderate		Poorly suited		Severe	
		Low strength	0.50	Wetness	1.00	Low strength	1.00
				Low strength	0.50		
27B:							
Pineywoods----------	85	Moderate		Poorly suited		Severe	
		Low strength	0.50	Wetness	1.00	Low strength	1.00
				Low strength	0.50		
28:							
Pits, quarry--------	100	Not rated		Not rated		Not rated	
29B:							
Saunook-------------	85	Slight		Well suited		Moderate	
						Low strength	0.50
29C:							
Saunook-------------	85	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
29D:							
Saunook	85	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
30B:							
Saunook, very stony	85	Slight		Well suited		Moderate	
						Low strength	0.50
30C:							
Saunook, very stony	85	Slight		Moderately suited		Moderate	
				Slope	0.50	Low strength	0.50
30D:							
Saunook, very stony	85	Moderate		Poorly suited		Moderate	
		Slope	0.50	Slope	1.00	Low strength	0.50
30E:							
Saunook, very stony	85	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Low strength	0.50				
31A:							
Sindion	45	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Yogaville	40	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	0.50	Flooding	1.00		
				Wetness	0.50		
32B:							
Sketerville	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
33A:							
Speedwell	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
34C:							
Spriggs	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
34D:							
Spriggs	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Low strength	0.50		
34E:							
Spriggs	85	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
35B:							
Spriggs, very stony	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
35C:							
Spriggs, very stony-	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
35D:							
Spriggs, very stony-	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Low strength	0.50		
35E:							
Spriggs, very stony-	85	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
36D:							
Stott Knob----------	55	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
Rhodhiss------------	35	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
36E:							
Stott Knob----------	55	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Rhodhiss------------	35	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
37D:							
Stott Knob, very stony--------------	55	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
Rhodhiss, very stony	35	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
37E:							
Stott Knob, very stony--------------	55	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Rhodhiss, very stony	35	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
38A:							
Suches--------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
39C:							
Sylco	60	Moderate		Moderately suited		Severe	
		Restrictive layer	0.50	Slope	0.50	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Sylvatus	35	Severe		Moderately suited		Moderate	
		Restrictive layer	1.00	Slope	0.50	Low strength	0.50
39D:							
Sylco	60	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Low strength	0.50		
Sylvatus	35	Severe		Poorly suited		Moderate	
		Restrictive layer	1.00	Slope	1.00	Low strength	0.50
		Slope	0.50				
39E:							
Sylco	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Sylvatus	35	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
39F:							
Sylco	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Sylvatus	35	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
40C:							
Sylco, extremely stony	60	Moderate		Moderately suited		Severe	
		Restrictive layer	0.50	Slope	0.50	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Sylvatus, extremely stony	35	Severe		Moderately suited		Moderate	
		Restrictive layer	1.00	Slope	0.50	Low strength	0.50
		Stoniness	0.50	Rock fragments	0.50		
40D:							
Sylco, extremely stony	60	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
		Restrictive layer	0.50	Rock fragments	0.50		
		Stoniness	0.50	Low strength	0.50		
Sylvatus, extremely stony	35	Severe		Poorly suited		Moderate	
		Restrictive layer	1.00	Slope	1.00	Low strength	0.50
		Slope	0.50	Rock fragments	0.50		
		Stoniness	0.50				

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
40E:							
Sylco, extremely stony	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Sylvatus, extremely stony	35	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Stoniness	0.50	Rock fragments	0.50		
40F:							
Sylco, extremely stony	60	Severe		Poorly suited		Severe	
		Slope	1.00	Slope	1.00	Low strength	1.00
		Stoniness	0.50	Rock fragments	0.50		
		Low strength	0.50	Low strength	0.50		
Sylvatus, extremely stony	35	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Stoniness	0.50	Rock fragments	0.50		
41E:							
Sylvatus, extremely stony	60	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Stoniness	0.50	Rock fragments	0.50		
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Severe		Poorly suited		Moderate	
		Slope	1.00	Slope	1.00	Low strength	0.50
		Stoniness	0.50	Rock fragments	0.50		
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
43C:							
Unison	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
44B:							
Unison, very stony	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00

Table 9.—Forestland Management, Part I—Continued

Map symbol and soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
44C:							
Unison, very stony--	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
45B:							
Wintergreen, severely eroded----	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
45C:							
Wintergreen, severely eroded----	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
45D:							
Wintergreen, severely eroded----	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
46B:							
Wintergreen---------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
46C:							
Wintergreen---------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
46D:							
Wintergreen---------	90	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
47B:							
Wintergreen, very stony--------------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
47C:							
Wintergreen, very stony--------------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Slope	0.50	Low strength	1.00
				Low strength	0.50		
47D:							
Wintergreen, very stony--------------	85	Moderate		Poorly suited		Severe	
		Slope	0.50	Slope	1.00	Low strength	1.00
				Low strength	0.50		
W:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
1B:							
Buffstat	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
1C:							
Buffstat	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
1D:							
Buffstat	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
2C:							
Bugley	70	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
Littlejoe	35	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
2D:							
Bugley	70	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Littlejoe	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
2E:							
Bugley	70	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Littlejoe	30	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
3C:							
Catoctin	55	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
3E:							
Catoctin------------	55	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Rock outcrop--------	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded-------------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
4C:							
Clifford, severely eroded-------------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
4D:							
Clifford, severely eroded-------------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
4E:							
Clifford, severely eroded-------------	90	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
5B:							
Clifford------------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
5C:							
Clifford------------	90	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
5D:							
Clifford------------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
5E:							
Clifford------------	90	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
6B:							
Clifford, very stony	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
6C:							
Clifford, very stony	90	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
6D:							
Clifford, very stony	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
6E:							
Clifford, very stony	90	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
7A:							
Codorus-------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
						Wetness	0.50
8B:							
Colleen-------------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
8C:							
Colleen-------------	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
8D:							
Colleen-------------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
9A:							
Combs---------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
10A:							
Comus---------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
11A:							
Craigsville---------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
12D:							
Dekalb--------------	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Hazleton------------	40	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
12E:							
Dekalb--------------	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
12E:							
Hazleton------------	40	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
12F:							
Dekalb--------------	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Hazleton------------	40	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
13E:							
Dekalb--------------	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rock outcrop--------	35	Not rated		Not rated		Not rated	
13F:							
Dekalb--------------	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rock outcrop--------	35	Not rated		Not rated		Not rated	
14B:							
Delanco-------------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
15B:							
Delanco-------------	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
Elsinboro-----------	40	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
15C:							
Delanco-------------	60	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
Elsinboro-----------	40	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
16C:							
Edneytown-----------	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
16D:							
Edneytown-----------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
16E:							
Edneytown-----------	90	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
17B:							
Edneytown-----------	55	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
Peaks---------------	35	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
17C:							
Edneytown-----------	55	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Peaks---------------	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
17D:							
Edneytown-----------	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Peaks---------------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
17E:							
Edneytown-----------	55	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Peaks---------------	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
17F:							
Edneytown-----------	55	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Peaks---------------	35	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
18B:							
Elsinboro-----------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
19C:							
Fauquier------------	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
19D:							
Fauquier-----------	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
19E:							
Fauquier-----------	85	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
20B:							
Haymarket----------	55	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
Mirerock-----------	40	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
20C:							
Haymarket----------	55	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
Mirerock-----------	40	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
21B:							
Littlejoe----------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
21C:							
Littlejoe----------	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
21D:							
Littlejoe----------	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
22B:							
Minnieville, severely eroded----	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
22C:							
Minnieville, severely eroded----	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
22D:							
Minnieville, severely eroded----	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
23B:							
Minnieville---------	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
23C:							
Minnieville	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
23D:							
Minnieville	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
24C:							
Myersville	50	Moderate		Severe		Moderately suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Catoctin	35	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
24D:							
Myersville	50	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Catoctin	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
24E:							
Myersville	50	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Catoctin	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
24F:							
Myersville	50	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Catoctin	35	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
25B:							
Orenda	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
25C:							
Orenda	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
25D:							
Orenda	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
26C:							
Peaks	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	85	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
27B:							
Pineywoods	85	Slight		Moderate		Poorly suited	
				Slope/erodibility	0.50	Wetness	1.00
						Low strength	0.50
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
29C:							
Saunook	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
29D:							
Saunook	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
30B:							
Saunook, very stony	85	Slight		Moderate		Well suited	
				Slope/erodibility	0.50		
30C:							
Saunook, very stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
30D:							
Saunook, very stony-	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
30E:							
Saunook, very stony-	85	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
31A:							
Sindion-------------	45	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
Yogaville-----------	40	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	0.50
32B:							
Sketerville---------	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
33A:							
Speedwell-----------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
34C:							
Spriggs-------------	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
34D:							
Spriggs-------------	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
34E:							
Spriggs-------------	85	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
35B:							
Spriggs, very stony-	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
35C:							
Spriggs, very stony-	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
35D:							
Spriggs, very stony-	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
35E:							
Spriggs, very stony-	85	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
36D:							
Stott Knob----------	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rhodhiss------------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
36E:							
Stott Knob----------	55	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rhodhiss------------	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
37D:							
Stott Knob, very stony--------------	55	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rhodhiss, very stony	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
37E:							
Stott Knob, very stony--------------	55	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Rhodhiss, very stony	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
38A:							
Suches--------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
39C:							
Sylco---------------	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
Sylvatus------------	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
39D:							
Sylco---------------	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Sylvatus------------	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
39E:							
Sylco	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Sylvatus	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
39F:							
Sylco	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
Sylvatus	35	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
40C:							
Sylco, extremely stony	60	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
						Low strength	0.50
Sylvatus, extremely stony	35	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Rock fragments	0.50
40D:							
Sylco, extremely stony	60	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Sylvatus, extremely stony	35	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
40E:							
Sylco, extremely stony	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50
Sylvatus, extremely stony	35	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
40F:							
Sylco, extremely stony	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
40F:							
Sylvatus, extremely stony	35	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
41E:							
Sylvatus, extremely stony	60	Severe		Severe		Poorly suited	
		Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Very severe		Severe		Poorly suited	
		Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
						Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
43C:							
Unison	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
44B:							
Unison, very stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
44C:							
Unison, very stony	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
45B:							
Wintergreen, severely eroded	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
45C:							
Wintergreen, severely eroded	90	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Slope	0.50
						Low strength	0.50
45D:							
Wintergreen, severely eroded	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50

Table 9.—Forestland Management, Part II—Continued

Map symbol and soil name	Pct. of map unit	Hazard of off-road or off-trail 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
46B:							
Wintergreen	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
46C:							
Wintergreen	90	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
46D:							
Wintergreen	90	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
47B:							
Wintergreen, very stony	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
47C:							
Wintergreen, very stony	85	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Slope	0.50
						Low strength	0.50
47D:							
Wintergreen, very stony	85	Moderate		Severe		Poorly suited	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
						Low strength	0.50
W:							
Water	100	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part III

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
1B:							
Buffstat	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
				Slope	0.50		
1C:							
Buffstat	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
				Slope	0.50		
1D:							
Buffstat	90	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.50	Slope	0.50
2C:							
Bugley	70	Moderately suited		Poorly suited		Well suited	
		Rock fragments	0.50	Rock fragments	0.75		
				Slope	0.50		
Littlejoe	35	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
2D:							
Bugley	70	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Slope	0.50
				Rock fragments	0.75		
Littlejoe	35	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
2E:							
Bugley	70	Moderately suited		Unsuited		Poorly suited	
		Rock fragments	0.50	Slope	1.00	Slope	1.00
		Slope	0.50	Rock fragments	0.75		
Littlejoe	30	Poorly suited		Unsuited		Poorly suited	
		Stickiness; high plasticity index	0.75	Slope	1.00	Slope	1.00
		Slope	0.50	Stickiness; high plasticity index	0.75	Low strength	0.50
3C:							
Catoctin	55	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50	Low strength	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
3D:							
Catoctin------------	55	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Low strength	0.50
						Slope	0.50
Rock outcrop--------	30	Not rated		Not rated		Not rated	
3E:							
Catoctin------------	55	Moderately suited		Unsuited		Poorly suited	
		Rock fragments	0.50	Slope	1.00	Slope	1.00
		Slope	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Rock outcrop--------	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded-------------	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
4C:							
Clifford, severely eroded-------------	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
4D:							
Clifford, severely eroded-------------	90	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
						Slope	0.50
4E:							
Clifford, severely eroded-------------	90	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
5B:							
Clifford------------	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
5C:							
Clifford------------	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
5D:							
Clifford------------	90	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
						Slope	0.50
5E:							
Clifford------------	90	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
6B:							
Clifford, very stony	90	Well suited		Moderately suited		Moderately suited	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
6C:							
Clifford, very stony	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
6D:							
Clifford, very stony	90	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
6E:							
Clifford, very stony	90	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50	Low strength	0.50
7A:							
Codorus-------------	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
8B:							
Colleen-------------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
8C:							
Colleen-------------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
8D:							
Colleen-------------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
9A:							
Combs---------------	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
10A:							
Comus---------------	85	Well suited		Well suited		Well suited	
11A:							
Craigsville---------	85	Moderately suited		Unsuited		Well suited	
		Rock fragments	0.50	Rock fragments	1.00		
12D:							
Dekalb--------------	60	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
Hazleton------------	40	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.75	Slope	0.50

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
12E:							
Dekalb	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Hazleton	40	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
12F:							
Dekalb	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Hazleton	40	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
13E:							
Dekalb	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
15B:							
Delanco	60	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
Elsinboro	40	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
15C:							
Delanco	60	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
15C:							
Elsinboro	40	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
16C:							
Edneytown	90	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
16D:							
Edneytown	90	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Low strength	0.50
						Slope	0.50
16E:							
Edneytown	90	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
						Low strength	0.50
17B:							
Edneytown	55	Well suited		Moderately suited		Moderately suited	
				Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
Peaks	35	Moderately suited		Poorly suited		Well suited	
		Rock fragments	0.50	Rock fragments	0.75		
				Slope	0.50		
17C:							
Edneytown	55	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50	Low strength	0.50
Peaks	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50		
17D:							
Edneytown	55	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Low strength	0.50
						Slope	0.50
Peaks	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Slope	0.50
17E:							
Edneytown	55	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Peaks	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
17F:							
Edneytown	55	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Peaks	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
18B:							
Elsinboro	90	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
19C:							
Fauquier	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
				Rock fragments	0.50		
19D:							
Fauquier	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
				Rock fragments	0.50		
19E:							
Fauquier	85	Poorly suited		Unsuited		Poorly suited	
		Stickiness; high plasticity index	0.75	Slope	1.00	Slope	1.00
		Slope	0.50	Stickiness; high plasticity index	0.75	Low strength	0.50
				Rock fragments	0.50		
20B:							
Haymarket	55	Poorly suited		Poorly suited		Well suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75		
				Slope	0.50		
Mirerock	40	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
20C:							
Haymarket	55	Poorly suited		Poorly suited		Well suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75		
				Slope	0.50		
Mirerock	40	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
21B:							
Littlejoe-----------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
21C:							
Littlejoe-----------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
21D:							
Littlejoe-----------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
22B:							
Minnieville, severely eroded----	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
22C:							
Minnieville, severely eroded----	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
22D:							
Minnieville, severely eroded----	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
23B:							
Minnieville---------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
23C:							
Minnieville---------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
23D:							
Minnieville---------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
24C:							
Myersville----------	50	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
		Stickiness; high	0.50	Slope	0.50	Low strength	0.50
		plasticity index		Stickiness; high	0.50		
				plasticity index			
Catoctin------------	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50	Low strength	0.50
24D:							
Myersville----------	50	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
		Stickiness; high	0.50	Rock fragments	0.75	Low strength	0.50
		plasticity index		Stickiness; high	0.50	Slope	0.50
				plasticity index			
Catoctin------------	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Low strength	0.50
						Slope	0.50
24E:							
Myersville----------	50	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
		Stickiness; high	0.50	Stickiness; high	0.50	Low strength	0.50
		plasticity index		plasticity index			
Catoctin------------	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
24F:							
Myersville----------	50	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
		Stickiness; high	0.50	Stickiness; high	0.50	Low strength	0.50
		plasticity index		plasticity index			
Catoctin------------	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
25B:							
Orenda--------------	85	Moderately suited		Moderately suited		Well suited	
		Stickiness; high	0.50	Stickiness; high	0.50		
		plasticity index		plasticity index			
				Slope	0.50		
25C:							
Orenda--------------	85	Moderately suited		Moderately suited		Well suited	
		Stickiness; high	0.50	Stickiness; high	0.50		
		plasticity index		plasticity index			
				Slope	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
25D:							
Orenda	85	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Slope	0.50
				Stickiness; high plasticity index	0.50		
26C:							
Peaks	60	Moderately suited		Poorly suited		Well suited	
		Rock fragments	0.50	Rock fragments	0.75		
				Slope	0.50		
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Slope	0.50
				Rock fragments	0.75		
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75		
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
27B:							
Pineywoods	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
29C:							
Saunook	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
29D:							
Saunook	85	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
30B:							
Saunook, very stony	85	Well suited		Moderately suited		Well suited	
				Rock fragments	0.50		
				Slope	0.50		
30C:							
Saunook, very stony	85	Well suited		Moderately suited		Well suited	
				Slope	0.50		
				Rock fragments	0.50		
30D:							
Saunook, very stony	85	Well suited		Poorly suited		Moderately suited	
				Slope	0.75	Slope	0.50
				Rock fragments	0.50		
30E:							
Saunook, very stony	85	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
				Rock fragments	0.50		
31A:							
Sindion	45	Well suited		Well suited		Moderately suited	
						Low strength	0.50
Yogaville	40	Well suited		Well suited		Moderately suited	
						Low strength	0.50
32B:							
Sketerville	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
33A:							
Speedwell	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
34C:							
Spriggs	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
34D:							
Spriggs	85	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.50	Slope	0.50
34E:							
Spriggs	85	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
35B:							
Spriggs, very stony	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
				Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
35C:							
Spriggs, very stony-	85	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.50	Low strength	0.50
				Rock fragments	0.50		
				Stickiness; high plasticity index	0.50		
35D:							
Spriggs, very stony-	85	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
				Stickiness; high plasticity index	0.50		
35E:							
Spriggs, very stony-	85	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50	Rock fragments	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
36D:							
Stott Knob----------	55	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.50	Slope	0.50
Rhodhiss------------	35	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.50	Slope	0.50
36E:							
Stott Knob----------	55	Moderately suited		Unsuited		Moderately suited	
		Slope	0.50	Slope	1.00	Slope	0.50
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
Rhodhiss------------	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
37D:							
Stott Knob, very stony--------------	55	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
				Stickiness; high plasticity index	0.50		
Rhodhiss, very stony	35	Moderately suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
				Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
37E:							
Stott Knob, very stony	55	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50	Rock fragments	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
Rhodhiss, very stony	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50	Rock fragments	0.50	Low strength	0.50
				Stickiness; high plasticity index	0.50		
38A:							
Suches	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
39C:							
Sylco	60	Moderately suited		Moderately suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
				Slope	0.50		
Sylvatus	35	Moderately suited		Poorly suited		Well suited	
		Rock fragments	0.50	Rock fragments	0.75		
				Slope	0.50		
39D:							
Sylco	60	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Low strength	0.50
				Rock fragments	0.50	Slope	0.50
Sylvatus	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Slope	0.50
				Rock fragments	0.75		
39E:							
Sylco	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
Sylvatus	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75		
39F:							
Sylco	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50	Low strength	0.50
Sylvatus	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75		
40C:							
Sylco, extremely stony	60	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50	Low strength	0.50

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
40C:							
Sylvatus, extremely stony	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
				Slope	0.50		
40D:							
Sylco, extremely stony	60	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Low strength	0.50
						Slope	0.50
Sylvatus, extremely stony	35	Moderately suited		Poorly suited		Moderately suited	
		Rock fragments	0.50	Slope	0.75	Rock fragments	0.50
				Rock fragments	0.75	Slope	0.50
40E:							
Sylco, extremely stony	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Sylvatus, extremely stony	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
40F:							
Sylco, extremely stony	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
						Low strength	0.50
Sylvatus, extremely stony	35	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
41E:							
Sylvatus, extremely stony	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Moderately suited		Unsuited		Poorly suited	
		Slope	0.50	Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.75	Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
43B:							
Unison--------------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
43C:							
Unison--------------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
44B:							
Unison, very stony--	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Rock fragments	0.50		
				Slope	0.50		
44C:							
Unison, very stony--	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
				Rock fragments	0.50		
45B:							
Wintergreen, severely eroded----	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
45C:							
Wintergreen, severely eroded----	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
45D:							
Wintergreen, severely eroded----	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
46B:							
Wintergreen---------	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		
46C:							
Wintergreen---------	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Slope	0.50		

Table 9.—Forestland Management, Part III—Continued

Map 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	Suitability for use of harvesting equipment: Rating class and limiting features	Value
46D:							
Wintergreen	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
47B:							
Wintergreen, very stony	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Rock fragments	0.50		
				Slope	0.50		
47C:							
Wintergreen, very stony	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
				Rock fragments	0.50		
				Slope	0.50		
47D:							
Wintergreen, very stony	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Slope	0.75	Low strength	0.50
				Stickiness; high plasticity index	0.75	Slope	0.50
				Rock fragments	0.50		
W:							
Water	100	Not rated		Not rated		Not rated	

Table 9.—Forestland Management, Part IV

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1B:					
Buffstat	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
1C:					
Buffstat	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
1D:					
Buffstat	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
2C:					
Bugley	70	Poorly suited		Unsuited	
		Rock fragments	0.50	Restrictive layer	1.00
Littlejoe	35	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
2D:					
Bugley	70	Poorly suited		Unsuited	
		Slope	0.50	Restrictive layer	1.00
		Rock fragments	0.50	Slope	0.50
Littlejoe	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
2E:					
Bugley	70	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
Littlejoe	30	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50		
3C:					
Catoctin	55	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Rock outcrop	30	Not rated		Not rated	

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
3D:					
Catoctin	55	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Rock outcrop	30	Not rated		Not rated	
3E:					
Catoctin	55	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Rock outcrop	30	Not rated		Not rated	
4B:					
Clifford, severely eroded	90	Well suited		Well suited	
4C:					
Clifford, severely eroded	90	Well suited		Well suited	
4D:					
Clifford, severely eroded	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
4E:					
Clifford, severely eroded	90	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
5B:					
Clifford	90	Well suited		Well suited	
5C:					
Clifford	90	Well suited		Well suited	
5D:					
Clifford	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
5E:					
Clifford	90	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
6B:					
Clifford, very stony	90	Well suited		Well suited	
6C:					
Clifford, very stony	90	Well suited		Well suited	
6D:					
Clifford, very stony	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
6E:					
Clifford, very stony	90	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
7A:					
Codorus	85	Well suited		Well suited	
8B:					
Colleen	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
8C:					
Colleen	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
8D:					
Colleen	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
9A:					
Combs	85	Well suited		Well suited	
10A:					
Comus	85	Well suited		Well suited	
11A:					
Craigsville	85	Poorly suited		Unsuited	
		Rock fragments	0.50	Rock fragments	1.00
12D:					
Dekalb	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Hazleton	40	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50		
12E:					
Dekalb	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Hazleton	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
12F:					
Dekalb	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
12F:					
Hazleton------------	40	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
13E:					
Dekalb--------------	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Rock outcrop--------	35	Not rated		Not rated	
13F:					
Dekalb--------------	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Rock outcrop--------	35	Not rated		Not rated	
14B:					
Delanco-------------	90	Well suited		Well suited	
15B:					
Delanco-------------	60	Well suited		Well suited	
Elsinboro-----------	40	Well suited		Well suited	
15C:					
Delanco-------------	60	Well suited		Well suited	
Elsinboro-----------	40	Well suited		Well suited	
16C:					
Edneytown-----------	90	Well suited		Well suited	
16D:					
Edneytown-----------	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
16E:					
Edneytown-----------	90	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
17B:					
Edneytown-----------	55	Well suited		Well suited	
Peaks---------------	35	Poorly suited		Well suited	
		Rock fragments	0.50		
17C:					
Edneytown-----------	55	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Peaks---------------	35	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
17D:					
Edneytown	55	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
Peaks	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
17E:					
Edneytown	55	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Peaks	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
17F:					
Edneytown	55	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Peaks	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
18B:					
Elsinboro	90	Well suited		Well suited	
19C:					
Fauquier	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
19D:					
Fauquier	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
19E:					
Fauquier	85	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Stickiness; high plasticity index	0.50		
20B:					
Haymarket	55	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Mirerock	40	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
20C:					
Haymarket	55	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Mirerock	40	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
21B:					
Littlejoe	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
21C:					
Littlejoe	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
21D:					
Littlejoe	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
22B:					
Minnieville, severely eroded	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
22C:					
Minnieville, severely eroded	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
22D:					
Minnieville, severely eroded	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
23B:					
Minnieville	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
23C:					
Minnieville	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
23D:					
Minnieville	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
24C:					
Myersville----------	50	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
Catoctin------------	35	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
24D:					
Myersville----------	50	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
Catoctin------------	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
24E:					
Myersville----------	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Catoctin------------	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
24F:					
Myersville----------	50	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
Catoctin------------	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
25B:					
Orenda--------------	85	Well suited		Well suited	
25C:					
Orenda--------------	85	Well suited		Well suited	
25D:					
Orenda--------------	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
26C:					
Peaks---------------	60	Poorly suited		Well suited	
		Rock fragments	0.50		
Rock outcrop--------	35	Not rated		Not rated	
26D:					
Peaks---------------	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50		
Rock outcrop--------	35	Not rated		Not rated	

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
26E:					
Peaks	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50		
Rock outcrop	35	Not rated		Not rated	
26F:					
Peaks	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50		
Rock outcrop	35	Not rated		Not rated	
27A:					
Pineywoods	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
27B:					
Pineywoods	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
28:					
Pits, quarry	100	Not rated		Not rated	
29B:					
Saunook	85	Well suited		Well suited	
29C:					
Saunook	85	Well suited		Well suited	
29D:					
Saunook	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
30B:					
Saunook, very stony	85	Well suited		Well suited	
30C:					
Saunook, very stony	85	Well suited		Well suited	
30D:					
Saunook, very stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
30E:					
Saunook, very stony	85	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
31A:					
Sindion	45	Well suited		Well suited	
Yogaville	40	Well suited		Well suited	
32B:					
Sketerville	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
33A:					
Speedwell-----------	85	Well suited		Well suited	
34C:					
Spriggs-------------	85	Well suited		Well suited	
34D:					
Spriggs-------------	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
34E:					
Spriggs-------------	85	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
35B:					
Spriggs, very stony-	85	Well suited		Well suited	
35C:					
Spriggs, very stony-	85	Well suited		Well suited	
35D:					
Spriggs, very stony-	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
35E:					
Spriggs, very stony-	85	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
36D:					
Stott Knob----------	55	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Rhodhiss------------	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
36E:					
Stott Knob----------	55	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Rhodhiss------------	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
37D:					
Stott Knob, very stony--------------	55	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
Rhodhiss, very stony	35	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
37E:					
Stott Knob, very stony--------------	55	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
Rhodhiss, very stony	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
38A:					
Suches	85	Well suited		Well suited	
39C:					
Sylco	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Restrictive layer	0.50
Sylvatus	35	Poorly suited		Unsuited	
		Rock fragments	0.50	Restrictive layer	1.00
39D:					
Sylco	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Restrictive layer	0.50
Sylvatus	35	Poorly suited		Unsuited	
		Slope	0.50	Restrictive layer	1.00
		Rock fragments	0.50	Slope	0.50
39E:					
Sylco	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	0.50
Sylvatus	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
39F:					
Sylco	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	0.50
Sylvatus	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
40C:					
Sylco, extremely stony	60	Poorly suited		Poorly suited	
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Sylvatus, extremely stony	35	Poorly suited		Unsuited	
		Rock fragments	0.50	Restrictive layer	1.00
				Rock fragments	0.50
40D:					
Sylco, extremely stony	60	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Sylvatus, extremely stony	35	Poorly suited		Unsuited	
		Slope	0.50	Restrictive layer	1.00
		Rock fragments	0.50	Slope	0.50
				Rock fragments	0.50

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
40E:					
Sylco, extremely stony	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Sylvatus, extremely stony	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
				Rock fragments	0.50
40F:					
Sylco, extremely stony	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Rock fragments	0.50
				Restrictive layer	0.50
Sylvatus, extremely stony	35	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
				Rock fragments	0.50
41E:					
Sylvatus, extremely stony	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
				Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Unsuited		Unsuited	
		Slope	1.00	Slope	1.00
		Rock fragments	0.50	Restrictive layer	1.00
				Rock fragments	0.50
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
43C:					
Unison	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
44B:					
Unison, very stony--	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
44C:					
Unison, very stony--	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
45B:					
Wintergreen, severely eroded----	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
45C:					
Wintergreen, severely eroded----	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
45D:					
Wintergreen, severely eroded----	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
46B:					
Wintergreen---------	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
46C:					
Wintergreen---------	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
46D:					
Wintergreen---------	90	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
47B:					
Wintergreen, very stony--------------	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
47C:					
Wintergreen, very stony--------------	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		

Table 9.—Forestland Management, Part IV—Continued

Map symbol and soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (deep): Rating class and limiting features	Value
47D:					
Wintergreen, very stony	85	Poorly suited		Poorly suited	
		Slope	0.50	Slope	0.50
		Stickiness; high plasticity index	0.50		
W:					
Water	100	Not rated		Not rated	

Table 9.—Forestland Management, Part V

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and 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
1B:					
Buffstat	90	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
1C:					
Buffstat	90	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
1D:					
Buffstat	90	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
2C:					
Bugley	70	High		Moderate	
		Texture/surface depth/rock fragments	1.00	Soil reaction	0.50
Littlejoe	35	Moderate		Low	
		Texture/rock fragments	0.50		
2D:					
Bugley	70	High		Moderate	
		Texture/surface depth/rock fragments	1.00	Soil reaction	0.50
Littlejoe	35	Moderate		Low	
		Texture/rock fragments	0.50		
2E:					
Bugley	70	High		Moderate	
		Texture/slope/ surface depth/ rock fragments	1.00	Soil reaction	0.50
Littlejoe	30	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
3C:					
Catoctin	55	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map 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
3C:					
Rock outcrop	30	Not rated		Not rated	
3D:					
Catoctin	55	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
Rock outcrop	30	Not rated		Not rated	
3E:					
Catoctin	55	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Rock outcrop	30	Not rated		Not rated	
4B:					
Clifford, severely eroded	90	Low		Low	
4C:					
Clifford, severely eroded	90	Low		Low	
4D:					
Clifford, severely eroded	90	Low		Low	
4E:					
Clifford, severely eroded	90	Low		Low	
5B:					
Clifford	90	Moderate		Low	
		Texture/rock fragments	0.50		
5C:					
Clifford	90	Moderate		Low	
		Texture/rock fragments	0.50		
5D:					
Clifford	90	Moderate		Low	
		Texture/rock fragments	0.50		
5E:					
Clifford	90	Moderate		Low	
		Texture/rock fragments	0.50		
6B:					
Clifford, very stony	90	Moderate		Low	
		Texture/rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map 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
6C:					
Clifford, very stony	90	Moderate		Low	
		Texture/rock fragments	0.50		
6D:					
Clifford, very stony	90	Moderate		Low	
		Texture/rock fragments	0.50		
6E:					
Clifford, very stony	90	Moderate		Low	
		Texture/rock fragments	0.50		
7A:					
Codorus-------------	85	Low		Low	
		Texture/rock fragments	0.10		
8B:					
Colleen-------------	90	Moderate		Low	
		Texture/rock fragments	0.50		
8C:					
Colleen-------------	90	Moderate		Low	
		Texture/rock fragments	0.50		
8D:					
Colleen-------------	90	Moderate		Low	
		Texture/rock fragments	0.50		
9A:					
Combs---------------	85	Low		Low	
		Texture/rock fragments	0.10		
10A:					
Comus---------------	85	Low		Low	
		Texture/rock fragments	0.10		
11A:					
Craigsville---------	85	Low		Low	
		Texture/rock fragments	0.10		
12D:					
Dekalb--------------	60	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
Hazleton------------	40	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map 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
12E:					
Dekalb	60	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Hazleton	40	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
12F:					
Dekalb	60	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Hazleton	40	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
13E:					
Dekalb	60	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Rock outcrop	35	Not rated		Not rated	
13F:					
Dekalb	60	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Rock outcrop	35	Not rated		Not rated	
14B:					
Delanco	90	Low		Low	
		Texture/surface depth/rock fragments	0.10		
15B:					
Delanco	60	Low		Low	
		Texture/surface depth/rock fragments	0.10		
Elsinboro	40	Low		Low	
		Texture/rock fragments	0.10		
15C:					
Delanco	60	Low		Low	
		Texture/surface depth/rock fragments	0.10		

Table 9.—Forestland Management, Part V—Continued

Map 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
15C:					
Elsinboro	40	Low		Low	
		Texture/rock fragments	0.10		
16C:					
Edneytown	90	Low		Low	
		Texture/rock fragments	0.10		
16D:					
Edneytown	90	Low		Low	
		Texture/rock fragments	0.10		
16E:					
Edneytown	90	Low		Low	
		Texture/slope/ rock fragments	0.10		
17B:					
Edneytown	55	Low		Low	
		Texture/rock fragments	0.10		
Peaks	35	Low		Low	
		Texture/rock fragments	0.10		
17C:					
Edneytown	55	Low		Low	
		Texture/rock fragments	0.10		
Peaks	35	Low		Low	
		Texture/rock fragments	0.10		
17D:					
Edneytown	55	Low		Low	
		Texture/rock fragments	0.10		
Peaks	35	Low		Low	
		Texture/rock fragments	0.10		
17E:					
Edneytown	55	Low		Low	
		Texture/slope/ rock fragments	0.10		
Peaks	35	Low		Low	
		Texture/slope/ rock fragments	0.10		
17F:					
Edneytown	55	Low		Low	
		Texture/slope/ rock fragments	0.10		

Table 9.—Forestland Management, Part V—Continued

Map 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
17F:					
Peaks	35	Low		Low	
		Texture/slope/ rock fragments	0.10		
18B:					
Elsinboro	90	Low		Low	
		Texture/rock fragments	0.10		
19C:					
Fauquier	85	Low		Low	
		Texture/surface depth/rock fragments	0.10		
19D:					
Fauquier	85	Low		Low	
		Texture/surface depth/rock fragments	0.10		
19E:					
Fauquier	85	Moderate		Low	
		Texture/slope/ surface depth/ rock fragments	0.50		
20B:					
Haymarket	55	Low		Low	
		Texture/rock fragments	0.10		
Mirerock	40	Low		Low	
		Texture/rock fragments	0.10		
20C:					
Haymarket	55	Low		Low	
		Texture/rock fragments	0.10		
Mirerock	40	Low		Low	
		Texture/rock fragments	0.10		
21B:					
Littlejoe	90	Moderate		Low	
		Texture/rock fragments	0.50		
21C:					
Littlejoe	90	Moderate		Low	
		Texture/rock fragments	0.50		
21D:					
Littlejoe	90	Moderate		Low	
		Texture/rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map 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
22B:					
Minnieville, severely eroded	85	Low		Low	
22C:					
Minnieville, severely eroded	85	Low		Low	
22D:					
Minnieville, severely eroded	85	Low		Low	
23B:					
Minnieville	85	Moderate		Low	
		Texture/rock fragments	0.50		
23C:					
Minnieville	85	Moderate		Low	
		Texture/rock fragments	0.50		
23D:					
Minnieville	85	Moderate		Low	
		Texture/rock fragments	0.50		
24C:					
Myersville	50	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
Catoctin	35	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
24D:					
Myersville	50	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
Catoctin	35	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
24E:					
Myersville	50	High		Low	
		Texture/slope/surface depth/rock fragments	1.00		
Catoctin	35	High		Low	
		Texture/slope/surface depth/rock fragments	1.00		

Table 9.—Forestland Management, Part V—Continued

Map 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
24F:					
Myersville----------	50	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
Catoctin------------	35	High		Low	
		Texture/slope/ surface depth/ rock fragments	1.00		
25B:					
Orenda--------------	85	Moderate		Low	
		Texture/rock fragments	0.50		
25C:					
Orenda--------------	85	Moderate		Low	
		Texture/rock fragments	0.50		
25D:					
Orenda--------------	85	Moderate		Low	
		Texture/rock fragments	0.50		
26C:					
Peaks---------------	60	Low		Low	
		Texture/rock fragments	0.10		
Rock outcrop--------	35	Not rated		Not rated	
26D:					
Peaks---------------	60	Low		Low	
		Texture/rock fragments	0.10		
Rock outcrop--------	35	Not rated		Not rated	
26E:					
Peaks---------------	60	Low		Low	
		Texture/slope/ rock fragments	0.10		
Rock outcrop--------	35	Not rated		Not rated	
26F:					
Peaks---------------	60	Low		Low	
		Texture/slope/ rock fragments	0.10		
Rock outcrop--------	35	Not rated		Not rated	
27A:					
Pineywoods----------	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00

Table 9.—Forestland Management, Part V—Continued

Map 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
27B:					
Pineywoods----------	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
28:					
Pits, quarry--------	100	Not rated		Not rated	
29B:					
Saunook-------------	85	Low		Low	
		Texture/rock fragments	0.10		
29C:					
Saunook-------------	85	Low		Low	
		Texture/rock fragments	0.10		
29D:					
Saunook-------------	85	Low		Low	
		Texture/rock fragments	0.10		
30B:					
Saunook, very stony-	85	Low		Low	
		Texture/rock fragments	0.10		
30C:					
Saunook, very stony-	85	Low		Low	
		Texture/rock fragments	0.10		
30D:					
Saunook, very stony-	85	Low		Low	
		Texture/rock fragments	0.10		
30E:					
Saunook, very stony-	85	Low		Low	
		Texture/rock fragments	0.10		
31A:					
Sindion-------------	45	Low		Low	
		Texture/rock fragments	0.10		
Yogaville-----------	40	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
32B:					
Sketerville---------	90	Low		Low	
		Texture/surface depth/rock fragments	0.10		

Table 9.—Forestland Management, Part V—Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Potential for damage to soil by fire: Value	Potential for seedling mortality: Rating class and limiting features	Potential for seedling mortality: Value
33A:					
Speedwell	85	Low		Low	
		Texture/rock fragments	0.10		
34C:					
Spriggs	85	Moderate		Low	
		Texture/rock fragments	0.50		
34D:					
Spriggs	85	Moderate		Low	
		Texture/rock fragments	0.50		
34E:					
Spriggs	85	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
35B:					
Spriggs, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		
35C:					
Spriggs, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		
35D:					
Spriggs, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		
35E:					
Spriggs, very stony	85	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
36D:					
Stott Knob	55	Moderate		Low	
		Texture/rock fragments	0.50		
Rhodhiss	35	Moderate		Low	
		Texture/rock fragments	0.50		
36E:					
Stott Knob	55	Moderate		Low	
		Texture/rock fragments	0.50		
Rhodhiss	35	Moderate		Low	
		Texture/slope/ rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map 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
37D:					
Stott Knob, very stony	55	Moderate		Low	
		Texture/rock fragments	0.50		
Rhodhiss, very stony	35	Moderate		Low	
		Texture/rock fragments	0.50		
37E:					
Stott Knob, very stony	55	Moderate		Low	
		Texture/rock fragments	0.50		
Rhodhiss, very stony	35	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
38A:					
Suches	85	Low		Low	
		Texture/rock fragments	0.10		
39C:					
Sylco	60	Moderate		Low	
		Texture/rock fragments	0.50		
Sylvatus	35	Moderate		Low	
		Texture/rock fragments	0.50		
39D:					
Sylco	60	Moderate		Low	
		Texture/rock fragments	0.50		
Sylvatus	35	Moderate		Low	
		Texture/rock fragments	0.50		
39E:					
Sylco	60	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Sylvatus	35	High		Low	
		Texture/slope/ rock fragments	1.00		
39F:					
Sylco	60	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Sylvatus	35	High		Low	
		Texture/slope/ rock fragments	1.00		

Table 9.—Forestland Management, Part V—Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Potential for damage to soil by fire: Value	Potential for seedling mortality: Rating class and limiting features	Potential for seedling mortality: Value
40C:					
Sylco, extremely stony	60	Moderate		Low	
		Texture/rock fragments	0.50		
Sylvatus, extremely stony	35	Moderate		Low	
		Texture/rock fragments	0.50		
40D:					
Sylco, extremely stony	60	Moderate		Low	
		Texture/rock fragments	0.50		
Sylvatus, extremely stony	35	Moderate		Low	
		Texture/rock fragments	0.50		
40E:					
Sylco, extremely stony	60	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Sylvatus, extremely stony	35	High		Low	
		Texture/slope/ rock fragments	1.00		
40F:					
Sylco, extremely stony	60	Moderate		Low	
		Texture/slope/ rock fragments	0.50		
Sylvatus, extremely stony	35	High		Low	
		Texture/slope/ rock fragments	1.00		
41E:					
Sylvatus, extremely stony	60	High		Low	
		Texture/slope/ rock fragments	1.00		
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	High		Low	
		Texture/slope/ rock fragments	1.00		
Rock outcrop	35	Not rated		Not rated	

Table 9.—Forestland Management, Part V—Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Potential for damage to soil by fire: Value	Potential for seedling mortality: Rating class and limiting features	Potential for seedling mortality: Value
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Low		Low	
		Texture/rock fragments	0.10		
43C:					
Unison	85	Low		Low	
		Texture/rock fragments	0.10		
44B:					
Unison, very stony	85	Low		Low	
		Texture/rock fragments	0.10		
44C:					
Unison, very stony	85	Low		Low	
		Texture/rock fragments	0.10		
45B:					
Wintergreen, severely eroded	90	Low		Low	
45C:					
Wintergreen, severely eroded	90	Low		Low	
45D:					
Wintergreen, severely eroded	90	Low		Low	
46B:					
Wintergreen	85	Moderate		Low	
		Texture/rock fragments	0.50		
46C:					
Wintergreen	90	Moderate		Low	
		Texture/rock fragments	0.50		
46D:					
Wintergreen	90	Moderate		Low	
		Texture/rock fragments	0.50		
47B:					
Wintergreen, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		

Table 9.—Forestland Management, Part V—Continued

Map symbol and soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
47C:					
Wintergreen, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		
47D:					
Wintergreen, very stony	85	Moderate		Low	
		Texture/rock fragments	0.50		
W:					
Water	100	Not rated		Not rated	

Table 10.—Recreational Development, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1B:							
Buffstat	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Gravel content	0.56
1C:							
Buffstat	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
						Gravel content	0.56
1D:							
Buffstat	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.56
2C:							
Bugley	70	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
		Gravel content	0.12	Gravel content	0.12	Depth to bedrock	1.00
Littlejoe	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
						Gravel content	0.78
2D:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	0.12	Gravel content	0.12	Depth to bedrock	1.00
Littlejoe	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78
2E:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	0.12	Gravel content	0.12	Depth to bedrock	1.00
Littlejoe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78
3C:							
Catoctin	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
						Depth to bedrock	0.97
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
3D:							
Catoctin	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
Rock outcrop	30	Not rated		Not rated		Not rated	
3E:							
Catoctin	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
4C:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
4D:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
4E:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
5B:							
Clifford	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
5C:							
Clifford	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
5D:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
5E:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
6B:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
6C:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
7A:							
Codorus-------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
		Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
8B:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
						Slope	0.88
8C:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.94	Slow water movement	0.94	Slope	1.00
		Slope	0.37	Slope	0.37	Slow water movement	0.94
8D:							
Colleen-------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
9A:							
Combs---------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
10A:							
Comus---------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
11A:							
Craigsville---------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Large stones content	0.76	Flooding	1.00
		Large stones content	0.76	Flooding	0.40	Gravel content	1.00
		Gravel content	0.26	Gravel content	0.26	Large stones content	0.76

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
12D:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Depth to bedrock	0.35
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
12E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
12F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
13E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
						Gravel content	0.03
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
						Gravel content	0.03
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.48	Slope	0.88
		Depth to saturated zone	0.81	Slow water movement	0.15	Depth to saturated zone	0.81
		Slow water movement	0.15			Slow water movement	0.15

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
15B:							
Delanco	60	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.48	Slope	0.88
		Depth to saturated zone	0.81	Slow water movement	0.15	Depth to saturated zone	0.81
		Slow water movement	0.15			Slow water movement	0.15
Elsinboro	40	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Slope	0.88
15C:							
Delanco	60	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.48	Slope	1.00
		Depth to saturated zone	0.81	Slope	0.37	Depth to saturated zone	0.81
		Slope	0.37	Slow water movement	0.15	Slow water movement	0.15
Elsinboro	40	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Slope	0.37	Slope	1.00
		Slope	0.37				
16C:							
Edneytown	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
16D:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
16E:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
17B:							
Edneytown	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
Peaks	35	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
17C:							
Edneytown	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
Peaks	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Gravel content	0.97	Gravel content	0.97	Slope	1.00
		Slope	0.37	Slope	0.37	Gravel content	1.00

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
17D:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
17E:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
17F:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
18B:							
Elsinboro	90	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Slope	0.88
19C:							
Fauquier	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47
19D:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
19E:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
20B:							
Haymarket-----------	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.26	Slow water movement	0.26	Gravel content	0.92
						Slope	0.88
						Slow water movement	0.26
Mirerock------------	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.26	Slow water movement	0.26	Slope	0.88
						Depth to bedrock	0.46
						Slow water movement	0.26
20C:							
Haymarket-----------	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
		Slow water movement	0.26	Slow water movement	0.26	Gravel content	0.92
						Slow water movement	0.26
Mirerock------------	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
		Slow water movement	0.26	Slow water movement	0.26	Depth to bedrock	0.46
						Slow water movement	0.26
21B:							
Littlejoe-----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Gravel content	0.78
21C:							
Littlejoe-----------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
						Gravel content	0.78
21D:							
Littlejoe-----------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.78
22B:							
Minnieville, severely eroded----	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
22C:							
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
22D:							
Minnieville, severely eroded----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
23B:							
Minnieville---------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
23C:							
Minnieville	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
23D:							
Minnieville	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
24C:							
Myersville	50	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
						Depth to bedrock	0.97
24D:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
24E:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
24F:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
25B:							
Orenda	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.15	Slow water movement	0.15	Slope	0.88
						Slow water movement	0.15

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
25C:							
Orenda--------------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
		Slow water movement	0.15	Slow water movement	0.15	Slow water movement	0.15
25D:							
Orenda--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Slow water movement	0.15	Slow water movement	0.15	Slow water movement	0.15
26C:							
Peaks---------------	60	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.97	Gravel content	0.97	Slope	1.00
		Slope	0.37	Slope	0.37	Gravel content	1.00
						Depth to bedrock	0.16
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26D:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
						Depth to bedrock	0.16
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26E:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
						Depth to bedrock	0.16
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26F:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.97	Gravel content	0.97	Gravel content	1.00
						Depth to bedrock	0.16
Rock outcrop--------	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods----------	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
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
27B:							
Pineywoods----------	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
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
						Slope	0.88

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
28:							
Pits, quarry--------	100	Not rated		Not rated		Not rated	
29B:							
Saunook-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
						Gravel content	0.44
29C:							
Saunook-------------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
						Gravel content	0.44
29D:							
Saunook-------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.44
30B:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
						Gravel content	0.44
30C:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47
						Gravel content	0.44
30D:							
Saunook, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Gravel content	0.44
30E:							
Saunook, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Gravel content	0.44
31A:							
Sindion-------------	45	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Depth to saturated zone	0.07
Yogaville-----------	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
		Flooding	1.00	Ponding	1.00	Flooding	1.00
		Ponding	1.00	Flooding	0.40	Ponding	1.00

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
32B:							
Sketerville	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.94	Slow water movement	0.94	Slow water movement	0.94
		Depth to saturated zone	0.39	Depth to saturated zone	0.19	Slope	0.88
						Depth to saturated zone	0.39
33A:							
Speedwell	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
34C:							
Spriggs	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
						Depth to bedrock	0.46
34D:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.46
34E:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.46
35B:							
Spriggs, very stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
						Depth to bedrock	0.46
35C:							
Spriggs, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47
						Depth to bedrock	0.46
35D:							
Spriggs, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Depth to bedrock	0.46
35E:							
Spriggs, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Depth to bedrock	0.46
36D:							
Stott Knob	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.46

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
36D:							
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
36E:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.46
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
37D:							
Stott Knob, very stony--------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Depth to bedrock	0.46
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
37E:							
Stott Knob, very stony--------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
						Depth to bedrock	0.46
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
38A:							
Suches--------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
39C:							
Sylco---------------	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Gravel content	0.84
						Depth to bedrock	0.20
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	0.37	Slope	0.37	Depth to bedrock	1.00
		Gravel content	0.05	Gravel content	0.05	Gravel content	1.00
39D:							
Sylco---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Gravel content	0.84
						Depth to bedrock	0.20

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
39D:							
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.05	Gravel content	0.05	Gravel content	1.00
39E:							
Sylco---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Gravel content	0.84
						Depth to bedrock	0.20
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.05	Gravel content	0.05	Gravel content	1.00
39F:							
Sylco---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Gravel content	0.84
						Depth to bedrock	0.20
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.05	Gravel content	0.05	Gravel content	1.00
40C:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
						Gravel content	0.84
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	0.37	Slope	0.37	Depth to bedrock	1.00
40D:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.84
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
40E:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.84
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
40F:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.84
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
41E:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones content	1.00	Large stones content	1.00
		Large stones content	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
43C:							
Unison	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
44B:							
Unison, very stony--	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
44C:							
Unison, very stony--	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47
45B:							
Wintergreen, severely eroded----	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
45C:							
Wintergreen, severely eroded----	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
45D:							
Wintergreen, severely eroded----	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
46B:							
Wintergreen---------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
46C:							
Wintergreen---------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
46D:							
Wintergreen---------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
47B:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.88
						Large stones content	0.47
47C:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.47	Large stones content	0.47	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.47

Table 10.—Recreational Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Value	Picnic areas: Rating class and limiting features	Value	Playgrounds: Rating class and limiting features	Value
47D:							
Wintergreen, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Large stones content	0.47
W:							
Water	100	Not rated		Not rated		Not rated	

Table 10.—Recreational Development, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
1B:							
Buffstat	90	Not limited		Not limited		Not limited	
1C:							
Buffstat	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
1D:							
Buffstat	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
2C:							
Bugley	70	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
						Slope	0.37
Littlejoe	35	Not limited		Not limited		Somewhat limited	
						Slope	0.37
2D:							
Bugley	70	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
						Depth to bedrock	1.00
						Droughty	1.00
Littlejoe	35	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
2E:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	1.00
						Droughty	1.00
Littlejoe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
3C:							
Catoctin	55	Very limited		Very limited		Somewhat limited	
		Large stones content	1.00	Large stones content	1.00	Depth to bedrock	0.97
						Large stones content	0.79
						Slope	0.37
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	0.50			Depth to bedrock	0.97
						Large stones content	0.79
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
3E:							
Catoctin	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	0.97
						Large stones content	0.79
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Not limited		Not limited		Not limited	
4C:							
Clifford, severely eroded	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
4D:							
Clifford, severely eroded	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
4E:							
Clifford, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
5B:							
Clifford	90	Not limited		Not limited		Not limited	
5C:							
Clifford	90	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.37
5D:							
Clifford	90	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.50				
5E:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	0.96		
6B:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Not limited	
		Large stones content	0.47	Large stones content	0.47		
6C:							
Clifford, very stony	90	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.37
		Large stones content	0.47	Large stones content	0.47		

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.50	Large stones content	0.47		
		Large stones content	0.47				
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	0.96		
		Large stones content	0.47	Large stones content	0.47		
7A:							
Codorus-------------	85	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
8B:							
Colleen-------------	90	Not limited		Not limited		Not limited	
8C:							
Colleen-------------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
8D:							
Colleen-------------	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
9A:							
Combs---------------	85	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
10A:							
Comus---------------	85	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
		Too sandy	0.01	Too sandy	0.01		
11A:							
Craigsville---------	85	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.76	Large stones content	0.76	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Large stones content	0.95
						Gravel content	0.26
12D:							
Dekalb--------------	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.47	Slope	1.00
		Large stones content	0.47			Large stones content	0.79
						Droughty	0.67
Hazleton------------	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.47	Slope	1.00
		Large stones content	0.47			Large stones content	0.01

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
12E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.79
						Droughty	0.67
Hazleton	40	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.01
12F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.79
						Droughty	0.67
Hazleton	40	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	0.01
13E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Large stones content	0.79
						Droughty	0.67
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Large stones content	0.79
						Droughty	0.67
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48
15B:							
Delanco	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48
Elsinboro	40	Not limited		Not limited		Not limited	
15C:							
Delanco	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48
						Slope	0.37

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
15C:							
Elsinboro	40	Not limited		Not limited		Somewhat limited	
						Slope	0.37
16C:							
Edneytown	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
16D:							
Edneytown	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
16E:							
Edneytown	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.92	Slope	1.00
17B:							
Edneytown	55	Somewhat limited		Somewhat limited		Not limited	
		Large stones content	0.47	Large stones content	0.47		
Peaks	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Gravel content	0.97
						Droughty	0.63
						Depth to bedrock	0.16
17C:							
Edneytown	55	Very limited		Very limited		Somewhat limited	
		Large stones content	1.00	Large stones content	1.00	Slope	0.37
Peaks	35	Very limited		Very limited		Somewhat limited	
		Large stones content	1.00	Large stones content	1.00	Gravel content	0.97
						Droughty	0.63
						Slope	0.37
17D:							
Edneytown	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00				
Peaks	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Gravel content	0.97
		Slope	1.00			Droughty	0.63
17E:							
Edneytown	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
Peaks	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Gravel content	0.97
		Slope	1.00	Slope	1.00	Droughty	0.63

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
17F:							
Edneytown	55	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
Peaks	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Gravel content	0.97
		Slope	1.00	Slope	1.00	Droughty	0.63
18B:							
Elsinboro	90	Not limited		Not limited		Not limited	
19C:							
Fauquier	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.37
19D:							
Fauquier	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.47	Slope	1.00
		Large stones content	0.47				
19E:							
Fauquier	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Large stones content	0.47	Large stones content	0.47		
20B:							
Haymarket	55	Not limited		Not limited		Not limited	
Mirerock	40	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.46
20C:							
Haymarket	55	Not limited		Not limited		Somewhat limited	
						Slope	0.37
Mirerock	40	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.46
						Slope	0.37
21B:							
Littlejoe	90	Not limited		Not limited		Not limited	
21C:							
Littlejoe	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
21D:							
Littlejoe	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
22B:							
Minnieville, severely eroded	85	Not limited		Not limited		Not limited	

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
22C:							
Minnieville, severely eroded----	85	Not limited		Not limited		Somewhat limited	
						Slope	0.37
22D:							
Minnieville, severely eroded----	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
23B:							
Minnieville---------	85	Not limited		Not limited		Not limited	
23C:							
Minnieville---------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.37
23D:							
Minnieville---------	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
24C:							
Myersville----------	50	Very limited		Very limited		Somewhat limited	
		Large stones content	1.00	Large stones content	1.00	Slope	0.37
		Water erosion	1.00	Water erosion	1.00		
Catoctin------------	35	Very limited		Very limited		Somewhat limited	
		Large stones content	1.00	Large stones content	1.00	Depth to bedrock	0.97
						Large stones content	0.79
						Slope	0.37
24D:							
Myersville----------	50	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Water erosion	1.00	Water erosion	1.00		
		Slope	1.00				
Catoctin------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	0.97
		Slope	1.00			Large stones content	0.79
24E:							
Myersville----------	50	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Water erosion	1.00		
		Water erosion	1.00	Slope	1.00		
Catoctin------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	0.97
		Slope	1.00	Slope	1.00	Large stones content	0.79

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
24F:							
Myersville	50	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00		
		Water erosion	1.00	Water erosion	1.00		
Catoctin	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	0.97
						Large stones content	0.79
25B:							
Orenda	85	Not limited		Not limited		Not limited	
25C:							
Orenda	85	Not limited		Not limited		Somewhat limited	
						Slope	0.37
25D:							
Orenda	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
26C:							
Peaks	60	Not limited		Not limited		Somewhat limited	
						Gravel content	0.97
						Droughty	0.63
						Slope	0.37
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Gravel content	0.97
						Droughty	0.63
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.97
						Droughty	0.63
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.97
						Droughty	0.63
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	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

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
27B:							
Pineywoods----------	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
28:							
Pits, quarry--------	100	Not rated		Not rated		Not rated	
29B:							
Saunook-------------	85	Not limited		Not limited		Not limited	
29C:							
Saunook-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.37
29D:							
Saunook-------------	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
30B:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Not limited	
		Large stones content	0.47	Large stones content	0.47		
30C:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.37
30D:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.47	Slope	1.00
		Large stones content	0.47				
30E:							
Saunook, very stony-	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Large stones content	0.47	Large stones content	0.47		
31A:							
Sindion-------------	45	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
						Depth to saturated zone	0.03
Yogaville-----------	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40	Ponding	1.00
32B:							
Sketerville---------	90	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.19

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
33A:							
Speedwell-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
34C:							
Spriggs-------------	85	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.46
						Slope	0.37
34D:							
Spriggs-------------	85	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
						Depth to bedrock	0.46
34E:							
Spriggs-------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
						Depth to bedrock	0.46
35B:							
Spriggs, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Depth to bedrock	0.46
35C:							
Spriggs, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Depth to bedrock	0.46
						Slope	0.37
35D:							
Spriggs, very stony-	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.47	Slope	1.00
		Large stones content	0.47			Depth to bedrock	0.46
35E:							
Spriggs, very stony-	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Large stones content	0.47	Large stones content	0.47	Depth to bedrock	0.46
36D:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.50			Depth to bedrock	0.46
Rhodhiss------------	35	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
36E:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	0.78	Depth to bedrock	0.46
Rhodhiss------------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
37D:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.50	Large stones content	0.47	Depth to bedrock	0.46
		Large stones content	0.47				
Rhodhiss, very stony	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.47	Slope	1.00
		Large stones content	0.47				
37E:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Slope	1.00	Water erosion	1.00	Slope	1.00
		Water erosion	1.00	Slope	0.96	Depth to bedrock	0.46
		Large stones content	0.47	Large stones content	0.47		
Rhodhiss, very stony	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Large stones content	0.47	Large stones content	0.47		
38A:							
Suches	85	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
39C:							
Sylco	60	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.05	Large stones content	0.05	Large stones content	1.00
						Slope	0.37
						Depth to bedrock	0.20
Sylvatus	35	Somewhat limited		Somewhat limited		Very limited	
		Large stones content	0.01	Large stones content	0.01	Depth to bedrock	1.00
						Droughty	0.99
						Large stones content	0.99
39D:							
Sylco	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.05	Slope	1.00
		Large stones content	0.05			Large stones content	1.00
						Depth to bedrock	0.20
Sylvatus	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Large stones content	0.01	Slope	1.00
		Large stones content	0.01			Depth to bedrock	1.00
						Droughty	0.99
39E:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Large stones content	1.00
						Depth to bedrock	0.20

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
39E:							
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.01	Large stones content	0.01	Depth to bedrock	1.00
						Droughty	0.99
39F:							
Sylco---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.05	Large stones content	0.05	Large stones content	1.00
						Depth to bedrock	0.20
Sylvatus------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.01	Large stones content	0.01	Depth to bedrock	1.00
						Droughty	0.99
40C:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
						Slope	0.37
						Depth to bedrock	0.20
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Depth to bedrock	1.00
						Droughty	0.99
						Large stones content	0.99
40D:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00			Large stones content	1.00
						Depth to bedrock	0.20
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00			Droughty	0.99
40E:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	1.00
						Depth to bedrock	0.20
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	0.99

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
40F:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Large stones content	1.00
						Depth to bedrock	0.20
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	0.99
41E:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	0.99
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Large stones content	1.00	Large stones content	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	0.99
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Not limited		Not limited		Not limited	
43C:							
Unison	85	Not limited		Not limited		Somewhat limited	
						Slope	0.37
44B:							
Unison, very stony	85	Somewhat limited		Somewhat limited		Not limited	
		Large stones content	0.47	Large stones content	0.47		
44C:							
Unison, very stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.37
45B:							
Wintergreen, severely eroded	90	Not limited		Not limited		Not limited	
45C:							
Wintergreen, severely eroded	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37

Table 10.—Recreational Development, Part II—Continued

Map symbol and soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf fairways: Rating class and limiting features	Value
45D:							
Wintergreen, severely eroded----	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
46B:							
Wintergreen---------	85	Not limited		Not limited		Not limited	
46C:							
Wintergreen---------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.37
46D:							
Wintergreen---------	90	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
47B:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Not limited	
		Large stones content	0.47	Large stones content	0.47		
47C:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Large stones content	0.47	Large stones content	0.47	Slope	0.37
47D:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Large stones content	0.47	Slope	1.00
		Large stones content	0.47				
W:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 11.—Hydric Soils

Map symbol	Soil name
27A	Pineywoods silt loam, 0 to 2 percent slopes
27B	Pineywoods silt loam, 2 to 7 percent slopes
31A	Sindion-Yogaville complex, 0 to 3 percent slopes, frequently flooded (only Yogaville component is hydric)

Table 12.—Building Site Development, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and 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
1B:							
Buffstat	90	Somewhat limited Shrink-swell	 0.50	Somewhat limited Shrink-swell	 0.50	Somewhat limited Shrink-swell Slope	 0.50 0.12
1C:							
Buffstat	90	Somewhat limited Shrink-swell Slope	 0.50 0.37	Somewhat limited Shrink-swell Slope	 0.50 0.37	Very limited Slope Shrink-swell	 1.00 0.50
1D:							
Buffstat	90	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50
2C:							
Bugley	70	Very limited Depth to hard bedrock Slope	 1.00 0.37	Very limited Depth to hard bedrock Slope	 1.00 0.37	Very limited Depth to hard bedrock Slope	 1.00 1.00
Littlejoe	35	Somewhat limited Shrink-swell Slope	 0.50 0.37	Somewhat limited Shrink-swell Slope	 0.50 0.37	Very limited Slope Shrink-swell	 1.00 0.50
2D:							
Bugley	70	Very limited Slope Depth to hard bedrock	 1.00 1.00	Very limited Slope Depth to hard bedrock	 1.00 1.00	Very limited Slope Depth to hard bedrock	 1.00 1.00
Littlejoe	35	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50
2E:							
Bugley	70	Very limited Slope Depth to hard bedrock	 1.00 1.00	Very limited Slope Depth to hard bedrock	 1.00 1.00	Very limited Slope Depth to hard bedrock	 1.00 1.00
Littlejoe	30	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50	Very limited Slope Shrink-swell	 1.00 0.50
3C:							
Catoctin	55	Somewhat limited Depth to hard bedrock Large stones content Slope	 0.46 0.44 0.37	Very limited Depth to hard bedrock Depth to soft bedrock Large stones content	 1.00 0.97 0.44	Very limited Slope Depth to hard bedrock Large stones content	 1.00 0.46 0.44
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part I—Continued

Map 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
3D:							
Catoctin	55	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
		Large stones content	0.44	Depth to soft bedrock	0.97	Large stones content	0.44
Rock outcrop	30	Not rated		Not rated		Not rated	
3E:							
Catoctin	55	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
		Large stones content	0.44	Depth to soft bedrock	0.97	Large stones content	0.44
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
4C:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
4D:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
4E:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
5B:							
Clifford	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
5C:							
Clifford	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
5D:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
5E:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
6B:							
Clifford, very stony	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12

Table 12.—Building Site Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6C:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
7A:							
Codorus-------------	85	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
8B:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
8C:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
8D:							
Colleen-------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
9A:							
Combs---------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
10A:							
Comus---------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
11A:							
Craigsville---------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	1.00
12D:							
Dekalb--------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.68	Depth to hard bedrock	1.00	Large stones content	0.68
		Depth to hard bedrock	0.35	Large stones content	0.68	Depth to hard bedrock	0.35
Hazleton------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.90
				Large stones content	0.90		

Table 12.—Building Site Development, Part I—Continued

Map 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
12E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.68	Depth to hard bedrock	1.00	Large stones content	0.68
		Depth to hard bedrock	0.35	Large stones content	0.68	Depth to hard bedrock	0.35
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.90
				Large stones content	0.90		
12F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.68	Depth to hard bedrock	1.00	Large stones content	0.68
		Depth to hard bedrock	0.35	Large stones content	0.68	Depth to hard bedrock	0.35
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.90
				Large stones content	0.90		
13E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.68	Depth to hard bedrock	1.00	Large stones content	0.68
		Depth to hard bedrock	0.35	Large stones content	0.68	Depth to hard bedrock	0.35
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.68	Depth to hard bedrock	1.00	Large stones content	0.68
		Depth to hard bedrock	0.35	Large stones content	0.68	Depth to hard bedrock	0.35
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 12.—Building Site Development, Part I—Continued

Map 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
15B:							
Delanco	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Elsinboro	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.04	Slope	0.12
15C:							
Delanco	60	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Depth to saturated zone	0.81
Elsinboro	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
				Depth to saturated zone	0.04		
16C:							
Edneytown	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
16D:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
16E:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
17B:							
Edneytown	55	Not limited		Not limited		Somewhat limited	
						Slope	0.12
Peaks	35	Not limited		Somewhat limited		Somewhat limited	
				Depth to hard bedrock	0.99	Slope	0.12
				Depth to soft bedrock	0.15		
17C:							
Edneytown	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
Peaks	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Depth to hard bedrock	0.99	Slope	1.00
				Slope	0.37		
				Depth to soft bedrock	0.15		

Table 12.—Building Site Development, Part I—Continued

Map 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
17D:							
Edneytown-----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Peaks---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
17E:							
Edneytown-----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Peaks---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
17F:							
Edneytown-----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Peaks---------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
18B:							
Elsinboro-----------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.04	Slope	0.12
19C:							
Fauquier------------	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Slope	0.37	Slope	1.00
		Slope	0.37			Shrink-swell	0.50
19D:							
Fauquier------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
19E:							
Fauquier------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
20B:							
Haymarket-----------	55	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12

Table 12.—Building Site Development, Part I—Continued

Map 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
20B:							
Mirerock	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.46	Slope	0.12
20C:							
Haymarket	55	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
Mirerock	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.37	Depth to soft bedrock	0.46	Slope	1.00
				Slope	0.37		
21B:							
Littlejoe	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
21C:							
Littlejoe	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
21D:							
Littlejoe	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
22B:							
Minnieville, severely eroded	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
22C:							
Minnieville, severely eroded	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
22D:							
Minnieville, severely eroded	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
23B:							
Minnieville	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
23C:							
Minnieville	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50

Table 12.—Building Site Development, Part I—Continued

Map 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
23D:							
Minnieville	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
24C:							
Myersville	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
Catoctin	35	Somewhat limited		Very limited		Very limited	
		Depth to hard	0.46	Depth to hard	1.00	Slope	1.00
		bedrock		bedrock		Depth to hard	0.46
		Large stones	0.44	Depth to soft	0.97	bedrock	
		content		bedrock		Large stones	0.44
		Slope	0.37	Large stones	0.44	content	
				content			
24D:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard	0.46	Depth to hard	1.00	Depth to hard	0.46
		bedrock		bedrock		bedrock	
		Large stones	0.44	Depth to soft	0.97	Large stones	0.44
		content		bedrock		content	
24E:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard	0.46	Depth to hard	1.00	Depth to hard	0.46
		bedrock		bedrock		bedrock	
		Large stones	0.44	Depth to soft	0.97	Large stones	0.44
		content		bedrock		content	
24F:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard	0.46	Depth to hard	1.00	Depth to hard	0.46
		bedrock		bedrock		bedrock	
		Large stones	0.44	Depth to soft	0.97	Large stones	0.44
		content		bedrock		content	
25B:							
Orenda	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
25C:							
Orenda	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50

Table 12.—Building Site Development, Part I—Continued

Map 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
25D:							
Orenda	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
26C:							
Peaks	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Depth to hard bedrock	0.99	Slope	1.00
				Slope	0.37		
				Depth to soft bedrock	0.15		
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.15		
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	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
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
27B:							
Pineywoods	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
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part I—Continued

Map 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
29B:							
Saunook-------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
29C:							
Saunook-------------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
29D:							
Saunook-------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
30B:							
Saunook, very stony-	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
30C:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
30D:							
Saunook, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
30E:							
Saunook, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
31A:							
Sindion-------------	45	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
Yogaville-----------	40	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
		Ponding	1.00	Ponding	1.00	Ponding	1.00
32B:							
Sketerville---------	90	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39	Shrink-swell	0.50	Depth to saturated zone	0.39
						Slope	0.12
33A:							
Speedwell-----------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
34C:							
Spriggs-------------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Depth to hard bedrock	0.99	Slope	1.00
				Depth to soft bedrock	0.46		
				Slope	0.37		

Table 12.—Building Site Development, Part I—Continued

Map 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
34D:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.46		
34E:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.46		
35B:							
Spriggs, very stony	85	Not limited		Somewhat limited		Somewhat limited	
				Depth to hard bedrock	0.99	Slope	0.12
				Depth to soft bedrock	0.46		
35C:							
Spriggs, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Depth to hard bedrock	0.99	Slope	1.00
				Depth to soft bedrock	0.46		
				Slope	0.37		
35D:							
Spriggs, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.46		
35E:							
Spriggs, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to hard bedrock	0.99		
				Depth to soft bedrock	0.46		
36D:							
Stott Knob	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.46		
Rhodhiss	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
36E:							
Stott Knob	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.46		

Table 12.—Building Site Development, Part I—Continued

Map 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
36E:							
Rhodhiss	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
37D:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.46		
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
37E:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.46		
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
38A:							
Suches	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.95		
39C:							
Sylco	60	Somewhat limited		Very limited		Very limited	
		Large stones content	0.66	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.37	Large stones content	0.66	Large stones content	0.66
		Depth to hard bedrock	0.20	Slope	0.37	Depth to hard bedrock	0.20
Sylvatus	35	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 content	0.42	Large stones content	0.42	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.42
39D:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20
Sylvatus	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 content	0.42	Large stones content	0.42	Large stones content	0.42

Table 12.—Building Site Development, Part I—Continued

Map 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
39E:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20
Sylvatus	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 content	0.42	Large stones content	0.42	Large stones content	0.42
39F:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20
Sylvatus	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 content	0.42	Large stones content	0.42	Large stones content	0.42
40C:							
Sylco, extremely stony	60	Somewhat limited		Very limited		Very limited	
		Large stones content	0.66	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.37	Large stones content	0.66	Large stones content	0.66
		Depth to hard bedrock	0.20	Slope	0.37	Depth to hard bedrock	0.20
Sylvatus, extremely stony	35	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 content	0.42	Large stones content	0.42	Slope	1.00
		Slope	0.37	Slope	0.37	Large stones content	0.42
40D:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20

Table 12.—Building Site Development, Part I—Continued

Map 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
40D:							
Sylvatus, extremely stony	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 content	0.42	Large stones content	0.42	Large stones content	0.42
40E:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20
Sylvatus, extremely stony	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 content	0.42	Large stones content	0.42	Large stones content	0.42
40F:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.66	Depth to hard bedrock	1.00	Large stones content	0.66
		Depth to hard bedrock	0.20	Large stones content	0.66	Depth to hard bedrock	0.20
Sylvatus, extremely stony	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 content	0.42	Large stones content	0.42	Large stones content	0.42
41E:							
Sylvatus, extremely stony	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 content	0.42	Large stones content	0.42	Large stones content	0.42
Rock outcrop	35	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part I—Continued

Map 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
41F:							
Sylvatus, extremely stony	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 content	0.42	Large stones content	0.42	Large stones content	0.42
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
43C:							
Unison	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
44B:							
Unison, very stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
44C:							
Unison, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
45B:							
Wintergreen, severely eroded	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
45C:							
Wintergreen, severely eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
45D:							
Wintergreen, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
46B:							
Wintergreen	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12

Table 12.—Building Site Development, Part I—Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46C:							
Wintergreen	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
46D:							
Wintergreen	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
47B:							
Wintergreen, very stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
						Slope	0.12
47C:							
Wintergreen, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Shrink-swell	0.50
47D:							
Wintergreen, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
W:							
Water	100	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
1B:							
Buffstat	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50	Too clayey	0.02		
		Frost action	0.50				
1C:							
Buffstat	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50	Too clayey	0.02		
1D:							
Buffstat	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50	Too clayey	0.02		
2C:							
Bugley	70	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
		Frost action	0.50	Slope	0.37	Slope	0.37
		Slope	0.37	Cutbanks cave	0.10		
Littlejoe	35	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.28		
		Frost action	0.50	Cutbanks cave	0.10		
2D:							
Bugley	70	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Littlejoe	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
2E:							
Bugley	70	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
						Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Littlejoe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
3C:							
Catoctin	55	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
		Large stones content	0.44	Large stones content	0.44	Slope	0.37
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	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	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
Rock outcrop	30	Not rated		Not rated		Not rated	
3E:							
Catoctin	55	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	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
4C:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Too clayey	0.88	Slope	0.37
		Slope	0.37	Slope	0.37		
		Low strength	0.10	Cutbanks cave	0.10		
4D:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
4E:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
5B:							
Clifford------------	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
5C:							
Clifford------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Too clayey	0.88	Slope	0.37
		Slope	0.37	Slope	0.37		
		Low strength	0.10	Cutbanks cave	0.10		
5D:							
Clifford------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
5E:							
Clifford------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
6B:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
6C:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Too clayey	0.88	Slope	0.37
		Slope	0.37	Slope	0.37		
		Low strength	0.10	Cutbanks cave	0.10		
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Too clayey	0.88		
		Low strength	0.10	Cutbanks cave	0.10		
7A:							
Codorus-------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Flooding	0.80	Depth to saturated zone	0.75
		Depth to saturated zone	0.75	Cutbanks cave	0.10		
8B:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Too clayey	0.28		
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.10				

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
8C:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Slope	0.37	Slope	0.37
		Frost action	0.50	Too clayey	0.28		
		Slope	0.37	Cutbanks cave	0.10		
8D:							
Colleen-------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.28		
		Frost action	0.50	Cutbanks cave	0.10		
9A:							
Combs---------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Frost action	0.50	Cutbanks cave	0.10		
10A:							
Comus---------------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Frost action	0.50	Cutbanks cave	0.10		
11A:							
Craigsville---------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	1.00
		Large stones content	1.00	Large stones content	1.00	Large stones content	0.95
		Frost action	0.50	Flooding	0.80	Gravel content	0.26
12D:							
Dekalb--------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.68	Slope	1.00	Large stones content	0.79
		Frost action	0.50	Large stones content	0.68	Droughty	0.67
Hazleton------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.01
		Frost action	0.50	Large stones content	0.90		
12E:							
Dekalb--------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.68	Slope	1.00	Large stones content	0.79
		Frost action	0.50	Large stones content	0.68	Droughty	0.67
Hazleton------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.01
		Frost action	0.50	Large stones content	0.90		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
12F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.68	Slope	1.00	Large stones content	0.79
		Frost action	0.50	Large stones content	0.68	Droughty	0.67
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Large stones content	0.90	Depth to hard bedrock	0.93	Large stones content	0.01
		Frost action	0.50	Large stones content	0.90		
13E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.68	Slope	1.00	Large stones content	0.79
		Frost action	0.50	Large stones content	0.68	Droughty	0.67
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Large stones content	0.68	Slope	1.00	Large stones content	0.79
		Frost action	0.50	Large stones content	0.68	Droughty	0.67
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
15B:							
Delanco	60	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
Elsinboro	40	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Depth to saturated zone	0.04		
		Flooding	0.40				
15C:							
Delanco	60	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Shrink-swell	0.50	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
15C:							
Elsinboro	40	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
		Flooding	0.40	Depth to saturated zone	0.04		
16C:							
Edneytown	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
		Slope	0.37				
16D:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
16E:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
17B:							
Edneytown	55	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Peaks	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
						Depth to bedrock	0.16
				Depth to soft bedrock	0.15		
17C:							
Edneytown	55	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
		Slope	0.37				
Peaks	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
		Slope	0.37	Depth to hard bedrock	0.99	Droughty	0.63
						Slope	0.37
				Slope	0.37		
17D:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
17E:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
17F:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
18B:							
Elsinboro	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50	Depth to saturated zone	0.04		
		Flooding	0.40				
19C:							
Fauquier	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.28		
		Frost action	0.50	Cutbanks cave	0.10		
19D:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
19E:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
20B:							
Haymarket	55	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.50		
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Mirerock	40	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Low strength	1.00				
		Frost action	0.50	Too clayey	0.32		
				Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
20C:							
Haymarket	55	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.50	Slope	0.37
		Shrink-swell	1.00	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		
Mirerock	40	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Low strength	1.00			Slope	0.37
		Frost action	0.50	Slope	0.37		
				Too clayey	0.32		
21B:							
Littlejoe	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
21C:							
Littlejoe	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.28		
		Frost action	0.50	Cutbanks cave	0.10		
21D:							
Littlejoe	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
22B:							
Minnieville, severely eroded	85	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.10				
22C:							
Minnieville, severely eroded	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Too clayey	0.50	Slope	0.37
		Frost action	0.50	Slope	0.37		
		Slope	0.37	Cutbanks cave	0.10		
22D:							
Minnieville, severely eroded	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
23B:							
Minnieville	85	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.10				

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
23C:							
Minnieville---------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Too clayey	0.50	Slope	0.37
		Frost action	0.50	Slope	0.37		
		Slope	0.37	Cutbanks cave	0.10		
23D:							
Minnieville---------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.50		
		Frost action	0.50	Cutbanks cave	0.10		
24C:							
Myersville----------	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Frost action	0.50	Cutbanks cave	0.10		
		Slope	0.37				
Catoctin------------	35	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
		Large stones content	0.44	Large stones content	0.44	Slope	0.37
24D:							
Myersville----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Catoctin------------	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	Depth to bedrock	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
24E:							
Myersville----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Catoctin------------	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	Depth to bedrock	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
24F:							
Myersville----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
24F:							
Catoctin------------	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	Depth to bedrock	0.97
		Depth to hard bedrock	0.46	Depth to soft bedrock	0.97	Large stones content	0.79
25B:							
Orenda--------------	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
25C:							
Orenda--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
25D:							
Orenda--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
26C:							
Peaks---------------	60	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
		Slope	0.37	Depth to hard bedrock	0.99	Droughty	0.63
				Slope	0.37	Slope	0.37
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26D:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26E:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
Rock outcrop--------	35	Not rated		Not rated		Not rated	
26F:							
Peaks---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	1.00	Gravel content	0.97
				Depth to hard bedrock	0.99	Droughty	0.63
Rock outcrop--------	35	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
27A:							
Pineywoods	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	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
27B:							
Pineywoods	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	Too clayey	0.28		
		Shrink-swell	0.50	Cutbanks cave	0.10		
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Frost action	0.50				
29C:							
Saunook	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.37
		Frost action	0.50	Slope	0.37		
		Slope	0.37				
29D:							
Saunook	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00		
		Frost action	0.50				
30B:							
Saunook, very stony	85	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Frost action	0.50				
30C:							
Saunook, very stony	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	0.37
		Frost action	0.50	Slope	0.37		
		Slope	0.37				
30D:							
Saunook, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00		
		Frost action	0.50				
30E:							
Saunook, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00		
		Frost action	0.50				

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
31A:							
Sindion-------------	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Flooding	0.80	Depth to saturated zone	0.03
		Frost action	0.50	Cutbanks cave	0.10		
Yogaville-----------	40	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	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80	Ponding	1.00
32B:							
Sketerville---------	90	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Frost action	0.50	Too clayey	0.28		
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
33A:							
Speedwell-----------	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
34C:							
Spriggs-------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Slope	0.37	Depth to soft bedrock	0.46	Slope	0.37
		Low strength	0.22	Slope	0.37		
34D:							
Spriggs-------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Low strength	0.22	Depth to soft bedrock	0.46		
34E:							
Spriggs-------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Low strength	0.22	Depth to soft bedrock	0.46		
35B:							
Spriggs, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Low strength	0.22	Depth to soft bedrock	0.46		
				Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
35C:							
Spriggs, very stony-	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Slope	0.37			Slope	0.37
		Low strength	0.22	Depth to soft bedrock	0.46		
				Slope	0.37		
35D:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Low strength	0.22				
				Depth to soft bedrock	0.46		
35E:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Depth to hard bedrock	0.99	Depth to bedrock	0.46
		Low strength	0.22				
				Depth to soft bedrock	0.46		
36D:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Frost action	0.50				
				Cutbanks cave	0.10		
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
36E:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Frost action	0.50				
				Cutbanks cave	0.10		
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
37D:							
Stott Knob, very stony--------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Frost action	0.50				
				Cutbanks cave	0.10		
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
37E:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Frost action	0.50	Cutbanks cave	0.10		
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
38A:							
Suches	85	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.95	Flooding	1.00
		Frost action	0.50	Flooding	0.80		
		Low strength	0.22	Cutbanks cave	0.10		
39C:							
Sylco	60	Somewhat limited		Very limited		Very limited	
		Low strength	0.78	Depth to hard bedrock	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Slope	0.37
		Frost action	0.50	Slope	0.37	Depth to bedrock	0.20
Sylvatus	35	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 content	0.42	Droughty	0.99
		Large stones content	0.42	Slope	0.37	Large stones content	0.99
39D:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20
Sylvatus	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
39E:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
39E:							
Sylvatus------------	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
39F:							
Sylco---------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20
Sylvatus------------	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
40C:							
Sylco, extremely stony--------------	60	Somewhat limited		Very limited		Very limited	
		Low strength	0.78	Depth to hard bedrock	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Slope	0.37
		Frost action	0.50	Slope	0.37	Depth to bedrock	0.20
Sylvatus, extremely stony--------------	35	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 content	0.42	Droughty	0.99
		Large stones content	0.42	Slope	0.37	Large stones content	0.99
40D:							
Sylco, extremely stony--------------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20
Sylvatus, extremely stony--------------	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
40E:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20
Sylvatus, extremely stony	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
40F:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00	Large stones content	1.00
		Large stones content	0.66	Large stones content	0.66	Depth to bedrock	0.20
Sylvatus, extremely stony	35	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
41E:							
Sylvatus, extremely stony	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	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 bedrock	1.00
		Frost action	0.50	Large stones content	0.42	Droughty	0.99
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
43B:							
Unison--------------	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.68		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
43C:							
Unison--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.68	Slope	0.37
		Shrink-swell	0.50	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		
44B:							
Unison, very stony--	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.68		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
44C:							
Unison, very stony--	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.68	Slope	0.37
		Shrink-swell	0.50	Slope	0.37		
		Frost action	0.50	Cutbanks cave	0.10		
45B:							
Wintergreen,							
severely eroded----	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
45C:							
Wintergreen,							
severely eroded----	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.12		
		Frost action	0.50	Cutbanks cave	0.10		
45D:							
Wintergreen,							
severely eroded----	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
46B:							
Wintergreen---------	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
46C:							
Wintergreen---------	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.12		
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.—Building Site Development, Part II—Continued

Map 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	Lawns and landscaping: Rating class and limiting features	Value
46D:							
Wintergreen---------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
47B:							
Wintergreen, very stony--------------	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
47C:							
Wintergreen, very stony--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.37	Slope	0.37
		Shrink-swell	0.50	Too clayey	0.12		
		Frost action	0.50	Cutbanks cave	0.10		
47D:							
Wintergreen, very stony--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.12		
		Shrink-swell	0.50	Cutbanks cave	0.10		
W:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 13.—Sanitary Facilities, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
1B:					
Buffstat	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.92	Slope	0.68
		Depth to bedrock	0.78	Seepage	0.50
				Depth to soft bedrock	0.42
1C:					
Buffstat	90	Somewhat limited		Very limited	
		Slow water movement	0.92	Slope	1.00
		Depth to bedrock	0.78	Seepage	0.50
		Slope	0.37	Depth to soft bedrock	0.42
1D:					
Buffstat	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.92	Seepage	0.50
		Depth to bedrock	0.78	Depth to soft bedrock	0.42
2C:					
Bugley	70	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.37	Seepage	1.00
Littlejoe	35	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.68	Seepage	1.00
		Depth to bedrock	0.47	Depth to soft bedrock	0.05
2D:					
Bugley	70	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
Littlejoe	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.68	Depth to soft bedrock	0.05

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
2E:					
Bugley	70	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
Littlejoe	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.68	Depth to soft bedrock	0.05
3C:					
Catoctin	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Depth to soft bedrock	1.00
		Large stones content	0.44	Slope	1.00
Rock outcrop	30	Not rated		Not rated	
3D:					
Catoctin	55	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
Rock outcrop	30	Not rated		Not rated	
3E:					
Catoctin	55	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
Rock outcrop	30	Not rated		Not rated	
4B:					
Clifford, severely eroded	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
4C:					
Clifford, severely eroded	90	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
		Slope	0.37	Seepage	0.50

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
4D:					
Clifford, severely eroded-------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
4E:					
Clifford, severely eroded-------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
5B:					
Clifford------------	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
5C:					
Clifford------------	90	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
5D:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
5E:					
Clifford------------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
6B:					
Clifford, very stony	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
6C:					
Clifford, very stony	90	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
6D:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
6E:					
Clifford, very stony	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
7A:					
Codorus	85	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
8B:					
Colleen	90	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.68
8C:					
Colleen	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.37		
8D:					
Colleen	90	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00		
9A:					
Combs	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
10A:					
Comus	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
11A:					
Craigsville	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Large stones content	1.00	Large stones content	1.00
12D:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Large stones content	1.00

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
12E:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Large stones content	1.00
12F:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Hazleton	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Large stones content	1.00
13E:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
13F:					
Dekalb	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
14B:					
Delanco	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
		Flooding	0.40	Seepage	0.50
15B:					
Delanco	60	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Slope	0.68
		Flooding	0.40	Seepage	0.50

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
15B:					
Elsinboro-----------	40	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
		Flooding	0.40	Seepage	0.50
		Depth to saturated zone	0.09	Flooding	0.40
15C:					
Delanco-------------	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
		Flooding	0.40	Seepage	0.50
Elsinboro-----------	40	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
		Flooding	0.40	Seepage	0.50
		Slope	0.37	Flooding	0.40
16C:					
Edneytown-----------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
		Slope	0.37		
16D:					
Edneytown-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
16E:					
Edneytown-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
17B:					
Edneytown-----------	55	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.68
Peaks---------------	35	Very limited		Very limited	
		Seepage, bottom layer	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to hard bedrock	0.99

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
17C:					
Edneytown	55	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
		Slope	0.37		
Peaks	35	Very limited		Very limited	
		Seepage, bottom layer	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
17D:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
Peaks	35	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
17E:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
Peaks	35	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
17F:					
Edneytown	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
Peaks	35	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
18B:					
Elsinboro	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
		Flooding	0.40	Flooding	0.40
		Depth to saturated zone	0.09		
19C:					
Fauquier	85	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Depth to bedrock	0.52	Depth to soft bedrock	0.08
		Slow water movement	0.50		
19D:					
Fauquier	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Depth to soft bedrock	0.08
		Depth to bedrock	0.52		
19E:					
Fauquier	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Depth to soft bedrock	0.08
		Depth to bedrock	0.52		
20B:					
Haymarket	55	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.68
				Seepage	0.50
Mirerock	40	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	0.68
20C:					
Haymarket	55	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
				Seepage	0.50
		Slope	0.37		
Mirerock	40	Very limited		Very limited	
		Slow water movement	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.37		
21B:					
Littlejoe	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
				Slope	0.68
		Slow water movement	0.68	Depth to soft bedrock	0.05
		Depth to bedrock	0.47		

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
21C:					
Littlejoe-----------	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
				Seepage	1.00
		Slow water movement	0.68	Depth to soft bedrock	0.05
		Depth to bedrock	0.47		
21D:					
Littlejoe-----------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
				Depth to soft bedrock	0.05
		Slow water movement	0.68		
22B:					
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
22C:					
Minnieville, severely eroded----	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
22D:					
Minnieville, severely eroded----	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
23B:					
Minnieville---------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
23C:					
Minnieville---------	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
23D:					
Minnieville---------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
24C:					
Myersville----------	50	Somewhat limited		Very limited	
		Depth to bedrock	0.78	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
				Depth to soft bedrock	0.42
		Slope	0.37		0.42

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
24C:					
Catoctin------------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Depth to soft bedrock	1.00
		Large stones content	0.44	Slope	1.00
24D:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.78	Seepage	0.50
		Slow water movement	0.50	Depth to soft bedrock	0.42
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
24E:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.78	Seepage	0.50
		Slow water movement	0.50	Depth to soft bedrock	0.42
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
24F:					
Myersville----------	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.78	Seepage	0.50
		Slow water movement	0.50	Depth to soft bedrock	0.42
Catoctin------------	35	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
25B:					
Orenda--------------	85	Very limited		Somewhat limited	
		Slow water movement	1.00	Slope	0.68
				Seepage	0.50
25C:					
Orenda--------------	85	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.37	Seepage	0.50

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
25D:					
Orenda	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00	Seepage	0.50
26C:					
Peaks	60	Very limited		Very limited	
		Seepage, bottom layer	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
26D:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
26E:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
26F:					
Peaks	60	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00
Rock outcrop	35	Not rated		Not rated	
27A:					
Pineywoods	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Depth to soft bedrock	0.99
		Depth to bedrock	0.99	Seepage	0.18
27B:					
Pineywoods	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Depth to soft bedrock	0.99
		Depth to bedrock	0.99	Slope	0.68

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
28:					
Pits, quarry--------	100	Not rated		Not rated	
29B:					
Saunook-------------	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Seepage	1.00
				Slope	0.68
29C:					
Saunook-------------	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	1.00
		Slope	0.37		
29D:					
Saunook-------------	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
30B:					
Saunook, very stony-	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Seepage	1.00
				Slope	0.68
30C:					
Saunook, very stony-	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	1.00
		Slope	0.37		
30D:					
Saunook, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
30E:					
Saunook, very stony-	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	1.00
31A:					
Sindion-------------	45	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	0.50
Yogaville-----------	40	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Ponding	1.00

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
32B:					
Sketerville---------	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Slope	0.68
33A:					
Speedwell-----------	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	0.50	Seepage	0.50
34C:					
Spriggs-------------	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slow water movement	0.50	Slope	1.00
		Slope	0.37	Depth to hard bedrock	0.99
34D:					
Spriggs-------------	85	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Depth to hard bedrock	0.99
34E:					
Spriggs-------------	85	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Depth to hard bedrock	0.99
35B:					
Spriggs, very stony-	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slow water movement	0.50	Depth to hard bedrock	0.99
				Slope	0.68
35C:					
Spriggs, very stony-	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slow water movement	0.50	Slope	1.00
		Slope	0.37	Depth to hard bedrock	0.99
35D:					
Spriggs, very stony-	85	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Depth to hard bedrock	0.99

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
35E:					
Spriggs, very stony-	85	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slow water movement	0.50	Depth to hard bedrock	0.99
36D:					
Stott Knob----------	55	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Rhodhiss------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
36E:					
Stott Knob----------	55	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Rhodhiss------------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
37D:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
37E:					
Stott Knob, very stony--------------	55	Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
37E:					
Rhodhiss, very stony	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
38A:					
Suches	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	0.50	Seepage	0.50
39C:					
Sylco	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Large stones content	0.66	Seepage	1.00
Sylvatus	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	0.42	Slope	1.00
		Slope	0.37	Large stones content	0.77
39D:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Sylvatus	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
39E:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Sylvatus	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
39F:					
Sylco	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Sylvatus	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
40C:					
Sylco, extremely stony	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Seepage, bottom layer	1.00	Slope	1.00
		Large stones content	0.66	Seepage	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Large stones content	0.42	Slope	1.00
		Slope	0.37	Large stones content	0.77
40D:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
40E:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
40E:					
Sylvatus, extremely stony	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
40F:					
Sylco, extremely stony	60	Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
Sylvatus, extremely stony	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
41E:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Large stones content	0.42	Large stones content	0.77
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
43C:					
Unison	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		

Table 13.—Sanitary Facilities, Part I—Continued

Map 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
44B:					
Unison, very stony--	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
44C:					
Unison, very stony--	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
45B:					
Wintergreen, severely eroded----	90	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
45C:					
Wintergreen, severely eroded----	90	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
45D:					
Wintergreen, severely eroded----	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
46B:					
Wintergreen---------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
46C:					
Wintergreen---------	90	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		
46D:					
Wintergreen---------	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
47B:					
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Slope	0.68
				Seepage	0.50
47C:					
Wintergreen, very stony--------------	85	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
		Slope	0.37		

Table 13.—Sanitary Facilities, Part I—Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
47D:					
Wintergreen, very stony	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
W:					
Water	100	Not rated		Not rated	

Table 13.—Sanitary Facilities, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1B:							
Buffstat	90	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	0.42
1C:							
Buffstat	90	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Slope	0.37			Depth to bedrock	0.42
1D:							
Buffstat	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
2C:							
Bugley	70	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Slope	0.37	Gravel content	0.54
		Slope	0.37			Seepage	0.50
Littlejoe	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	0.05	Slope	0.37
2D:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Gravel content	0.54
Littlejoe	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Depth to bedrock	0.05	Hard to compact	1.00
2E:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Gravel content	0.54
Littlejoe	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Depth to bedrock	0.05	Hard to compact	1.00

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3C:							
Catoctin	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
				Slope	0.37	Large stones content	0.44
		Large stones content	0.44				
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	
3E:							
Catoctin	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
4C:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
4D:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
4E:							
Clifford, severely eroded	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
5B:							
Clifford	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
5C:							
Clifford	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5D:							
Clifford------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
5E:							
Clifford------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
6B:							
Clifford, very stony	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
6C:							
Clifford, very stony	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
7A:							
Codorus-------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Seepage, bottom layer	1.00				
8B:							
Colleen-------------	90	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
						Hard to compact	0.50
8C:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Hard to compact	0.50
						Slope	0.37
8D:							
Colleen-------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
						Hard to compact	0.50
9A:							
Combs---------------	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Seepage	0.21
		Seepage, bottom layer	1.00	Seepage	1.00		

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
10A:							
Comus	85	Very limited		Very limited		Not limited	
		Flooding	1.00	Flooding	1.00		
		Seepage, bottom layer	1.00				
11A:							
Craigsville	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones	1.00
						Too sandy	0.50
		Large stones	1.00				
12D:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	0.94	Large stones content	0.96
12E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	0.94	Large stones content	0.96
12F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Hazleton	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	0.94	Large stones content	0.96
13E:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
13F:							
Dekalb	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Too clayey	0.50	Flooding	0.40	Too clayey	0.50
		Flooding	0.40				
15B:							
Delanco	60	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Too clayey	0.50	Flooding	0.40	Too clayey	0.50
		Flooding	0.40				
Elsinboro	40	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50	Flooding	0.40		
		Flooding	0.40				
15C:							
Delanco	60	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Too clayey	0.50	Flooding	0.40	Too clayey	0.50
		Flooding	0.40	Slope	0.37	Slope	0.37
Elsinboro	40	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
						Slope	0.37
		Too clayey	0.50	Flooding	0.40		
		Flooding	0.40	Slope	0.37		
16C:							
Edneytown	90	Very limited		Very limited		Somewhat limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
				Slope	0.37	Slope	0.37
		Too clayey	0.50				
		Slope	0.37				
16D:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
16E:							
Edneytown	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				
17B:							
Edneytown	55	Very limited		Very limited		Somewhat limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
						Depth to bedrock	1.00
17C:							
Edneytown	55	Very limited		Very limited		Somewhat limited	
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
				Slope	0.37	Slope	0.37
		Too clayey	0.50				
		Slope	0.37				
Peaks	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
				Slope	0.37	Depth to bedrock	1.00
		Slope	0.37				
17D:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
17E:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
17F:							
Edneytown	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
		Too clayey	0.50				
Peaks	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
18B:							
Elsinboro	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50	Flooding	0.40		
		Flooding	0.40				
19C:							
Fauquier	85	Very limited		Very limited		Somewhat limited	
		Depth to bedrock	1.00	Seepage	1.00	Slope	0.37
		Seepage, bottom layer	1.00	Slope	0.37	Seepage	0.21
				Depth to bedrock	0.08	Depth to bedrock	0.08
		Slope	0.37				
19D:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	0.21
		Seepage, bottom layer	1.00	Depth to bedrock	0.08	Depth to bedrock	0.08
19E:							
Fauquier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	0.21
		Seepage, bottom layer	1.00	Depth to bedrock	0.08	Depth to bedrock	0.08
20B:							
Haymarket	55	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
Mirerock	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
						Depth to bedrock	1.00
20C:							
Haymarket	55	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37
Mirerock	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Slope	0.37			Depth to bedrock	1.00

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
21B:							
Littlejoe-----------	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Depth to bedrock	0.05	Hard to compact	1.00
		Seepage, bottom layer	1.00			Depth to bedrock	0.05
21C:							
Littlejoe-----------	90	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Slope	0.37	Hard to compact	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	0.05	Slope	0.37
21D:							
Littlejoe-----------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Too clayey	1.00
		Too clayey	1.00	Depth to bedrock	0.05	Hard to compact	1.00
22B:							
Minnieville, severely eroded----	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
22C:							
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
22D:							
Minnieville, severely eroded----	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
23B:							
Minnieville---------	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
23C:							
Minnieville---------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
23D:							
Minnieville---------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
24C:							
Myersville----------	50	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Depth to bedrock	0.42	Depth to bedrock	0.42
		Slope	0.37	Slope	0.37	Slope	0.37

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24C:							
Catoctin	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
		Large stones content	0.44	Slope	0.37	Large stones content	0.44
24D:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.42	Depth to bedrock	0.42
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
24E:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.42	Depth to bedrock	0.42
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
24F:							
Myersville	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	0.42	Depth to bedrock	0.42
Catoctin	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Seepage	0.50
25B:							
Orenda	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
25C:							
Orenda	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
25D:							
Orenda	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
26C:							
Peaks	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Slope	0.37	Slope	0.37	Depth to bedrock	1.00

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
26C:							
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to bedrock	1.00	Gravel content	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	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 bedrock	1.00	Depth to bedrock	0.99	Depth to bedrock	0.99
27B:							
Pineywoods	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 bedrock	1.00	Depth to bedrock	0.99	Depth to bedrock	0.99
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
29C:							
Saunook	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
29D:							
Saunook	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
30B:							
Saunook, very stony	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
30C:							
Saunook, very stony	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.37	Too clayey	0.50
		Slope	0.37			Slope	0.37
30D:							
Saunook, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
30E:							
Saunook, very stony	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
31A:							
Sindion	45	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.68
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Seepage, bottom layer	1.00				
Yogaville	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Too clayey	0.50
32B:							
Sketerville	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
		Too clayey	0.50			Too clayey	0.50
						Hard to compact	0.50
33A:							
Speedwell	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Too clayey	0.50
		Too clayey	0.50				
34C:							
Spriggs	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.37	Slope	0.37	Slope	0.37
34D:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
34E:							
Spriggs	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
35B:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
35C:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.37	Slope	0.37	Slope	0.37
35D:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
35E:							
Spriggs, very stony-	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
36D:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom	1.00	Seepage	1.00	Too clayey	0.50
		layer					
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom	1.00			Too clayey	0.50
		layer					
		Too clayey	0.50				
36E:							
Stott Knob----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom	1.00	Seepage	1.00	Too clayey	0.50
		layer					
Rhodhiss------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom	1.00			Too clayey	0.50
		layer					
		Too clayey	0.50				
37D:							
Stott Knob, very stony--------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom	1.00	Seepage	1.00	Too clayey	0.50
		layer					
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom	1.00			Too clayey	0.50
		layer					
		Too clayey	0.50				

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
37E:							
Stott Knob, very stony	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Too clayey	0.50
Rhodhiss, very stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00			Too clayey	0.50
		Too clayey	0.50				
38A:							
Suches	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.11
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
39C:							
Sylco	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
				Slope	0.37		
		Large stones content	0.66			Seepage	0.50
Sylvatus	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.42	Slope	0.37	Large stones content	0.42
		Slope	0.37			Slope	0.37
39D:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
39E:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
39F:							
Sylco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
40C:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
		Large stones content	0.66	Slope	0.37	Seepage	0.50
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones content	0.42	Slope	0.37	Large stones content	0.42
		Slope	0.37			Slope	0.37
40D:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
40E:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
40F:							
Sylco, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Large stones content	0.66
Sylvatus, extremely stony	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
41E:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Large stones content	0.42			Large stones content	0.42
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
43C:							
Unison	85	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37
44B:							
Unison, very stony	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
44C:							
Unison, very stony	85	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37

Table 13.—Sanitary Facilities, Part II—Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
45B:							
Wintergreen, severely eroded----	90	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
45C:							
Wintergreen, severely eroded----	90	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37
45D:							
Wintergreen, severely eroded----	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
46B:							
Wintergreen---------	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
46C:							
Wintergreen---------	90	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37
46D:							
Wintergreen---------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
47B:							
Wintergreen, very stony--------------	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
47C:							
Wintergreen, very stony--------------	85	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.37	Too clayey	1.00
		Slope	0.37			Hard to compact	1.00
						Slope	0.37
47D:							
Wintergreen, very stony--------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
W:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 14.—Construction Materials, Part I

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. 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 symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
1B:					
Buffstat------------	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
1C:					
Buffstat------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
1D:					
Buffstat------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
2C:					
Bugley--------------	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Littlejoe-----------	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2D:					
Bugley--------------	70	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Littlejoe-----------	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2E:					
Bugley--------------	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Littlejoe-----------	30	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
3C:					
Catoctin------------	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop--------	30	Not rated		Not rated	

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
3D:					
Catoctin------------	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop--------	30	Not rated		Not rated	
3E:					
Catoctin------------	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop--------	30	Not rated		Not rated	
4B:					
Clifford, severely eroded-------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
4C:					
Clifford, severely eroded-------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
4D:					
Clifford, severely eroded-------------	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
4E:					
Clifford, severely eroded-------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
5B:					
Clifford------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
5C:					
Clifford------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
5D:					
Clifford------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
5E:					
Clifford------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
6B:					
Clifford, very stony	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
6C:					
Clifford, very stony	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
6D:					
Clifford, very stony	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
6E:					
Clifford, very stony	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
7A:					
Codorus-------------	85	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.01
8B:					
Colleen-------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
8C:					
Colleen-------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
8D:					
Colleen-------------	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
9A:					
Combs---------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
10A:					
Comus---------------	85	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.02
11A:					
Craigsville---------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
12D:					
Dekalb--------------	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
12D:					
Hazleton------------	40	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
12E:					
Dekalb--------------	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Hazleton------------	40	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
12F:					
Dekalb--------------	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Hazleton------------	40	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
13E:					
Dekalb--------------	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Rock outcrop--------	35	Not rated		Not rated	
13F:					
Dekalb--------------	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rock outcrop--------	35	Not rated		Not rated	
14B:					
Delanco-------------	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
15B:					
Delanco-------------	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Elsinboro-----------	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
15C:					
Delanco-------------	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Elsinboro-----------	40	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
16C:					
Edneytown	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
16D:					
Edneytown	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
16E:					
Edneytown	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
17B:					
Edneytown	55	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Peaks	35	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
17C:					
Edneytown	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Peaks	35	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
17D:					
Edneytown	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Peaks	35	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
17E:					
Edneytown	55	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Peaks	35	Fair		Fair	
		Thickest layer	0.09	Thickest layer	0.02
		Bottom layer	0.30	Bottom layer	0.02
17F:					
Edneytown	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Peaks	35	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
18B:					
Elsinboro	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
19C:					
Fauquier	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
19D:					
Fauquier	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
19E:					
Fauquier	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
20B:					
Haymarket	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mirerock	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
20C:					
Haymarket	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mirerock	40	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
21B:					
Littlejoe	90	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
21C:					
Littlejoe	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
21D:					
Littlejoe	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
22B:					
Minnieville, severely eroded	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
22C:					
Minnieville, severely eroded----	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
22D:					
Minnieville, severely eroded----	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
23B:					
Minnieville---------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
23C:					
Minnieville---------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
23D:					
Minnieville---------	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
24C:					
Myersville----------	50	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Catoctin------------	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
24D:					
Myersville----------	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Catoctin------------	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
24E:					
Myersville----------	50	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Catoctin------------	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
24F:					
Myersville----------	50	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
24F:					
Catoctin------------	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
25B:					
Orenda--------------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
25C:					
Orenda--------------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
25D:					
Orenda--------------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
26C:					
Peaks---------------	60	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
Rock outcrop--------	35	Not rated		Not rated	
26D:					
Peaks---------------	60	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
Rock outcrop--------	35	Not rated		Not rated	
26E:					
Peaks---------------	60	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
Rock outcrop--------	35	Not rated		Not rated	
26F:					
Peaks---------------	60	Fair		Fair	
		Thickest layer	0.09	Bottom layer	0.02
		Bottom layer	0.30	Thickest layer	0.02
Rock outcrop--------	35	Not rated		Not rated	
27A:					
Pineywoods----------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
27B:					
Pineywoods----------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
28:					
Pits, quarry--------	100	Not rated		Not rated	

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
29B:					
Saunook-------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
29C:					
Saunook-------------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
29D:					
Saunook-------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
30B:					
Saunook, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
30C:					
Saunook, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
30D:					
Saunook, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
30E:					
Saunook, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
31A:					
Sindion-------------	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Yogaville-----------	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
32B:					
Sketerville---------	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
33A:					
Speedwell-----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
34C:					
Spriggs-------------	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
34D:					
Spriggs-------------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
34E:					
Spriggs-------------	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
35B:					
Spriggs, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
35C:					
Spriggs, very stony-	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
35D:					
Spriggs, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
35E:					
Spriggs, very stony-	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
36D:					
Stott Knob----------	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rhodhiss------------	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
36E:					
Stott Knob----------	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rhodhiss------------	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
37D:					
Stott Knob, very stony--------------	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rhodhiss, very stony	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
37E:					
Stott Knob, very stony	55	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Rhodhiss, very stony	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
38A:					
Suches	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
39C:					
Sylco	60	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Sylvatus	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
39D:					
Sylco	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Sylvatus	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
39E:					
Sylco	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Sylvatus	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
39F:					
Sylco	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Sylvatus	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
40C:					
Sylco, extremely stony	60	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Sylvatus, extremely stony	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
40D:					
Sylco, extremely stony	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Sylvatus, extremely stony	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
40E:					
Sylco, extremely stony	60	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Sylvatus, extremely stony	35	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
40F:					
Sylco, extremely stony	60	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Sylvatus, extremely stony	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
41E:					
Sylvatus, extremely stony	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop	35	Not rated		Not rated	
41F:					
Sylvatus, extremely stony	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Rock outcrop	35	Not rated		Not rated	
42:					
Udorthents	100	Not rated		Not rated	
43B:					
Unison	85	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
43C:					
Unison	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
44B:					
Unison, very stony--	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
44C:					
Unison, very stony--	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
45B:					
Wintergreen, severely eroded----	90	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
45C:					
Wintergreen, severely eroded----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
45D:					
Wintergreen, severely eroded----	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
46B:					
Wintergreen---------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
46C:					
Wintergreen---------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
46D:					
Wintergreen---------	90	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
47B:					
Wintergreen, very stony--------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
47C:					
Wintergreen, very stony--------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 14.—Construction Materials, Part I—Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
47D:					
Wintergreen, very stony	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
W:					
Water	100	Not rated		Not rated	

Table 14.—Construction Materials, Part II

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
1B:							
Buffstat	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Depth to bedrock	0.58	Hard to reclaim (rock fragments)	0.05
				Shrink-swell	0.87		
		Too acid	0.50			Too acid	0.59
1C:							
Buffstat	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Depth to bedrock	0.58	Hard to reclaim (rock fragments)	0.05
				Shrink-swell	0.87		
		Too acid	0.50			Too acid	0.59
1D:							
Buffstat	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Depth to bedrock	0.58	Hard to reclaim (rock fragments)	0.05
		Too acid	0.50				
2C:							
Bugley	70	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
		Organic matter content low	0.12			Too acid	0.24
Littlejoe	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Depth to bedrock	0.95	Slope	0.63
				Shrink-swell	0.99	Too acid	0.95
		Too acid	0.50				
2D:							
Bugley	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.50	Rock fragments	0.00
		Organic matter content low	0.12			Depth to bedrock	0.00
Littlejoe	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Depth to bedrock	0.95	Too acid	0.95
		Too acid	0.50				
2E:							
Bugley	70	Poor		Poor		Poor	
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12			Slope	0.00

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
2E:							
Littlejoe-----------	30	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Low strength	0.00	Too clayey	0.00
				Depth to bedrock	0.95	Too acid	0.95
		Too acid	0.50				
3C:							
Catoctin------------	55	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.03	Stone content	0.99	Depth to bedrock	0.03
		Organic matter content low	0.12			Slope	0.63
Rock outcrop--------	30	Not rated		Not rated		Not rated	
3D:							
Catoctin------------	55	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.03	Slope	0.50	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.99	Depth to bedrock	0.03
Rock outcrop--------	30	Not rated		Not rated		Not rated	
3E:							
Catoctin------------	55	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.03	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Stone content	0.99	Depth to bedrock	0.03
Rock outcrop--------	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12				
		Too acid	0.84				
4C:							
Clifford, severely eroded-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12			Slope	0.63
		Too acid	0.84				
4D:							
Clifford, severely eroded-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
		Too acid	0.84				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
4E:							
Clifford, severely eroded	90	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Low strength	0.10	Too clayey	0.00
		Too acid	0.84				
5B:							
Clifford	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12				
		Too acid	0.84				
5C:							
Clifford	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12			Slope	0.63
		Too acid	0.84				
5D:							
Clifford	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
		Too acid	0.84				
5E:							
Clifford	90	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Low strength	0.10	Too clayey	0.00
		Too acid	0.84				
6B:							
Clifford, very stony	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12				
		Too acid	0.84				
6C:							
Clifford, very stony	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12			Slope	0.63
		Too acid	0.84				
6D:							
Clifford, very stony	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
		Too acid	0.84				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
6E:							
Clifford, very stony	90	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Low strength	0.10	Too clayey	0.00
		Too acid	0.84				
7A:							
Codorus-------------	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.14
				Wetness depth	0.14		
		Too acid	0.84				
8B:							
Colleen-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.99
		Too acid	0.61				
8C:							
Colleen-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Slope	0.63
						Too acid	0.99
		Too acid	0.61				
8D:							
Colleen-------------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Shrink-swell	0.87	Too acid	0.99
		Too acid	0.61				
9A:							
Combs---------------	85	Good		Good		Good	
10A:							
Comus---------------	85	Fair		Good		Fair	
		Too acid	0.54			Too acid	0.98
		Too sandy	0.98			Too sandy	0.98
11A:							
Craigsville---------	85	Poor		Poor		Poor	
		Cobble content	0.00	Cobble content	0.00	Hard to reclaim (rock fragments)	0.00
		Organic matter content low	0.12			Rock fragments	0.00
		Too acid	0.50			Too acid	0.95
12D:							
Dekalb--------------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Stone content	0.03	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.35	Too acid	0.59

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
12D:							
Hazleton------------	40	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Stone content	0.17	Cobble content	0.02	Hard to reclaim (rock fragments)	0.00
		Droughty	0.41	Depth to bedrock	0.07	Rock fragments	0.00
12E:							
Dekalb--------------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Stone content	0.03	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.35	Too acid	0.59
Hazleton------------	40	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Stone content	0.17	Cobble content	0.02	Hard to reclaim (rock fragments)	0.00
		Droughty	0.41	Depth to bedrock	0.07	Rock fragments	0.00
12F:							
Dekalb--------------	60	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Rock fragments	0.00
		Stone content	0.03	Depth to bedrock	0.00	Slope	0.00
		Organic matter content low	0.12	Stone content	0.35	Too acid	0.59
Hazleton------------	40	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Rock fragments	0.00
				Cobble content	0.02	Slope	0.00
		Stone content	0.17	Depth to bedrock	0.07	Hard to reclaim (rock fragments)	0.00
		Droughty	0.41				
13E:							
Dekalb--------------	60	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Stone content	0.03	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.35	Too acid	0.59
Rock outcrop--------	35	Not rated		Not rated		Not rated	
13F:							
Dekalb--------------	60	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Stone content	0.03	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.35	Too acid	0.59
Rock outcrop--------	35	Not rated		Not rated		Not rated	
14B:							
Delanco-------------	90	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.29
		Too acid	0.50	Wetness depth	0.29	Too acid	0.95

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
15B:							
Delanco	60	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.29
		Too acid	0.50	Wetness depth	0.29	Too acid	0.95
Elsinboro	40	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Too acid	0.95
		Too acid	0.50				
15C:							
Delanco	60	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.29
				Wetness depth	0.29	Slope	0.63
		Too acid	0.50			Too acid	0.95
Elsinboro	40	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.63
						Too acid	0.95
		Too acid	0.50				
16C:							
Edneytown	90	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.63
						Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
16D:							
Edneytown	90	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.00
				Slope	0.50	Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
16E:							
Edneytown	90	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.00	Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
17B:							
Edneytown	55	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Rock fragments	0.68
						Too acid	0.95
		Too acid	0.50				
		Water erosion	0.99				
Peaks	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Depth to bedrock	0.84
		Depth to bedrock	0.84			Too acid	0.98
17C:							
Edneytown	55	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.63
						Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
17C:							
Peaks---------------	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Slope	0.63
		Depth to bedrock	0.84			Depth to bedrock	0.84
17D:							
Edneytown-----------	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.00	Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
Peaks---------------	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
		Depth to bedrock	0.84			Depth to bedrock	0.84
17E:							
Edneytown-----------	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.00	Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
Peaks---------------	35	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.84			Depth to bedrock	0.84
17F:							
Edneytown-----------	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.00
				Slope	0.00	Rock fragments	0.68
		Too acid	0.50			Too acid	0.95
		Water erosion	0.99				
Peaks---------------	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
		Depth to bedrock	0.84			Depth to bedrock	0.84
18B:							
Elsinboro-----------	90	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Too acid	0.95
		Too acid	0.50				
19C:							
Fauquier------------	85	Poor		Fair		Poor	
		Too clayey	0.00	Depth to bedrock	0.92	Too clayey	0.00
		Water erosion	0.68	Shrink-swell	0.99	Slope	0.63
		Too acid	0.74				
19D:							
Fauquier------------	85	Poor		Fair		Poor	
		Too clayey	0.00	Slope	0.50	Too clayey	0.00
		Water erosion	0.68	Depth to bedrock	0.92	Slope	0.00
		Too acid	0.74	Shrink-swell	0.99		

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
19E:							
Fauquier	85	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Too clayey	0.00
		Water erosion	0.68	Depth to bedrock	0.92	Slope	0.00
		Too acid	0.74	Shrink-swell	0.99		
20B:							
Haymarket	55	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.74	Too acid	0.95
		Organic matter content low	0.12				
Mirerock	40	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Organic matter content low	0.12	Low strength	0.00	Depth to bedrock	0.54
				Shrink-swell	0.12		
		Droughty	0.38				
20C:							
Haymarket	55	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.12	Shrink-swell	0.74	Slope	0.63
		Organic matter content low	0.12			Too acid	0.95
Mirerock	40	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Organic matter content low	0.12	Low strength	0.00	Depth to bedrock	0.54
				Shrink-swell	0.12	Slope	0.63
		Droughty	0.38				
21B:							
Littlejoe	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Depth to bedrock	0.95	Too acid	0.95
				Shrink-swell	0.99		
		Too acid	0.50				
21C:							
Littlejoe	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Depth to bedrock	0.95	Slope	0.63
				Shrink-swell	0.99	Too acid	0.95
		Too acid	0.50				
21D:							
Littlejoe	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Depth to bedrock	0.95	Too acid	0.95
		Too acid	0.50				
22B:							
Minnieville, severely eroded	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87		
		Too acid	0.74				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
22C:							
Minnieville, severely eroded	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Slope	0.63
		Too acid	0.74				
22D:							
Minnieville, severely eroded	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Shrink-swell	0.87		
		Too acid	0.74				
23B:							
Minnieville	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87		
		Too acid	0.74				
23C:							
Minnieville	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Slope	0.63
		Too acid	0.74				
23D:							
Minnieville	85	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Organic matter content low	0.12	Slope	0.50	Slope	0.00
				Shrink-swell	0.87		
		Too acid	0.74				
24C:							
Myersville	50	Fair		Fair		Fair	
		Organic matter content low	0.12	Low strength	0.22	Slope	0.63
				Depth to bedrock	0.58	Hard to reclaim (rock fragments)	0.68
		Too acid	0.54				
		Water erosion	0.90			Too acid	0.98
Catoctin	35	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.03	Stone content	0.99	Depth to bedrock	0.03
		Organic matter content low	0.12			Slope	0.63
24D:							
Myersville	50	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.22	Hard to reclaim (rock fragments)	0.68
		Too acid	0.54	Depth to bedrock	0.58		
		Water erosion	0.90			Too acid	0.98

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
24D:							
Catoctin	35	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.03	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.99	Depth to bedrock	0.03
24E:							
Myersville	50	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.22	Hard to reclaim (rock fragments)	0.68
		Too acid	0.54	Depth to bedrock	0.58		
		Water erosion	0.90			Too acid	0.98
Catoctin	35	Fair		Poor		Poor	
		Droughty	0.02	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.03	Depth to bedrock	0.00	Slope	0.00
		Organic matter content low	0.12	Stone content	0.99	Depth to bedrock	0.03
24F:							
Myersville	50	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.22	Hard to reclaim (rock fragments)	0.68
		Too acid	0.54	Depth to bedrock	0.58		
		Water erosion	0.90			Too acid	0.98
Catoctin	35	Fair		Poor		Poor	
		Droughty	0.02	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.03	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Stone content	0.99	Depth to bedrock	0.03
25B:							
Orenda	85	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.05
		Organic matter content low	0.12	Shrink-swell	0.99	Too acid	0.99
		Too acid	0.61				
25C:							
Orenda	85	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.05
		Organic matter content low	0.12	Shrink-swell	0.99	Slope	0.63
						Too acid	0.99
		Too acid	0.61				
25D:							
Orenda	85	Fair		Poor		Poor	
		Too clayey	0.08	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.05
				Shrink-swell	0.99	Too acid	0.99
		Too acid	0.61				
26C:							
Peaks	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50			Slope	0.63
		Depth to bedrock	0.84			Depth to bedrock	0.84
Rock outcrop	35	Not rated		Not rated		Not rated	

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
26D:							
Peaks	60	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
		Depth to bedrock	0.84			Depth to bedrock	0.84
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.84			Depth to bedrock	0.84
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Too acid	0.50	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.84			Depth to bedrock	0.84
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Wetness depth	0.00	Wetness depth	0.00
				Depth to bedrock	0.01		
		Too acid	0.50	Low strength	0.10		
		Droughty	0.99				
27B:							
Pineywoods	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Wetness depth	0.00	Wetness depth	0.00
				Depth to bedrock	0.01		
		Too acid	0.50	Low strength	0.10		
		Droughty	0.99				
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Fair		Poor		Fair	
		Too acid	0.61	Low strength	0.00	Rock fragments	0.32
						Too acid	0.99
29C:							
Saunook	85	Fair		Poor		Fair	
		Too acid	0.61	Low strength	0.00	Rock fragments	0.32
						Slope	0.63
						Too acid	0.99
29D:							
Saunook	85	Fair		Poor		Poor	
		Too acid	0.61	Low strength	0.00	Slope	0.00
				Slope	0.50	Rock fragments	0.32
						Too acid	0.99

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
30B:							
Saunook, very stony-	85	Fair		Poor		Fair	
		Too acid	0.61	Low strength	0.00	Rock fragments	0.32
						Too acid	0.99
30C:							
Saunook, very stony-	85	Fair		Poor		Fair	
		Too acid	0.61	Low strength	0.00	Rock fragments	0.32
						Slope	0.63
						Too acid	0.99
30D:							
Saunook, very stony-	85	Fair		Poor		Poor	
		Too acid	0.61	Low strength	0.00	Slope	0.00
				Slope	0.50	Rock fragments	0.32
						Too acid	0.99
30E:							
Saunook, very stony-	85	Fair		Poor		Poor	
		Too acid	0.61	Slope	0.00	Slope	0.00
				Low strength	0.00	Rock fragments	0.32
						Too acid	0.99
31A:							
Sindion-------------	45	Fair		Poor		Fair	
		Too acid	0.84	Low strength	0.00	Wetness depth	0.76
				Wetness depth	0.76		
Yogaville-----------	40	Fair		Poor		Poor	
		Too acid	0.84	Wetness depth	0.00	Wetness depth	0.00
				Low strength	0.00		
32B:							
Sketerville---------	90	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.10	Too clayey	0.00
		Too acid	0.12	Wetness depth	0.53	Wetness depth	0.53
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
33A:							
Speedwell-----------	85	Good		Poor		Good	
				Low strength	0.00		
34C:							
Spriggs-------------	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Depth to bedrock	0.00	Depth to bedrock	0.54
				Low strength	0.78	Slope	0.63
		Depth to bedrock	0.54			Rock fragments	0.68
		Too acid	0.54				
34D:							
Spriggs-------------	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Depth to bedrock	0.00	Slope	0.00
				Slope	0.50	Depth to bedrock	0.54
		Depth to bedrock	0.54	Low strength	0.78	Rock fragments	0.68
		Too acid	0.54				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
34E:							
Spriggs-------------	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Depth to bedrock	0.54	Depth to bedrock	0.00	Depth to bedrock	0.54
		Too acid	0.54	Low strength	0.78	Rock fragments	0.68
35B:							
Spriggs, very stony-	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Depth to bedrock	0.00	Depth to bedrock	0.54
		Depth to bedrock	0.54	Low strength	0.78	Rock fragments	0.68
		Too acid	0.54			Too acid	0.98
35C:							
Spriggs, very stony-	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Depth to bedrock	0.00	Depth to bedrock	0.54
		Depth to bedrock	0.54	Low strength	0.78	Slope	0.63
		Too acid	0.54			Rock fragments	0.68
35D:							
Spriggs, very stony-	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.54	Slope	0.50	Depth to bedrock	0.54
		Too acid	0.54	Low strength	0.78	Rock fragments	0.68
35E:							
Spriggs, very stony-	85	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Depth to bedrock	0.54	Depth to bedrock	0.00	Depth to bedrock	0.54
		Too acid	0.54	Low strength	0.78	Rock fragments	0.68
36D:							
Stott Knob----------	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.43	Low strength	0.00	Depth to bedrock	0.54
		Too acid	0.50	Slope	0.50	Too acid	0.95
Rhodhiss------------	35	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.00
		Too acid	0.16	Slope	0.50	Too acid	0.95
36E:							
Stott Knob----------	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Droughty	0.43	Depth to bedrock	0.00	Depth to bedrock	0.54
		Too acid	0.50	Low strength	0.00	Too acid	0.95
Rhodhiss------------	35	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Too acid	0.16	Low strength	0.00	Too acid	0.95

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
37D:							
Stott Knob, very stony	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.43	Low strength	0.00	Depth to bedrock	0.54
		Too acid	0.50	Slope	0.50	Too acid	0.95
Rhodhiss, very stony	35	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.00
		Too acid	0.16	Slope	0.50	Too acid	0.95
37E:							
Stott Knob, very stony	55	Fair		Poor		Poor	
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
		Droughty	0.43	Depth to bedrock	0.00	Depth to bedrock	0.54
		Too acid	0.50	Low strength	0.00	Too acid	0.95
Rhodhiss, very stony	35	Fair		Poor		Poor	
		Organic matter content low	0.12	Low strength	0.00	Slope	0.00
		Too acid	0.16	Slope	0.00	Too acid	0.95
38A:							
Suches	85	Fair		Fair		Fair	
		Too acid	0.54	Low strength	0.78	Too acid	0.98
39C:							
Sylco	60	Fair		Poor		Poor	
		Droughty	0.07	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Low strength	0.22	Too acid	0.59
		Too acid	0.50	Cobble content	0.38	Slope	0.63
Sylvatus	35	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Cobble content	0.86	Rock fragments	0.00
		Organic matter content low	0.12			Too acid	0.59
39D:							
Sylco	60	Fair		Poor		Poor	
		Droughty	0.07	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Depth to bedrock	0.00	Rock fragments	0.00
		Too acid	0.50	Low strength	0.22	Too acid	0.59
Sylvatus	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
		Organic matter content low	0.12	Cobble content	0.86	Slope	0.00

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
39E:							
Sylco	60	Fair		Poor		Poor	
		Droughty	0.07	Depth to bedrock	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.00	Rock fragments	0.00
				Low strength	0.22	Too acid	0.59
		Too acid	0.50				
Sylvatus	35	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Depth to bedrock	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Cobble content	0.86	Depth to bedrock	0.00
39F:							
Sylco	60	Fair		Poor		Poor	
		Droughty	0.07	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Depth to bedrock	0.00	Rock fragments	0.00
				Low strength	0.22	Too acid	0.59
		Too acid	0.50				
Sylvatus	35	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Organic matter content low	0.12	Cobble content	0.86	Slope	0.00
40C:							
Sylco, extremely stony	60	Fair		Poor		Poor	
		Droughty	0.07	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Low strength	0.22	Too acid	0.59
				Cobble content	0.38	Slope	0.63
		Too acid	0.50				
Sylvatus, extremely stony	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.86	Depth to bedrock	0.00
		Organic matter content low	0.12			Too acid	0.59
40D:							
Sylco, extremely stony	60	Fair		Poor		Poor	
		Droughty	0.07	Depth to bedrock	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.00	Rock fragments	0.00
				Low strength	0.22	Too acid	0.59
		Too acid	0.50				
Sylvatus, extremely stony	35	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
		Organic matter content low	0.12	Cobble content	0.86	Slope	0.00

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
40E:							
Sylco, extremely stony	60	Fair		Poor		Poor	
		Droughty	0.07	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Depth to bedrock	0.00	Slope	0.00
				Low strength	0.22	Too acid	0.59
		Too acid	0.50				
Sylvatus, extremely stony	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Cobble content	0.86	Depth to bedrock	0.00
40F:							
Sylco, extremely stony	60	Fair		Poor		Poor	
		Droughty	0.07	Depth to bedrock	0.00	Rock fragments	0.00
		Organic matter content low	0.12	Slope	0.00	Slope	0.00
				Low strength	0.22	Too acid	0.59
		Too acid	0.50				
Sylvatus, extremely stony	35	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
		Organic matter content low	0.12	Cobble content	0.86	Rock fragments	0.00
41E:							
Sylvatus, extremely stony	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Organic matter content low	0.12	Cobble content	0.86	Depth to bedrock	0.00
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	Poor		Poor		Poor	
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Organic matter content low	0.12	Cobble content	0.86	Rock fragments	0.00
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.98
		Too acid	0.54				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
43C:							
Unison--------------	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Slope	0.63
						Too acid	0.98
		Too acid	0.54				
44B:							
Unison, very stony--	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.98
		Too acid	0.54				
44C:							
Unison, very stony--	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Slope	0.63
						Too acid	0.98
		Too acid	0.54				
45B:							
Wintergreen, severely eroded----	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Rock fragments	0.88
		Too acid	0.50				
45C:							
Wintergreen, severely eroded----	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Slope	0.63
		Too acid	0.50				
45D:							
Wintergreen, severely eroded----	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Shrink-swell	0.87	Too acid	0.59
		Too acid	0.50				
46B:							
Wintergreen---------	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Rock fragments	0.88
		Too acid	0.50				
46C:							
Wintergreen---------	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Slope	0.63
		Too acid	0.50				

Table 14.—Construction Materials, Part II—Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
46D:							
Wintergreen	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Shrink-swell	0.87	Too acid	0.59
		Too acid	0.50				
47B:							
Wintergreen, very stony	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Rock fragments	0.88
		Too acid	0.50				
47C:							
Wintergreen, very stony	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Organic matter content low	0.12	Shrink-swell	0.87	Too acid	0.59
						Slope	0.63
		Too acid	0.50				
47D:							
Wintergreen, very stony	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Organic matter content low	0.12	Slope	0.50	Too clayey	0.00
				Shrink-swell	0.87	Too acid	0.59
		Too acid	0.50				
W:							
Water	100	Not rated		Not rated		Not rated	

Table 15.—Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map 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
1B:							
Buffstat	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Thin layer	0.11	Depth to water	1.00
		Slope	0.32				
		Depth to bedrock	0.01				
1C:							
Buffstat	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.11	Depth to water	1.00
		Seepage	0.70				
		Depth to bedrock	0.01				
1D:							
Buffstat	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.11	Depth to water	1.00
		Seepage	0.70				
		Depth to bedrock	0.01				
2C:							
Bugley	70	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00				
Littlejoe	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.01	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
2D:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00				
Littlejoe	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.01	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
2E:							
Bugley	70	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00				
Littlejoe	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.01	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
3C:							
Catoctin	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		

Table 15.—Water Management—Continued

Map 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
3C:							
Rock outcrop	30	Not rated		Not rated		Not rated	
3D:							
Catoctin	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
Rock outcrop	30	Not rated		Not rated		Not rated	
3E:							
Catoctin	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
Rock outcrop	30	Not rated		Not rated		Not rated	
4B:							
Clifford, severely eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.99	Depth to water	1.00
		Slope	0.32				
4C:							
Clifford, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.99	Depth to water	1.00
		Seepage	0.70				
4D:							
Clifford, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.99	Depth to water	1.00
		Seepage	0.70				
4E:							
Clifford, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.99	Depth to water	1.00
		Seepage	0.70				
5B:							
Clifford	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
		Slope	0.32				
5C:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				
5D:							
Clifford	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				

Table 15.—Water Management—Continued

Map 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
5E:							
Clifford------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				
6B:							
Clifford, very stony	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.70	Piping	1.00	Depth to water	1.00
		Slope	0.32				
6C:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				
6D:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				
6E:							
Clifford, very stony	90	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Seepage	0.70				
7A:							
Codorus-------------	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.02		
				Seepage	0.01		
8B:							
Colleen-------------	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.32	Hard to pack	0.41	Depth to water	1.00
		Seepage	0.05				
8C:							
Colleen-------------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.41	Depth to water	1.00
		Seepage	0.05				
8D:							
Colleen-------------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.41	Depth to water	1.00
		Seepage	0.05				
9A:							
Combs---------------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
10A:							
Comus---------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.02	Depth to water	1.00
11A:							
Craigsville---------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Large stones content	1.00	Depth to water	1.00
				Seepage	0.10		

Table 15.—Water Management—Continued

Map 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
12D:							
Dekalb	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	1.00	Large stones content	0.68		
		Depth to bedrock	0.83				
Hazleton	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.90	Depth to water	1.00
		Slope	1.00	Seepage	0.43		
		Depth to bedrock	0.33	Thin layer	0.34		
12E:							
Dekalb	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	1.00	Large stones content	0.68		
		Depth to bedrock	0.83				
Hazleton	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.90	Depth to water	1.00
		Slope	1.00	Seepage	0.43		
		Depth to bedrock	0.33	Thin layer	0.34		
12F:							
Dekalb	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	1.00	Large stones content	0.68		
		Depth to bedrock	0.83				
Hazleton	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Large stones content	0.90	Depth to water	1.00
		Slope	1.00	Seepage	0.43		
		Depth to bedrock	0.33	Thin layer	0.34		
13E:							
Dekalb	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	1.00	Large stones content	0.68		
		Depth to bedrock	0.83				
Rock outcrop	35	Not rated		Not rated		Not rated	
13F:							
Dekalb	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	1.00	Large stones content	0.68		
		Depth to bedrock	0.83				
Rock outcrop	35	Not rated		Not rated		Not rated	
14B:							
Delanco	90	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
		Slope	0.32	Piping	0.49	Cutbanks cave	0.10

Table 15.—Water Management—Continued

Map 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
15B:							
Delanco	60	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
		Slope	0.32	Piping	0.49	Cutbanks cave	0.10
Elsinboro	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.09	Depth to water	1.00
		Slope	0.32				
15C:							
Delanco	60	Very limited		Very limited		Somewhat limited	
		Slope	1.00	Depth to saturated zone	1.00	Slow refill	0.30
		Seepage	0.70	Piping	0.49	Cutbanks cave	0.10
Elsinboro	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.09	Depth to water	1.00
		Seepage	0.70				
16C:							
Edneytown	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
16D:							
Edneytown	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
16E:							
Edneytown	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
17B:							
Edneytown	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	0.32				
Peaks	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Depth to bedrock	0.46	Seepage	0.30		
		Slope	0.32				
17C:							
Edneytown	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
Peaks	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
17D:							
Edneytown	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				

Table 15.—Water Management—Continued

Map 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
17D:							
Peaks	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
17E:							
Edneytown	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
Peaks	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
17F:							
Edneytown	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.83	Depth to water	1.00
		Slope	1.00				
Peaks	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
18B:							
Elsinboro	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.09	Depth to water	1.00
		Slope	0.32				
19C:							
Fauquier	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.02	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
19D:							
Fauquier	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.02	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
19E:							
Fauquier	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.02	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
20B:							
Haymarket	55	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.54	Depth to water	1.00
		Slope	0.32				
Mirerock	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.32	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.11	Hard to pack	0.62		
		Seepage	0.03				

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
20C:							
Haymarket-----------	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.54	Depth to water	1.00
		Seepage	0.70				
Mirerock------------	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.11	Hard to pack	0.62		
		Seepage	0.03				
21B:							
Littlejoe-----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.01	Depth to water	1.00
		Slope	0.32				
		Depth to bedrock	0.01				
21C:							
Littlejoe-----------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.01	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
21D:							
Littlejoe-----------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.01	Depth to water	1.00
		Seepage	1.00				
		Depth to bedrock	0.01				
22B:							
Minnieville, severely eroded----	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.79	Depth to water	1.00
		Slope	0.32				
22C:							
Minnieville, severely eroded----	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.79	Depth to water	1.00
		Seepage	0.70				
22D:							
Minnieville, severely eroded----	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.79	Depth to water	1.00
		Seepage	0.70				
23B:							
Minnieville---------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.75	Depth to water	1.00
		Slope	0.32				
23C:							
Minnieville---------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.75	Depth to water	1.00
		Seepage	0.70				
23D:							
Minnieville---------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.75	Depth to water	1.00
		Seepage	0.70				

Table 15.—Water Management—Continued

Map 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
24C:							
Myersville----------	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.23	Depth to water	1.00
		Seepage	0.70	Thin layer	0.11		
		Depth to bedrock	0.01				
Catoctin------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
24D:							
Myersville----------	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.23	Depth to water	1.00
		Seepage	0.70	Thin layer	0.11		
		Depth to bedrock	0.01				
Catoctin------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
24E:							
Myersville----------	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.23	Depth to water	1.00
		Seepage	0.70	Thin layer	0.11		
		Depth to bedrock	0.01				
Catoctin------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
24F:							
Myersville----------	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.23	Depth to water	1.00
		Seepage	0.70	Thin layer	0.11		
		Depth to bedrock	0.01				
Catoctin------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Slope	1.00	Piping	0.72		
		Depth to bedrock	0.86	Large stones content	0.44		
25B:							
Orenda--------------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Seepage	0.03	Depth to water	1.00
		Slope	0.32	Piping	0.01		
25C:							
Orenda--------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.03	Depth to water	1.00
		Seepage	0.70	Piping	0.01		

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
25D:							
Orenda	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Seepage	0.03	Depth to water	1.00
		Seepage	0.70	Piping	0.01		
26C:							
Peaks	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
Rock outcrop	35	Not rated		Not rated		Not rated	
26D:							
Peaks	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
Rock outcrop	35	Not rated		Not rated		Not rated	
26E:							
Peaks	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
Rock outcrop	35	Not rated		Not rated		Not rated	
26F:							
Peaks	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.74	Depth to water	1.00
		Slope	1.00	Seepage	0.30		
		Depth to bedrock	0.46				
Rock outcrop	35	Not rated		Not rated		Not rated	
27A:							
Pineywoods	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.43	Depth to saturated zone	1.00	Slow refill	0.57
		Depth to bedrock	0.01	Thin layer	0.42	Cutbanks cave	0.10
27B:							
Pineywoods	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.43	Depth to saturated zone	1.00	Slow refill	0.57
		Slope	0.32			Cutbanks cave	0.10
		Depth to bedrock	0.01	Thin layer	0.42		
28:							
Pits, quarry	100	Not rated		Not rated		Not rated	
29B:							
Saunook	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.29	Depth to water	1.00
		Slope	0.32				
29C:							
Saunook	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.29	Depth to water	1.00
		Seepage	0.70				

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29D:							
Saunook-------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.29	Depth to water	1.00
		Seepage	0.70				
30B:							
Saunook, very stony-	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.29	Depth to water	1.00
		Slope	0.32				
30C:							
Saunook, very stony-	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.29	Depth to water	1.00
		Seepage	0.70				
30D:							
Saunook, very stony-	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.29	Depth to water	1.00
		Seepage	0.70				
30E:							
Saunook, very stony-	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.29	Depth to water	1.00
		Seepage	0.70				
31A:							
Sindion-------------	45	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	0.95	Cutbanks cave	0.10
				Piping	0.64	Depth to saturated zone	0.02
				Seepage	0.03		
Yogaville-----------	40	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.70	Depth to saturated zone	1.00	Slow refill	0.30
				Ponding	1.00	Cutbanks cave	0.10
				Piping	0.02		
32B:							
Sketerville---------	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.32	Depth to saturated zone	0.99	Slow refill	0.95
		Seepage	0.05	Hard to pack	0.53	Cutbanks cave	0.10
						Depth to saturated zone	0.01
33A:							
Speedwell-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.05	Depth to water	1.00
34C:							
Spriggs-------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				
34D:							
Spriggs-------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				

Table 15.—Water Management—Continued

Map 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
34E:							
Spriggs	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				
35B:							
Spriggs, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.42	Piping	0.25		
		Slope	0.32				
35C:							
Spriggs, very stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				
35D:							
Spriggs, very stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				
35E:							
Spriggs, very stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	0.70	Piping	0.25		
		Depth to bedrock	0.42				
36D:							
Stott Knob	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	1.00	Piping	0.51		
		Depth to bedrock	0.11				
Rhodhiss	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.21	Depth to water	1.00
		Seepage	1.00				
36E:							
Stott Knob	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	1.00	Piping	0.51		
		Depth to bedrock	0.11				
Rhodhiss	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.21	Depth to water	1.00
		Seepage	1.00				
37D:							
Stott Knob, very stony	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	1.00	Piping	0.51		
		Depth to bedrock	0.11				
Rhodhiss, very stony	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.21	Depth to water	1.00
		Seepage	1.00				

Table 15.—Water Management—Continued

Map 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
37E:							
Stott Knob, very stony	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.86	Depth to water	1.00
		Seepage	1.00	Piping	0.51		
		Depth to bedrock	0.11				
Rhodhiss, very stony	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Piping	0.21	Depth to water	1.00
		Seepage	1.00				
38A:							
Suches	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.70	Piping	0.94	Slow refill	0.30
				Depth to saturated zone	0.46	Depth to saturated zone	0.24
						Cutbanks cave	0.10
39C:							
Sylco	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77	Piping	0.07		
Sylvatus	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Large stones content	0.42		
39D:							
Sylco	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77	Piping	0.07		
Sylvatus	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 content	0.42		
39E:							
Sylco	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77	Piping	0.07		
Sylvatus	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 content	0.42		
39F:							
Sylco	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77	Piping	0.07		

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
39F:							
Sylvatus------------	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 content	0.42		
40C:							
Sylco, extremely stony--------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77				
				Piping	0.07		
Sylvatus, extremely stony--------------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Large stones content	0.42		
40D:							
Sylco, extremely stony--------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77				
				Piping	0.07		
Sylvatus, extremely stony--------------	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 content	0.42		
40E:							
Sylco, extremely stony--------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77				
				Piping	0.07		
Sylvatus, extremely stony--------------	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 content	0.42		
40F:							
Sylco, extremely stony--------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.77	Depth to water	1.00
		Slope	1.00	Large stones content	0.66		
		Depth to bedrock	0.77				
				Piping	0.07		
Sylvatus, extremely stony--------------	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 content	0.42		

Table 15.—Water Management—Continued

Map 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
41E:							
Sylvatus, extremely stony	60	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 content	0.42		
Rock outcrop	35	Not rated		Not rated		Not rated	
41F:							
Sylvatus, extremely stony	60	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 content	0.42		
Rock outcrop	35	Not rated		Not rated		Not rated	
42:							
Udorthents	100	Not rated		Not rated		Not rated	
43B:							
Unison	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.59	Depth to water	1.00
		Slope	0.32				
43C:							
Unison	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.59	Depth to water	1.00
		Seepage	0.70				
44B:							
Unison, very stony	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.59	Depth to water	1.00
		Slope	0.32				
44C:							
Unison, very stony	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.59	Depth to water	1.00
		Seepage	0.70				
45B:							
Wintergreen, severely eroded	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.59	Depth to water	1.00
		Slope	0.32				
45C:							
Wintergreen, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.59	Depth to water	1.00
		Seepage	0.70				
45D:							
Wintergreen, severely eroded	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.59	Depth to water	1.00
		Seepage	0.70				

Table 15.—Water Management—Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
46B:							
Wintergreen---------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.46	Depth to water	1.00
		Slope	0.32				
46C:							
Wintergreen---------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.46	Depth to water	1.00
		Seepage	0.70				
46D:							
Wintergreen---------	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.46	Depth to water	1.00
		Seepage	0.70				
47B:							
Wintergreen, very stony--------------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Hard to pack	0.46	Depth to water	1.00
		Slope	0.32				
47C:							
Wintergreen, very stony--------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.46	Depth to water	1.00
		Seepage	0.70				
47D:							
Wintergreen, very stony--------------	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Hard to pack	0.46	Depth to water	1.00
		Seepage	0.70				
W:							
Water---------------	100	Not rated		Not rated		Not rated	

Table 16.—Engineering Properties

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
1B:												
Buffstat--------	0-3	Silt loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	80-100	80-100	65-100	55-90	22-41	6-19
	3-7	Silt loam, loam, fine sandy loam, channery silt loam, channery loam	CL, GC-GM	A-2, A-6	0	0-20	55-100	55-100	45-100	35-90	21-39	6-19
	7-39	Clay, silty clay loam, channery silty clay, channery clay loam, channery clay	CH, GC	A-7	0-5	0-25	70-100	65-100	60-100	45-85	43-59	25-36
	39-50	Channery silty clay loam, channery loam, very channery clay loam, silt loam	CL, GC	A-2, A-7	0-5	0-35	50-100	50-100	45-100	35-95	31-50	13-29
	50-60	Bedrock			---	---	---	---	---	---	---	---
1C:												
Buffstat--------	0-3	Silt loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	80-100	80-100	65-100	55-90	22-41	6-19
	3-7	Silt loam, loam, fine sandy loam, channery silt loam, channery loam	CL, GC-GM	A-2, A-6	0	0-20	55-100	55-100	45-100	35-90	21-39	6-19
	7-39	Clay, silty clay loam, channery silty clay, channery clay loam, channery clay	CH, GC	A-7	0-5	0-25	70-100	65-100	60-100	45-85	43-59	25-36
	39-50	Channery silty clay loam, channery loam, very channery clay loam, silt loam	CL, GC	A-2, A-7	0-5	0-35	50-100	50-100	45-100	35-95	31-50	13-29
	50-60	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
1D:												
Buffstat--------	0-3	Silt loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	80-100	80-100	65-100	55-90	22-41	6-19
	3-7	Silt loam, loam, fine sandy loam, channery silt loam, channery loam	CL, GC-GM	A-2, A-6	0	0-20	55-100	55-100	45-100	35-90	21-39	6-19
	7-39	Clay, silty clay loam, channery silty clay, channery clay loam, channery clay	CH, GC	A-7	0-5	0-25	70-100	65-100	60-100	45-85	43-59	25-36
	39-50	Channery silty clay loam, channery loam, very channery clay loam, silt loam	CL, GC	A-2, A-7	0-5	0-35	50-100	50-100	45-100	35-95	31-50	13-29
	50-60	Bedrock			---	---	---	---	---	---	---	---
2C:												
Bugley----------	0-2	Very channery silt loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	45-65	45-65	30-60	19-41	3-19
	2-6	Very channery silt loam, channery loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	50-85	50-85	30-75	18-39	3-19
	6-16	Very channery silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery clay loam	CL, GC, GC-GM	A-1, A-6, A-7	0-2	10-35	25-70	25-70	20-70	15-65	20-44	6-25
	16-26	Bedrock			---	---	---	---	---	---	---	---
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
2D:												
Bugley----------	0-2	Very channery silt loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	45-65	45-65	30-60	19-41	3-19
	2-6	Very channery silt loam, channery loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	50-85	50-85	30-75	18-39	3-19
	6-16	Very channery silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery clay loam	CL, GC, GC-GM	A-1, A-6, A-7	0-2	10-35	25-70	25-70	20-70	15-65	20-44	6-25
	16-26	Bedrock			---	---	---	---	---	---	---	---
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---
2E:												
Bugley----------	0-2	Very channery silt loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	45-65	45-65	30-60	19-41	3-19
	2-6	Very channery silt loam, channery loam	CL, GC, GM	A-2, A-6	0-2	8-15	50-100	50-85	50-85	30-75	18-39	3-19
	6-16	Very channery silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery clay loam	CL, GC, GC-GM	A-1, A-6, A-7	0-2	10-35	25-70	25-70	20-70	15-65	20-44	6-25
	16-26	Bedrock			---	---	---	---	---	---	---	---
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
3C:												
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
3D:												
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
3E:												
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
4B:												
Clifford, severely eroded	0-10	Clay loam	CL-ML, ML	A-4	0	0-8	80-100	80-100	70-95	55-80	25-34	4-8
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
4C:												
Clifford, severely eroded	0-10	Clay loam	CL-ML, ML	A-4	0	0-8	80-100	80-100	70-95	55-80	25-34	4-8
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
4D:												
Clifford,												
severely eroded	0-10	Clay loam	CL-ML, ML	A-4	0	0-8	80-100	80-100	70-95	55-80	25-34	4-8
	10-50	Clay, clay loam	ML, MH	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
4E:												
Clifford,												
severely eroded	0-10	Clay loam	CL-ML, ML	A-4	0	0-8	80-100	80-100	70-95	55-80	25-34	4-8
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
5B:												
Clifford--------	0-10	Loam	ML, SM	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
5C:												
Clifford--------	0-10	Loam	SM, ML	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	ML, MH	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
5D:												
Clifford--------	0-10	Loam	ML, SM	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	ML, MH	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
5E:												
Clifford--------	0-10	Loam	SM, ML	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	ML, MH	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
6B:												
Clifford, very												
stony----------	0-10	Loam	ML, SM	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
6C:												
Clifford, very												
stony----------	0-10	Loam	ML, SM	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	ML, MH	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
6D:												
Clifford, very stony----------	0-10	Loam	ML, SM	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
6E:												
Clifford, very stony----------	0-10	Loam	SM, ML	A-4	0	0-10	80-100	80-100	70-95	45-70	11-20	NP-2
	10-50	Clay, clay loam	MH, ML	A-4, A-7	0	0-10	80-100	80-100	60-100	50-100	31-56	7-18
	50-72	Clay, clay loam	ML	A-4, A-7	0	0-10	80-100	80-100	70-100	55-95	31-49	7-15
7A:												
Codorus---------	0-7	Loam	SC, CL, ML	A-4, A-6, A-7	0	0	75-100	75-100	60-95	45-75	29-45	9-18
	7-40	Clay loam, silty clay loam, silt loam, loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-95	45-75	27-44	12-25
	40-58	Clay loam, silty clay loam, silt loam, gravelly loam, fine sandy loam	GM, CL	A-6, A-2, A-7	0	0	60-100	60-100	40-100	30-80	16-49	2-28
	58-65	Clay loam, silty clay loam, silt loam, gravelly loam, fine sandy loam	GM, CL, SC	A-1, A-7, A-4	0	0	60-100	60-100	50-100	20-65	16-49	2-28
8B:												
Colleen---------	0-6	Loam	CL	A-4, A-6	0	0	95-100	85-100	70-95	50-75	21-41	6-19
	6-50	Clay, silty clay loam, gravelly clay loam	CL, CH	A-7	0	0	95-100	85-100	75-100	60-95	43-67	25-44
	50-65	Silty clay loam, clay loam, silt loam, gravelly loam, sandy loam	CL, SC	A-2, A-4, A-6	0	0	55-100	50-100	40-100	35-95	22-46	6-25
8C:												
Colleen---------	0-6	Loam	CL	A-4, A-6	0	0	95-100	85-100	70-95	50-75	21-41	6-19
	6-50	Clay, silty clay loam, gravelly clay loam	CH, CL	A-7	0	0	95-100	85-100	75-100	60-95	43-67	25-44
	50-65	Silty clay loam, clay loam, silt loam, gravelly loam, sandy loam	SC, CL	A-2, A-4, A-6	0	0	55-100	50-100	40-100	35-95	22-46	6-25

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
8D:												
Colleen	0-6	Loam	CL	A-4, A-6	0	0	95-100	85-100	70-95	50-75	21-41	6-19
	6-50	Clay, silty clay loam, gravelly clay loam	CL, CH	A-7	0	0	95-100	85-100	75-100	60-95	43-67	25-44
	50-65	Silty clay loam, clay loam, silt loam, gravelly loam, sandy loam	SC, CL	A-2, A-4, A-6	0	0	55-100	50-100	40-100	35-95	22-46	6-25
9A:												
Combs	0-12	Loam	SM, CL-ML, ML	A-4, A-6	0	0	75-100	75-100	60-95	40-70	18-40	2-12
	12-72	Loam, fine sandy loam, sandy loam, silt loam	SM, CL-ML, CL	A-2, A-4, A-6	0	0	75-100	75-100	60-95	25-70	17-33	2-12
10A:												
Comus	0-8	Fine sandy loam	SC-SM, SC, SM	A-2, A-4, A-6	0	0-9	80-100	80-100	70-100	25-45	18-35	2-12
	8-45	Fine sandy loam, loam, silt loam	SC-SM, SM, SC	A-2, A-4, A-6	0	0-9	80-100	80-100	70-100	25-45	17-33	2-12
	45-65	Fine sandy loam, sandy loam, loamy fine sand, loam, loamy sand, gravelly loamy sand, silty clay loam	SC-SM, GP-GM, CL	A-1, A-4, A-7	0	0-16	55-100	50-100	25-100	10-65	16-43	2-24
11A:												
Craigsville	0-5	Very cobbly sandy loam	GC-GM, GM, GC	A-2, A-1	0	26-51	45-65	40-65	30-50	15-30	18-33	2-10
	5-32	Very cobbly loam, extremely cobbly loam, extremely cobbly sandy loam, very gravelly sandy loam	GW-GM, CL, GC-GM	A-1, A-4	0	37-49	35-80	30-80	20-75	10-55	16-27	2-10
	32-72	Extremely gravelly loamy sand, extremely cobbly sandy loam, extremely cobbly loamy sand, very gravelly sandy loam, very gravelly loamy sand	SW-SM, SC, SC-SM	A-1, A-2	0	46-77	75-95	70-95	35-85	10-30	0-27	NP-10

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
12D:												
Dekalb----------	0-4	Channery loam	CL-ML, SM, CL	A-2, A-4, A-6	0-18	10-30	70-95	60-90	50-85	35-70	19-33	3-12
	4-26	Very channery loam, very channery sandy loam, very flaggy loam, channery fine sandy loam, loam	CL-ML, SM, CL	A-1, A-4, A-6	5-20	10-35	70-95	60-95	35-90	15-70	18-30	3-12
	26-31	Extremely flaggy loam, very flaggy loamy sand, very channery sandy loam	GC-GM, SC, GP-GM	A-1, A-4, A-6	25-40	30-45	50-85	35-80	15-65	5-45	18-30	3-12
	31-41	Bedrock			---	---	---	---	---	---	---	---
Hazleton--------	0-4	Loam	CL-ML, CL, ML	A-4, A-6	0-2	4-10	85-95	85-95	70-90	50-65	19-33	3-12
	4-31	Very channery loam, extremely channery sandy loam, flaggy fine sandy loam, loam	GC-GM, CL, GM	A-1, A-4, A-6	0-23	4-42	40-95	40-95	25-90	15-65	18-30	3-12
	31-43	Extremely channery loam, extremely flaggy loamy sand, very channery sandy loam, very channery fine sandy loam	GW-GM, GC, GC-GM	A-1, A-6	4-22	24-47	30-75	30-75	15-70	5-50	18-30	3-12
	43-53	Bedrock			---	---	---	---	---	---	---	---
12E:												
Dekalb----------	0-4	Channery loam	CL-ML, SM, CL	A-2, A-4, A-6	0-18	10-30	70-95	60-90	50-85	35-70	19-33	3-12
	4-26	Very channery loam, very channery sandy loam, very flaggy loam, channery fine sandy loam, loam	CL-ML, SM, CL	A-1, A-4, A-6	5-20	10-35	70-95	60-95	35-90	15-70	18-30	3-12
	26-31	Extremely flaggy loam, very flaggy loamy sand, very channery sandy loam	GC-GM, SC, GP-GM	A-1, A-4, A-6	25-40	30-45	50-85	35-80	15-65	5-45	18-30	3-12
	31-41	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
12E:												
Hazleton--------	0-4	Loam	CL-ML, CL, ML	A-4, A-6	0-2	4-10	85-95	85-95	70-90	50-65	19-33	3-12
	4-31	Very channery loam, extremely channery sandy loam, flaggy fine sandy loam, loam	GC-GM, CL, GM	A-1, A-4, A-6	0-23	4-42	40-95	40-95	25-90	15-65	18-30	3-12
	31-43	Extremely channery loam, extremely flaggy loamy sand, very channery sandy loam, very channery fine sandy loam	GW-GM, GC, GC-GM	A-1, A-6	4-22	24-47	30-75	30-75	15-70	5-50	18-30	3-12
	43-53	Bedrock			---	---	---	---	---	---	---	---
12F:												
Dekalb----------	0-4	Channery loam	CL-ML, SM, CL	A-2, A-4, A-6	0-18	10-30	70-95	60-90	50-85	35-70	19-33	3-12
	4-26	Very channery loam, very channery sandy loam, very flaggy loam, channery fine sandy loam, loam	CL-ML, SM, CL	A-1, A-4, A-6	5-20	10-35	70-95	60-95	35-90	15-70	18-30	3-12
	26-31	Extremely flaggy loam, very flaggy loamy sand, very channery sandy loam	GC-GM, SC, GP-GM	A-1, A-4, A-6	25-40	30-45	50-85	35-80	15-65	5-45	18-30	3-12
	31-41	Bedrock			---	---	---	---	---	---	---	---
Hazleton--------	0-4	Loam	CL-ML, CL, ML	A-4, A-6	0-2	4-10	85-95	85-95	70-90	50-65	19-33	3-12
	4-31	Very channery loam, extremely channery sandy loam, flaggy fine sandy loam, loam	GC-GM, CL, GM	A-1, A-4, A-6	0-23	4-42	40-95	40-95	25-90	15-65	18-30	3-12
	31-43	Extremely channery loam, extremely flaggy loamy sand, very channery sandy loam, very channery fine sandy loam	GW-GM, GC, GC-GM	A-1, A-6	4-22	24-47	30-75	30-75	15-70	5-50	18-30	3-12
	43-53	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
13E:												
Dekalb----------	0-4	Channery loam	CL-ML, SM, CL	A-2, A-4, A-6	0-18	10-30	70-95	60-90	50-85	35-70	19-33	3-12
	4-26	Very channery loam, very channery sandy loam, very flaggy loam, channery fine sandy loam, loam	CL-ML, SM, CL	A-1, A-4, A-6	5-20	10-35	70-95	60-95	35-90	15-70	18-30	3-12
	26-31	Extremely flaggy loam, very flaggy loamy sand, very channery sandy loam	GC-GM, SC, GP-GM	A-1, A-4, A-6	25-40	30-45	50-85	35-80	15-65	5-45	18-30	3-12
	31-41	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
13F:												
Dekalb----------	0-4	Channery loam	CL-ML, SM, CL	A-2, A-4, A-6	0-18	10-30	70-95	60-90	50-85	35-70	19-33	3-12
	4-26	Very channery loam, very channery sandy loam, very flaggy loam, channery fine sandy loam, loam	CL-ML, SM, CL	A-1, A-4, A-6	5-20	10-35	70-95	60-95	35-90	15-70	18-30	3-12
	26-31	Extremely flaggy loam, very flaggy loamy sand, very channery sandy loam	GC-GM, SC, GP-GM	A-1, A-4, A-6	25-40	30-45	50-85	35-80	15-65	5-45	18-30	3-12
	31-41	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
14B:												
Delanco---------	0-4	Loam	CL, ML, SM	A-4, A-6	0	0	90-100	90-100	70-95	45-70	20-39	2-13
	4-35	Clay loam, silty clay loam, sandy clay loam, silt loam, loam	CL	A-6, A-7	0	0	90-100	90-100	70-95	55-75	29-42	12-21
	35-60	Silt loam, loam, fine sandy loam, gravelly sandy loam	CL, GM	A-4, A-6	0	0	65-100	65-100	50-100	40-85	16-36	2-17
15B:												
Delanco---------	0-4	Loam	CL, ML, SM	A-4, A-6	0	0	90-100	90-100	70-95	45-70	20-39	2-13
	4-35	Clay loam, silty clay loam, sandy clay loam, silt loam, loam	CL	A-6, A-7	0	0	90-100	90-100	70-95	55-75	29-42	12-21
	35-60	Silt loam, loam, fine sandy loam, gravelly sandy loam	CL, GM	A-4, A-6	0	0	65-100	65-100	50-100	40-85	16-36	2-17

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
15B:												
Elsinboro-------	0-8	Loam	CL, SM	A-4	0	0-4	75-100	75-100	60-90	40-65	20-33	3-10
	8-38	Clay loam, silty clay loam, silt loam, loam, gravelly loam	CL, GC	A-2, A-6, A-7	0	0-4	65-100	65-100	50-95	35-80	27-44	12-25
	38-60	Sandy clay loam, silt loam, loam, fine sandy loam, gravelly sandy loam	CL, SM	A-1, A-6	0	0-4	65-100	65-100	40-90	20-55	16-38	2-19
15C:												
Delanco---------	0-4	Loam	CL, ML, SM	A-4, A-6	0	0	90-100	90-100	70-95	45-70	20-39	2-13
	4-35	Clay loam, silty clay loam, sandy clay loam, silt loam, loam	CL	A-6, A-7	0	0	90-100	90-100	70-95	55-75	29-42	12-21
	35-60	Silt loam, loam, fine sandy loam, gravelly sandy loam	CL, GM	A-4, A-6	0	0	65-100	65-100	50-100	40-85	16-36	2-17
Elsinboro-------	0-8	Loam	CL, SM	A-4	0	0-4	75-100	75-100	60-90	40-65	20-33	3-10
	8-38	Clay loam, silty clay loam, silt loam, loam, gravelly loam	CL, GC	A-2, A-6, A-7	0	0-4	65-100	65-100	50-95	35-80	27-44	12-25
	38-60	Sandy clay loam, silt loam, loam, fine sandy loam, gravelly sandy loam	CL, SM	A-1, A-6	0	0-4	65-100	65-100	40-90	20-55	16-38	2-19
16C:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10
16D:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
16E:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10
17B:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-40	Bedrock			---	---	---	---	---	---	---	---
	40-50	Bedrock			---	---	---	---	---	---	---	---
17C:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
17C:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
17D:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
17E:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
17E:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
17F:												
Edneytown-------	0-7	Loam, fine sandy loam, sandy loam	CL-ML, CL, SM	A-4	0	0-5	80-100	80-100	65-92	45-70	18-33	2-10
	7-39	Clay loam, sandy clay loam, fine sandy loam	CL, SC	A-6, A-7	0	0	75-100	75-100	60-98	45-80	26-44	11-25
	39-60	Loam, fine sandy loam, sandy loam, loamy sand	CL-ML, CL, SM	A-4	0	0	75-100	75-100	60-92	40-70	15-27	1-10
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
18B:												
Elsinboro-------	0-8	Loam	CL, SM	A-4	0	0-4	75-100	75-100	60-90	40-65	20-33	3-10
	8-38	Clay loam, silty clay loam, silt loam, loam, gravelly loam	CL, GC	A-2, A-6, A-7	0	0-4	65-100	65-100	50-95	35-80	27-44	12-25
	38-60	Sandy clay loam, silt loam, loam, fine sandy loam, gravelly sandy loam	CL, SM	A-1, A-6	0	0-4	65-100	65-100	40-90	20-55	16-38	2-19
19C:												
Fauquier--------	0-4	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	75-100	60-98	40-75	22-49	6-24
	4-25	Clay, silty clay, silty clay loam, gravelly silty clay loam	CH, GC	A-7	0	0	65-100	60-100	50-100	40-95	44-68	25-44
	25-38	Clay, silty clay, silty clay loam, gravelly silty clay loam	CH, GC	A-7	0	0	55-100	50-100	45-100	40-100	44-68	25-44
	38-55	Silt loam, gravelly silt loam, very gravelly silt loam	CL-ML, GM, CL	A-4, A-1	0	0	30-100	25-100	20-100	15-90	15-30	1-10
	55-65	Bedrock			---	---	---	---	---	---	---	---
19D:												
Fauquier--------	0-4	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	75-100	60-98	40-75	22-49	6-24
	4-25	Clay, silty clay, silty clay loam, gravelly silty clay loam	CH, GC	A-7	0	0	65-100	60-100	50-100	40-95	44-68	25-44
	25-38	Clay, silty clay, silty clay loam, gravelly silty clay loam	CH, GC	A-7	0	0	55-100	50-100	45-100	40-100	44-68	25-44
	38-55	Silt loam, gravelly silt loam, very gravelly silt loam	CL-ML, GM, CL	A-4, A-1	0	0	30-100	25-100	20-100	15-90	15-30	1-10
	55-65	Bedrock			---	---	---	---	---	---	---	---
19E:												
Fauquier--------	0-4	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	75-100	60-98	40-75	22-49	6-24
	4-25	Clay, silty clay, silty clay loam, gravelly silty clay loam	GC, CH	A-7	0	0	65-100	60-100	50-100	40-95	44-68	25-44
	25-38	Clay, silty clay, silty clay loam, gravelly silty clay loam	CH, GC	A-7	0	0	55-100	50-100	45-100	40-100	44-68	25-44
	38-55	Silt loam, gravelly silt loam, very gravelly silt loam	CL-ML, GM, CL	A-4, A-1	0	0	30-100	25-100	20-100	15-90	15-30	1-10
	55-65	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
20B:												
Haymarket-------	0-7	Loam	SC, CL	A-4, A-6, A-7	0	0-7	75-100	70-100	55-95	40-75	26-43	9-23
	7-35	Clay, silty clay loam	SC, CH	A-7	0	0	70-100	70-100	55-100	45-90	51-76	29-49
	35-45	Silty clay loam, silt loam, loam, clay loam	CH, CL	A-6, A-7	0	0	70-100	70-100	60-100	55-95	36-56	17-33
	45-65	Loam, sandy loam, clay loam, gravelly sandy clay loam	CH, CL, GC	A-2, A-7	0	0	60-100	60-100	45-100	35-80	31-51	13-29
Mirerock--------	0-5	Loam, fine sandy loam, silt loam	CL, SC-SM	A-4, A-6, A-7	0	0-7	75-100	70-100	55-95	40-75	22-43	6-18
	5-30	Silty clay, silty clay loam, clay, gravelly clay loam	CH, GC	A-7	0	0-10	50-100	50-100	40-100	40-100	45-69	25-44
	30-72	Bedrock			---	---	---	---	---	---	---	---
20C:												
Haymarket-------	0-7	Loam	CL, SC	A-4, A-6, A-7	0	0-7	75-100	70-100	55-95	40-75	26-43	9-23
	7-35	Clay, silty clay loam	SC, CH	A-7	0	0	70-100	70-100	55-100	45-90	51-76	29-49
	35-45	Silty clay loam, silt loam, loam, clay loam	CL, CH	A-6, A-7	0	0	70-100	70-100	60-100	55-95	36-56	17-33
	45-65	Loam, sandy loam, clay loam, gravelly sandy clay loam	CH, CL, GC	A-2, A-7	0	0	60-100	60-100	45-100	35-80	31-51	13-29
Mirerock--------	0-5	Loam, fine sandy loam, silt loam	CL, SC-SM	A-4, A-6, A-7	0	0-7	75-100	70-100	55-95	40-75	22-43	6-18
	5-30	Silty clay, silty clay loam, clay, gravelly clay loam	GC, CH	A-7	0	0-10	50-100	50-100	40-100	40-100	45-69	25-44
	30-72	Bedrock			---	---	---	---	---	---	---	---
21B:												
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
21C:												
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---
21D:												
Littlejoe-------	0-5	Silt loam, loam, fine sandy loam	CL, CL-ML	A-4, A-6, A-7	0	0-10	75-100	75-100	65-100	55-85	23-41	7-19
	5-38	Clay, silty clay, silty clay loam	CH, CL	A-7	0	0-5	80-100	75-100	60-100	50-95	43-67	25-44
	38-56	Silt loam, silty clay loam, gravelly silt loam, very gravelly silt loam	CL, ML, GM	A-1, A-4, A-7	0	0-10	35-100	35-100	25-100	25-100	15-45	1-18
	56-66	Bedrock			---	---	---	---	---	---	---	---
22B:												
Minnieville, severely eroded	0-6	Clay loam	CL	A-6, A-7	0	0	85-100	80-100	70-100	55-85	36-50	18-28
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44
22C:												
Minnieville, severely eroded	0-6	Clay loam	CL	A-6, A-7	0	0	85-100	80-100	70-100	55-85	36-50	18-28
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
22D: Minnieville, severely eroded	0-6	Clay loam	CL	A-6, A-7	0	0	85-100	80-100	70-100	55-85	36-50	18-28
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44
23B: Minnieville-----	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	80-100	80-100	60-95	45-75	22-41	6-19
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44
23C: Minnieville-----	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	80-100	80-100	60-95	45-75	22-41	6-19
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44
23D: Minnieville-----	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	80-100	80-100	60-95	45-75	22-41	6-19
	6-46	Clay, silty clay, clay loam	CH, CL	A-7	0	0	80-100	80-100	60-100	55-100	43-76	25-51
	46-52	Clay, silty clay, clay loam, gravelly clay loam	CH, CL	A-7	0	0	60-100	60-100	45-100	40-100	43-76	25-51
	52-72	Silty clay loam, clay loam, silt loam, loam, gravelly clay loam	CL	A-6, A-7	0	0	60-100	60-100	50-100	45-95	35-67	17-44

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
24C:												
Myersville------	0-3	Silt loam	CL, SM	A-2, A-4, A-6	0-4	0-13	90-100	90-100	75-100	30-80	17-35	2-13
	3-28	Silty clay loam, clay loam, silt loam, loam, channery clay loam	CL	A-6, A-7	0-10	0-27	70-100	70-100	60-100	55-95	27-44	12-25
	28-50	Channery silt loam, very channery loam, very channery silty clay loam, silt loam, clay loam	CL, GC-GM	A-4, A-6, A-7	0-17	2-33	60-100	55-95	45-95	40-85	20-42	6-22
	50-60	Bedrock			---	---	---	---	---	---	---	---
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---
24D:												
Myersville------	0-3	Silt loam	CL, SM	A-2, A-4, A-6	0-4	0-13	90-100	90-100	75-100	30-80	17-35	2-13
	3-28	Silty clay loam, clay loam, silt loam, loam, channery clay loam	CL	A-6, A-7	0-10	0-27	70-100	70-100	60-100	55-95	27-44	12-25
	28-50	Channery silt loam, very channery loam, very channery silty clay loam, silt loam, clay loam	CL, GC-GM	A-4, A-6, A-7	0-17	2-33	60-100	55-95	45-95	40-85	20-42	6-22
	50-60	Bedrock			---	---	---	---	---	---	---	---
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
24E:												
Myersville------	0-3	Silt loam	CL, SM	A-2, A-4, A-6	0-4	0-13	90-100	90-100	75-100	30-80	17-35	2-13
	3-28	Silty clay loam, clay loam, silt loam, loam, channery clay loam	CL	A-6, A-7	0-10	0-27	70-100	70-100	60-100	55-95	27-44	12-25
	28-50	Channery silt loam, very channery loam, very channery silty clay loam, silt loam, clay loam	CL, GC-GM	A-4, A-6, A-7	0-17	2-33	60-100	55-95	45-95	40-85	20-42	6-22
	50-60	Bedrock			---	---	---	---	---	---	---	---
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---
24F:												
Myersville------	0-3	Silt loam	CL, SM	A-2, A-4, A-6	0-4	0-13	90-100	90-100	75-100	30-80	17-35	2-13
	3-28	Silty clay loam, clay loam, silt loam, loam, channery clay loam	CL	A-6, A-7	0-10	0-27	70-100	70-100	60-100	55-95	27-44	12-25
	28-50	Channery silt loam, very channery loam, very channery silty clay loam, silt loam, clay loam	CL, GC-GM	A-4, A-6, A-7	0-17	2-33	60-100	55-95	45-95	40-85	20-42	6-22
	50-60	Bedrock			---	---	---	---	---	---	---	---
Catoctin--------	0-4	Channery silt loam	CL, ML	A-4, A-6	0-15	10-25	75-85	70-85	60-85	50-70	17-35	2-13
	4-22	Very channery silt loam, very channery loam, very channery silty clay loam, flaggy loam, very channery clay loam	CL, GC-GM	A-2, A-6, A-7	0-15	10-35	55-85	50-85	40-85	35-80	20-44	6-25
	22-30	Bedrock			---	---	---	---	---	---	---	---
	30-40	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
25B:												
Orenda----------	0-6	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	70-100	60-95	40-70	22-35	6-13
	6-40	Clay loam, clay, gravelly clay loam	CH, CL, GC	A-7	0	0	60-100	60-100	50-100	40-95	43-67	25-44
	40-60	Sandy loam, loam, sandy clay loam, gravelly silt loam	CL, SC, SC-SM	A-1, A-4, A-7	0	0	65-100	60-100	45-95	20-60	20-44	6-25
25C:												
Orenda----------	0-6	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	70-100	60-95	40-70	22-35	6-13
	6-40	Clay loam, clay, gravelly clay loam	CH, CL, GC	A-7	0	0	60-100	60-100	50-100	40-95	43-67	25-44
	40-60	Sandy loam, loam, sandy clay loam, gravelly silt loam	CL, SC, SC-SM	A-1, A-4, A-7	0	0	65-100	60-100	45-95	20-60	20-44	6-25
25D:												
Orenda----------	0-6	Loam	CL, SC-SM	A-4, A-6	0	0	75-100	70-100	60-95	40-70	22-35	6-13
	6-40	Clay loam, clay, gravelly clay loam	CH, CL, GC	A-7	0	0	60-100	60-100	50-100	40-95	43-67	25-44
	40-60	Sandy loam, loam, sandy clay loam, gravelly silt loam	CL, SC, SC-SM	A-1, A-4, A-7	0	0	65-100	60-100	45-95	20-60	20-44	6-25
26C:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas-ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
26D:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
26E:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
26F:												
Peaks-----------	0-6	Gravelly loam, gravelly fine sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1, A-2, A-6	0	0-9	50-75	50-75	40-70	25-50	17-35	1-12
	6-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GC, GP-GM	A-1, A-2	0	9-26	30-55	30-50	20-45	10-25	17-32	2-12
	20-34	Very gravelly sandy loam, extremely gravelly loam, very gravelly fine sandy loam, very cobbly loamy sand	GC-GM, GC, GP-GM	A-1, A-2	0	9-33	20-55	15-50	10-45	5-25	17-32	2-12
	34-50	Bedrock			---	---	---	---	---	---	---	---
	50-60	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
27A:												
Pineywoods------	0-6	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	90-100	80-100	70-100	55-90	25-45	6-18
	6-22	Clay, silty clay, gravelly clay loam	CL, CH	A-7	0	0	90-100	50-100	45-100	35-95	43-67	25-44
	22-41	Loam, sandy loam, gravelly silty clay loam	CL, SC	A-2, A-4, A-6	0	0-2	90-100	50-100	30-95	15-75	22-46	6-25
	41-62	Bedrock			---	---	---	---	---	---	---	---
27B:												
Pineywoods------	0-6	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	90-100	80-100	70-100	55-90	25-45	6-18
	6-22	Clay, silty clay, gravelly clay loam	CH, CL	A-7	0	0	90-100	50-100	45-100	35-95	43-67	25-44
	22-41	Loam, sandy loam, gravelly silty clay loam	CL, SC	A-2, A-4, A-6	0	0-2	90-100	50-100	30-95	15-75	22-46	6-25
	41-62	Bedrock			---	---	---	---	---	---	---	---
28.												
Pits, quarry												
29B:												
Saunook---------	0-19	Loam	MH, OH, SM	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	GC, CL	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments >10 inches	Fragments 3-10 inches	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
29C:												
Saunook---------	0-19	Loam	SM, OH, MH	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	CL, GC	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
29D:												
Saunook---------	0-19	Loam	MH, OH, SM	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	CL, GC	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
30B:												
Saunook, very stony----------	0-19	Loam	SM, MH, OH	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	CL, GC	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
30C:												
Saunook, very stony----------	0-19	Loam	MH, OH, SM	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	CL, GC	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
30D:												
Saunook, very stony----------	0-19	Loam	SM, MH, OH	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	CL, GC	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
30E:												
Saunook, very stony----------	0-19	Loam	MH, SM, OH	A-4, A-7	0	0-5	80-100	80-100	65-95	40-70	24-52	3-13
	19-60	Gravelly clay loam, sandy clay loam, loam	GC, CL	A-2, A-6, A-7	0	0-10	55-100	50-100	40-95	30-80	27-47	12-24
31A:												
Sindion---------	0-14	Loam	CL, SC	A-4, A-6	0	0	75-100	75-100	65-95	45-75	27-43	9-18
	14-62	Loam, silt loam, clay loam, silty clay loam, gravelly loam	CL, GC	A-6, A-7	0	0	50-100	50-100	40-100	30-80	29-49	12-24
	62-72	Sandy loam, loam, clay loam, gravelly sandy loam, extremely gravelly loam, very cobbly clay loam	SC, CL, GP-GM	A-1, A-4, A-7	0	0-22	15-100	15-100	10-95	5-60	0-49	NP-24

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
31A:												
Yogaville-------	0-16	Loam	CL, ML, SC-SM	A-6, A-7, A-4	0	0	75-100	75-100	60-95	40-75	22-45	6-18
	16-72	Clay loam, loam, silt loam, silty clay loam, sandy loam	CL, SC	A-7, A-6	0	0	75-100	75-100	60-95	45-80	28-47	12-24
32B:												
Sketerville-----	0-4	Silt loam	CL, CL-ML	A-4, A-6	0	0	90-100	80-100	70-100	55-95	22-43	6-18
	4-42	Clay, silty clay, gravelly clay loam	CH, CL	A-7	0	0	70-100	55-100	50-100	40-95	43-67	25-44
	42-70	Clay, loam, gravelly silty clay loam, sandy loam, silty clay loam	CH, CL, SC	A-7, A-2, A-4, A-6	0	0-2	70-100	55-100	30-100	15-95	22-63	6-40
	70-74	Bedrock			---	---	---	---	---	---	---	---
33A:												
Speedwell-------	0-20	Loam	CL, SC	A-4, A-6, A-7	0	0	75-100	75-100	65-95	45-75	27-43	9-18
	20-72	Clay loam, loam, sandy clay loam, silt loam, silty clay loam, gravelly loam	CL, GC	A-7, A-2	0	0	50-100	50-100	40-95	25-75	29-49	12-24
34C:												
Spriggs---------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---
34D:												
Spriggs---------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
34E:												
Spriggs----------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---
35B:												
Spriggs, very stony----------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---
35C:												
Spriggs, very stony----------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---
35D:												
Spriggs, very stony----------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
35E:												
Spriggs, very stony----------	0-6	Loam	CL, CL-ML	A-4, A-6, A-7	0	0	90-98	90-98	70-95	50-75	21-41	6-19
	6-18	Silty clay loam, clay loam, silt loam, loam, gravelly loam	CL, GC	A-6, A-7	0	0-10	55-98	50-98	45-98	40-95	31-46	13-25
	18-30	Silt loam, loam, sandy loam, gravelly loam	CL, GC	A-4, A-6	0	0-10	55-98	50-98	45-98	40-85	24-38	9-19
	30-41	Bedrock			---	---	---	---	---	---	---	---
	41-51	Bedrock			---	---	---	---	---	---	---	---
36D:												
Stott Knob------	0-9	Loam	CL, SC-SM	A-4, A-7	0	0	75-100	75-100	60-100	40-75	20-41	4-19
	9-21	Clay loam, sandy clay loam, loam, gravelly clay loam	CL, GC	A-2, A-6, A-7	0	0-15	60-100	55-100	45-95	30-75	27-44	12-25
	21-30	Loam, fine sandy loam, sandy loam, gravelly loam	CL, GM	A-1, A-6	0	0-15	60-100	55-100	40-95	25-70	16-38	2-19
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rhodhiss--------	0-8	Loam	SM, CL	A-2, A-4	0	0	75-100	75-100	60-100	35-75	17-41	2-19
	8-40	Clay loam, sandy clay loam, loam, fine sandy loam, sandy loam, gravelly clay loam	SC, CL	A-2, A-6, A-7	0	0	70-100	70-100	50-95	35-75	27-44	12-25
	40-60	Loam, sandy loam, fine sandy loam, sandy clay loam, gravelly loam	CL, SM	A-2, A-6	0	0	70-100	70-100	50-95	30-70	16-38	2-19
36E:												
Stott Knob------	0-9	Loam	CL, SC-SM	A-4, A-7	0	0	75-100	75-100	60-100	40-75	20-41	4-19
	9-21	Clay loam, sandy clay loam, loam, gravelly clay loam	CL, GC	A-2, A-6, A-7	0	0-15	60-100	55-100	45-95	30-75	27-44	12-25
	21-30	Loam, fine sandy loam, sandy loam, gravelly loam	CL, GM	A-1, A-6	0	0-15	60-100	55-100	40-95	25-70	16-38	2-19
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rhodhiss--------	0-8	Loam	SM, CL	A-2, A-4	0	0	75-100	75-100	60-100	35-75	17-41	2-19
	8-40	Clay loam, sandy clay loam, loam, fine sandy loam, sandy loam, gravelly clay loam	SC, CL	A-2, A-6, A-7	0	0	70-100	70-100	50-95	35-75	27-44	12-25
	40-60	Loam, sandy loam, fine sandy loam, sandy clay loam, gravelly loam	CL, SM	A-2, A-6	0	0	70-100	70-100	50-95	30-70	16-38	2-19

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
37D:												
Stott Knob, very stony----------	0-9	Loam	CL, SC-SM	A-4, A-7	0	0	75-100	75-100	60-100	40-75	20-41	4-19
	9-21	Clay loam, sandy clay loam, loam, gravelly clay loam	CL, GC	A-2, A-6, A-7	0	0-15	60-100	55-100	45-95	30-75	27-44	12-25
	21-30	Loam, fine sandy loam, sandy loam, gravelly loam	CL, GM	A-1, A-6	0	0-15	60-100	55-100	40-95	25-70	16-38	2-19
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rhodhiss, very stony----------	0-8	Loam	SM, CL	A-2, A-4	0	0	75-100	75-100	60-100	35-75	17-41	2-19
	8-40	Clay loam, sandy clay loam, loam, fine sandy loam, sandy loam, gravelly clay loam	SC, CL	A-2, A-6, A-7	0	0	70-100	70-100	50-95	35-75	27-44	12-25
	40-60	Loam, sandy loam, fine sandy loam, sandy clay loam, gravelly loam	CL, SM	A-2, A-6	0	0	70-100	70-100	50-95	30-70	16-38	2-19
37E:												
Stott Knob, very stony----------	0-9	Loam	CL, SC-SM	A-4, A-7	0	0	75-100	75-100	60-100	40-75	20-41	4-19
	9-21	Clay loam, sandy clay loam, loam, gravelly clay loam	CL, GC	A-2, A-6, A-7	0	0-15	60-100	55-100	45-95	30-75	27-44	12-25
	21-30	Loam, fine sandy loam, sandy loam, gravelly loam	CL, GM	A-1, A-6	0	0-15	60-100	55-100	40-95	25-70	16-38	2-19
	30-40	Bedrock			---	---	---	---	---	---	---	---
Rhodhiss, very stony----------	0-8	Loam	SM, CL	A-2, A-4	0	0	75-100	75-100	60-100	35-75	17-41	2-19
	8-40	Clay loam, sandy clay loam, loam, fine sandy loam, sandy loam, gravelly clay loam	SC, CL	A-2, A-6, A-7	0	0	70-100	70-100	50-95	35-75	27-44	12-25
	40-60	Loam, sandy loam, fine sandy loam, sandy clay loam, gravelly loam	CL, SM	A-2, A-6	0	0	70-100	70-100	50-95	30-70	16-38	2-19

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
38A:												
Suches----------	0-8	Loam	CL-ML, CL	A-6, A-4, A-7	0	0	90-100	90-100	70-95	50-70	25-43	6-17
	8-35	Loam, sandy loam, fine sandy loam, sandy clay loam, clay loam, silty clay loam	CL	A-6, A-7	0	0	90-100	90-100	75-100	55-85	28-50	12-27
	35-45	Loam, sandy loam, fine sandy loam, sandy clay loam, clay loam, silt loam	CL-ML, CL	A-6, A-7, A-4	0	0	90-100	90-100	75-100	60-95	20-47	4-24
	45-60	Silt loam, loamy sand, sandy loam, fine sandy loam, sandy clay loam, clay loam, loam	CL, ML	A-4, A-7	0	0	80-100	75-100	65-100	50-95	17-45	2-25
39C:												
Sylco-----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus--------	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
39D:												
Sylco-----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus--------	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
39E:												
Sylco-----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
39E:												
Sylvatus--------	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
39F:												
Sylco-----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus--------	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
40C:												
Sylco, extremely stony----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
40D:												
Sylco, extremely stony----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas-ticity index
	In				Pct	Pct					Pct	
40D:												
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
40E:												
Sylco, extremely stony----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
40F:												
Sylco, extremely stony----------	0-7	Channery silt loam, silt loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	70-90	65-90	55-90	45-80	21-41	6-19
	7-26	Very channery silty clay loam, very channery silt loam, channery loam	CL, GC-GM	A-4, A-6, A-7	0-10	10-30	55-85	55-85	45-85	40-80	20-44	6-25
	26-33	Very flaggy silt loam, extremely channery silt loam, very channery silty clay loam, extremely channery loam	GC, GC-GM, CL	A-1, A-6, A-7	5-30	30-40	35-65	35-65	30-65	25-60	20-44	6-25
	33-42	Bedrock			---	---	---	---	---	---	---	---
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
41E:												
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
41F:												
Sylvatus, extremely stony	0-5	Very channery silt loam, channery silt loam	GC, CL, GC-GM	A-4, A-6, A-7	0-1	15-29	60-85	60-85	50-80	40-70	21-41	6-19
	5-14	Very channery silt loam, very channery silty clay loam, extremely channery loam, flaggy clay loam	GC, CL, GC-GM	A-1, A-6, A-7	0-10	20-49	25-75	20-75	15-75	15-70	20-44	6-25
	14-16	Very channery silt loam, very channery silty clay loam, extremely channery loam, very flaggy silty clay loam	GC, CL, GP-GC	A-1, A-6, A-7	5-37	32-52	15-60	15-60	10-60	10-55	20-44	6-25
	16-25	Bedrock			---	---	---	---	---	---	---	---
Rock outcrop.												
42. Udorthents												
43B:												
Unison----------	0-6	Loam	CL, SC-SM	A-4, A-6, A-7	0	0	75-100	75-100	60-95	40-70	22-41	6-17
	6-30	Clay, clay loam, silty clay loam, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-100	30-90	43-67	25-44
	30-62	Clay loam, silty clay loam, loam, clay, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-95	30-75	35-55	17-32
43C:												
Unison----------	0-6	Loam	CL, SC-SM	A-4, A-6, A-7	0	0	75-100	75-100	60-95	40-70	22-41	6-17
	6-30	Clay, clay loam, silty clay loam, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-100	30-90	43-67	25-44
	30-62	Clay loam, silty clay loam, loam, clay, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-95	30-75	35-55	17-32
44B:												
Unison, very stony----------	0-6	Loam	CL, SC-SM	A-4, A-6, A-7	0	0	75-100	75-100	60-95	40-70	22-41	6-17
	6-30	Clay, clay loam, silty clay loam, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-100	30-90	43-67	25-44
	30-62	Clay loam, silty clay loam, loam, clay, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-95	30-75	35-55	17-32

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
44C:												
Unison, very stony----------	0-6	Loam	CL, SC-SM	A-4, A-6, A-7	0	0	75-100	75-100	60-95	40-70	22-41	6-17
	6-30	Clay, clay loam, silty clay loam, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-100	30-90	43-67	25-44
	30-62	Clay loam, silty clay loam, loam, clay, gravelly silty clay	CH, GC	A-2, A-7	0	0	50-100	50-100	35-95	30-75	35-55	17-32
45B:												
Wintergreen, severely eroded	0-7	Clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-100	55-80	36-50	18-28
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
45C:												
Wintergreen, severely eroded	0-7	Clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-100	55-80	36-50	18-28
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
45D:												
Wintergreen, severely eroded	0-7	Clay loam	CL	A-6, A-7	0	0-5	90-100	80-100	70-100	55-80	36-50	18-28
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CL, SC, CH	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
46B:												
Wintergreen-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
46C:												
Wintergreen-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40

Table 16.—Engineering Properties—Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	Percentage passing sieve number--: 10	Percentage passing sieve number--: 40	Percentage passing sieve number--: 200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
46D:												
Wintergreen-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
47B:												
Wintergreen, very stony-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
47C:												
Wintergreen, very stony-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
47D:												
Wintergreen, very stony-----	0-7	Loam	CL, CL-ML, SC-SM	A-4, A-6	0	0-5	90-100	80-100	70-95	50-75	22-39	6-17
	7-62	Clay, gravelly clay, very cobbly sandy clay, clay loam	CH, CL, SC	A-2, A-7	0	0-45	70-100	50-100	40-100	20-95	43-63	25-40
W.												
Water												

Table 17.—Physical Soil Properties

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
1B:														
Buffstat-------------	0-3	10-45	50-80	10-27	1.25-1.55	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.37	4	5	56
	3-7	10-70	10-80	10-27	1.25-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.5-1.0	.37	.49			
	7-39	10-40	10-60	35-50	1.30-1.60	4.00-14.00	0.08-0.15	3.0-5.9	0.0-0.5	.17	.20			
	39-50	10-45	20-70	20-40	1.30-1.60	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.17	.37			
	50-60	---	---	---	---	0.01-0.42	---	---	---	---	---			
1C:														
Buffstat-------------	0-3	10-45	50-80	10-27	1.25-1.55	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.37	4	5	56
	3-7	10-70	10-80	10-27	1.25-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.5-1.0	.37	.49			
	7-39	10-40	10-60	35-50	1.30-1.60	4.00-14.00	0.08-0.15	3.0-5.9	0.0-0.5	.17	.20			
	39-50	10-45	20-70	20-40	1.30-1.60	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.17	.37			
	50-60	---	---	---	---	0.01-0.42	---	---	---	---	---			
1D:														
Buffstat-------------	0-3	10-45	50-80	10-27	1.25-1.55	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.37	4	5	56
	3-7	10-70	10-80	10-27	1.25-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.5-1.0	.37	.49			
	7-39	10-40	10-60	35-50	1.30-1.60	4.00-14.00	0.08-0.15	3.0-5.9	0.0-0.5	.17	.20			
	39-50	10-45	20-70	20-40	1.30-1.60	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.17	.37			
	50-60	---	---	---	---	0.01-0.42	---	---	---	---	---			
2C:														
Bugley---------------	0-2	15-45	50-75	7-27	1.25-1.55	14.00-42.00	0.10-0.14	0.0-2.9	0.5-2.0	.20	.49	1	7	38
	2-6	15-50	30-75	7-27	1.25-1.55	14.00-42.00	0.10-0.19	0.0-2.9	0.0-1.0	.20	.49			
	6-16	10-45	25-80	10-35	1.35-1.65	14.00-42.00	0.03-0.15	0.0-2.9	0.0-0.5	.10	.55			
	16-26	---	---	---	---	0.00-0.42	---	---	---	---	---			
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			
2D:														
Bugley---------------	0-2	15-45	50-75	7-27	1.25-1.55	14.00-42.00	0.10-0.14	0.0-2.9	0.5-2.0	.20	.49	1	7	38
	2-6	15-50	30-75	7-27	1.25-1.55	14.00-42.00	0.10-0.19	0.0-2.9	0.0-1.0	.20	.49			
	6-16	10-45	25-80	10-35	1.35-1.65	14.00-42.00	0.03-0.15	0.0-2.9	0.0-0.5	.10	.55			
	16-26	---	---	---	---	0.00-0.42	---	---	---	---	---			
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
2E:														
Bugley---------------	0-2	15-45	50-75	7-27	1.25-1.55	14.00-42.00	0.10-0.14	0.0-2.9	0.5-2.0	.20	.49	1	7	38
	2-6	15-50	30-75	7-27	1.25-1.55	14.00-42.00	0.10-0.19	0.0-2.9	0.0-1.0	.20	.49			
	6-16	10-45	25-80	10-35	1.35-1.65	14.00-42.00	0.03-0.15	0.0-2.9	0.0-0.5	.10	.55			
	16-26	---	---	---	---	0.00-0.42	---	---	---	---	---			
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			
3C:														
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
3D:														
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
3E:														
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
4B:														
Clifford, severely eroded--------------	0-10	25-45	30-50	27-40	1.30-1.50	4.00-14.00	0.10-0.13	0.0-2.9	0.2-0.8	.20	.20	5	6	48
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
4C:														
Clifford, severely eroded--------------	0-10	25-45	30-50	27-40	1.30-1.50	4.00-14.00	0.10-0.13	0.0-2.9	0.2-0.8	.20	.20	5	6	48
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
4D:														
Clifford, severely eroded--------------	0-10	25-45	30-50	27-40	1.30-1.50	4.00-14.00	0.10-0.13	0.0-2.9	0.2-0.8	.20	.20	5	6	48
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
4E:														
Clifford, severely eroded--------------	0-10	25-45	30-50	27-40	1.30-1.50	4.00-14.00	0.10-0.13	0.0-2.9	0.2-0.8	.20	.20	5	6	48
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
5B:														
Clifford-------------	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
5C:														
Clifford-------------	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
5D:														
Clifford-------------	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
5E:														
Clifford-------------	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	5	56
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
6B:														
Clifford, very stony-	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	8	0
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
6C:														
Clifford, very stony-	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	8	0
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
6D:														
Clifford, very stony-	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	8	0
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
6E:														
Clifford, very stony-	0-10	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.15-0.20	0.0-2.9	0.5-1.0	.37	.37	5	8	0
	10-50	15-40	10-30	35-70	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.17	.17			
	50-72	15-40	10-30	35-60	1.20-1.35	4.00-14.00	0.10-0.15	0.0-2.9	0.0-0.5	.20	.20			
7A:														
Codorus--------------	0-7	30-50	30-50	15-27	1.20-1.40	4.00-14.00	0.14-0.21	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	7-40	10-45	25-70	18-35	1.20-1.50	4.00-14.00	0.10-0.22	0.0-2.9	0.0-0.5	.32	.32			
	40-58	10-75	10-75	5-40	1.20-1.50	14.00-141.00	0.08-0.22	0.0-2.9	0.0-0.5	.28	.28			
	58-65	10-75	10-75	5-40	1.20-1.50	14.00-141.00	0.08-0.22	0.0-2.9	0.0-0.8	.24	.24			
8B:														
Colleen--------------	0-6	30-50	30-50	10-27	1.35-1.45	4.00-14.00	0.12-0.18	0.0-2.9	0.5-2.0	.32	.37	5	5	56
	6-50	10-40	10-55	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.24	.24			
	50-65	10-70	20-70	10-35	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.43	.43			
8C:														
Colleen--------------	0-6	30-50	30-50	10-27	1.35-1.45	4.00-14.00	0.12-0.18	0.0-2.9	0.5-2.0	.32	.37	5	5	56
	6-50	10-40	10-55	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.24	.24			
	50-65	10-70	20-70	10-35	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.43	.43			
8D:														
Colleen--------------	0-6	30-50	30-50	10-27	1.35-1.45	4.00-14.00	0.12-0.18	0.0-2.9	0.5-2.0	.32	.37	5	5	56
	6-50	10-40	10-55	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.24	.24			
	50-65	10-70	20-70	10-35	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.43	.43			
9A:														
Combs----------------	0-12	30-50	30-50	5-18	1.20-1.50	4.00-42.00	0.12-0.22	0.0-2.9	1.0-5.0	.32	.32	5	5	56
	12-72	20-75	10-70	5-18	1.20-1.50	4.00-42.00	0.10-0.20	0.0-2.9	0.5-2.0	.28	.28			
10A:														
Comus----------------	0-8	55-75	10-40	5-18	1.20-1.40	4.00-14.00	0.13-0.18	0.0-2.9	1.0-3.0	.20	.20	5	3	86
	8-45	20-75	10-70	5-18	1.20-1.40	4.00-14.00	0.13-0.22	0.0-2.9	0.5-2.0	.28	.28			
	45-65	10-85	5-60	5-34	1.30-1.60	4.00-42.00	0.16-0.19	0.0-2.9	0.0-0.5	.32	.32			
11A:														
Craigsville----------	0-5	55-80	5-45	5-15	1.20-1.40	14.00-141.00	0.05-0.09	0.0-2.9	1.0-3.0	.05	.15	3	6	48
	5-32	40-80	5-45	5-15	1.30-1.60	14.00-141.00	0.04-0.15	0.0-2.9	0.0-0.5	.15	.43			
	32-72	55-85	2-40	2-15	1.35-1.55	42.00-141.00	0.04-0.12	0.0-2.9	0.0-0.5	.02	.15			
12D:														
Dekalb---------------	0-4	30-50	30-50	7-18	1.40-1.55	42.00-141.00	0.08-0.12	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-26	30-75	15-50	7-18	1.40-1.55	42.00-141.00	0.06-0.12	0.0-2.9	0.0-0.5	.15	.43			
	26-31	30-90	5-50	7-18	1.40-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.05	.55			
	31-41	---	---	---	---	0.00-4.00	0.00-0.00	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
12D:														
Hazleton	0-4	30-50	30-50	7-18	1.20-1.50	42.00-141.00	0.10-0.17	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	4-31	30-75	10-50	7-18	1.20-1.50	42.00-141.00	0.05-0.15	0.0-2.9	0.0-0.5	.10	.43			
	31-43	30-90	2-45	7-18	1.20-1.50	42.00-141.00	0.03-0.14	0.0-2.9	0.0-0.5	.05	.55			
	43-53	---	---	---	---	0.00-4.00	---	---	---	---	---			
12E:														
Dekalb	0-4	30-50	30-50	7-18	1.40-1.55	42.00-141.00	0.08-0.12	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-26	30-75	15-50	7-18	1.40-1.55	42.00-141.00	0.06-0.12	0.0-2.9	0.0-0.5	.15	.43			
	26-31	30-90	5-50	7-18	1.40-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.05	.55			
	31-41	---	---	---	---	0.00-4.00	0.00-0.00	---	---	---	---			
Hazleton	0-4	30-50	30-50	7-18	1.20-1.50	42.00-141.00	0.10-0.17	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	4-31	30-75	10-50	7-18	1.20-1.50	42.00-141.00	0.05-0.15	0.0-2.9	0.0-0.5	.10	.43			
	31-43	30-90	2-45	7-18	1.20-1.50	42.00-141.00	0.03-0.14	0.0-2.9	0.0-0.5	.05	.55			
	43-53	---	---	---	---	0.00-4.00	---	---	---	---	---			
12F:														
Dekalb	0-4	30-50	30-50	7-18	1.40-1.55	42.00-141.00	0.08-0.12	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-26	30-75	15-50	7-18	1.40-1.55	42.00-141.00	0.06-0.12	0.0-2.9	0.0-0.5	.15	.43			
	26-31	30-90	5-50	7-18	1.40-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.05	.55			
	31-41	---	---	---	---	0.00-4.00	0.00-0.00	---	---	---	---			
Hazleton	0-4	30-50	30-50	7-18	1.20-1.50	42.00-141.00	0.10-0.17	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	4-31	30-75	10-50	7-18	1.20-1.50	42.00-141.00	0.05-0.15	0.0-2.9	0.0-0.5	.10	.43			
	31-43	30-90	2-45	7-18	1.20-1.50	42.00-141.00	0.03-0.14	0.0-2.9	0.0-0.5	.05	.55			
	43-53	---	---	---	---	0.00-4.00	---	---	---	---	---			
13E:														
Dekalb	0-4	30-50	30-50	7-18	1.40-1.55	42.00-141.00	0.08-0.12	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-26	30-75	15-50	7-18	1.40-1.55	42.00-141.00	0.06-0.12	0.0-2.9	0.0-0.5	.15	.43			
	26-31	30-90	5-50	7-18	1.40-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.05	.55			
	31-41	---	---	---	---	0.00-4.00	0.00-0.00	---	---	---	---			
Rock outcrop.														
13F:														
Dekalb	0-4	30-50	30-50	7-18	1.40-1.55	42.00-141.00	0.08-0.12	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-26	30-75	15-50	7-18	1.40-1.55	42.00-141.00	0.06-0.12	0.0-2.9	0.0-0.5	.15	.43			
	26-31	30-90	5-50	7-18	1.40-1.55	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.05	.55			
	31-41	---	---	---	---	0.00-4.00	0.00-0.00	---	---	---	---			
Rock outcrop.														
14B:														
Delanco	0-4	35-50	30-45	5-20	1.10-1.30	4.00-14.00	0.15-0.19	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	4-35	15-65	10-70	18-30	1.40-1.60	1.40-4.00	0.13-0.22	3.0-5.9	0.0-0.5	.32	.32			
	35-60	15-70	20-70	5-25	1.50-1.70	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.32	.32			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
15B:														
Delanco-------------	0-4	35-50	30-45	5-20	1.10-1.30	4.00-14.00	0.15-0.19	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	4-35	15-65	10-70	18-30	1.40-1.60	1.40-4.00	0.13-0.22	3.0-5.9	0.0-0.5	.32	.32			
	35-60	15-70	20-70	5-25	1.50-1.70	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.32	.32			
Elsinboro-----------	0-8	35-50	30-50	7-15	1.25-1.40	4.00-14.00	0.15-0.19	0.0-2.9	1.0-3.0	.32	.32	5	5	56
	8-38	20-45	25-60	18-35	1.30-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.32	.32			
	38-60	20-75	10-70	5-27	1.35-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.24	.24			
15C:														
Delanco-------------	0-4	35-50	30-45	5-20	1.10-1.30	4.00-14.00	0.15-0.19	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	4-35	15-65	10-70	18-30	1.40-1.60	1.40-4.00	0.13-0.22	3.0-5.9	0.0-0.5	.32	.32			
	35-60	15-70	20-70	5-25	1.50-1.70	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.32	.32			
Elsinboro-----------	0-8	35-50	30-50	7-15	1.25-1.40	4.00-14.00	0.15-0.19	0.0-2.9	1.0-3.0	.32	.32	5	5	56
	8-38	20-45	25-60	18-35	1.30-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.32	.32			
	38-60	20-75	10-70	5-27	1.35-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.24	.24			
16C:														
Edneytown-----------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
16D:														
Edneytown-----------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
16E:														
Edneytown-----------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
17B:														
Edneytown-----------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
Peaks---------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-40	---	---	---	---	0.00-14.00	---	---	---	---	---			
	40-50	---	---	---	---	0.00-0.07	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
17C:														
Edneytown------------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
Peaks----------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
17D:														
Edneytown------------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
Peaks----------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
17E:														
Edneytown------------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
Peaks----------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
17F:														
Edneytown------------	0-7	30-75	15-50	5-15	1.40-1.60	14.00-42.00	0.11-0.17	0.0-2.9	1.0-3.0	.32	.37	5	5	56
	7-39	30-65	15-50	17-35	1.30-1.40	4.00-14.00	0.12-0.18	0.0-2.9	0.0-0.5	.24	.32			
	39-60	30-90	5-50	4-15	1.30-1.50	14.00-42.00	0.06-0.12	0.0-2.9	0.0-0.5	.37	.43			
Peaks----------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
18B:														
Elsinboro------------	0-8	35-50	30-50	7-15	1.25-1.40	4.00-14.00	0.15-0.19	0.0-2.9	1.0-3.0	.32	.32	5	5	56
	8-38	20-45	25-60	18-35	1.30-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.32	.32			
	38-60	20-75	10-70	5-27	1.35-1.55	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.24	.24			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
19C:														
Fauquier-------------	0-4	25-50	30-50	10-27	1.25-1.55	4.00-42.00	0.15-0.21	0.0-2.9	1.0-3.0	.28	.28	3	5	56
	4-25	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.20	.20			
	25-38	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.28	.28			
	38-55	10-40	50-80	7-27	1.35-1.45	4.00-42.00	0.20-0.22	0.0-2.9	0.0-0.5	.49	.55			
	55-65	---	---	---	---	0.00-0.07	---	---	---	---	---			
19D:														
Fauquier-------------	0-4	25-50	30-50	10-27	1.25-1.55	4.00-42.00	0.15-0.21	0.0-2.9	1.0-3.0	.28	.28	3	5	56
	4-25	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.20	.20			
	25-38	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.28	.28			
	38-55	10-40	50-80	7-27	1.35-1.45	4.00-42.00	0.20-0.22	0.0-2.9	0.0-0.5	.49	.55			
	55-65	---	---	---	---	0.00-0.07	---	---	---	---	---			
19E:														
Fauquier-------------	0-4	25-50	30-50	10-27	1.25-1.55	4.00-42.00	0.15-0.21	0.0-2.9	1.0-3.0	.28	.28	3	5	56
	4-25	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.20	.20			
	25-38	10-35	15-65	35-60	1.35-1.65	4.00-14.00	0.12-0.18	3.0-5.9	0.5-1.0	.28	.28			
	38-55	10-40	50-80	7-27	1.35-1.45	4.00-42.00	0.20-0.22	0.0-2.9	0.0-0.5	.49	.55			
	55-65	---	---	---	---	0.00-0.07	---	---	---	---	---			
20B:														
Haymarket------------	0-7	30-50	30-50	10-27	1.00-1.30	4.00-14.00	0.13-0.21	0.0-2.9	1.0-3.0	.24	.28	4	6	48
	7-35	10-35	10-60	35-60	1.20-1.50	1.40-4.00	0.10-0.16	6.0-8.9	0.0-0.5	.20	.20			
	35-45	10-45	25-75	20-40	1.20-1.50	1.40-4.00	0.09-0.22	3.0-5.9	0.0-0.5	.37	.37			
	45-65	30-75	10-45	15-35	1.30-1.60	4.00-14.00	0.08-0.19	0.0-2.9	0.0-0.5	.32	.32			
Mirerock-------------	0-5	20-70	10-70	10-27	1.00-1.30	4.00-14.00	0.18-0.22	0.0-2.9	1.0-3.0	.28	.28	3	6	48
	5-30	5-35	20-65	35-60	1.20-1.50	1.40-4.00	0.10-0.16	6.0-8.9	0.0-0.5	.28	.28			
	30-72	---	---	---	---	0.00-0.42	---	---	---	---	---			
20C:														
Haymarket------------	0-7	30-50	30-50	10-27	1.00-1.30	4.00-14.00	0.13-0.21	0.0-2.9	1.0-3.0	.24	.28	4	6	48
	7-35	10-35	10-60	35-60	1.20-1.50	1.40-4.00	0.10-0.16	6.0-8.9	0.0-0.5	.20	.20			
	35-45	10-45	25-75	20-40	1.20-1.50	1.40-4.00	0.09-0.22	3.0-5.9	0.0-0.5	.37	.37			
	45-65	30-75	10-45	15-35	1.30-1.60	4.00-14.00	0.08-0.19	0.0-2.9	0.0-0.5	.32	.32			
Mirerock-------------	0-5	20-70	10-70	10-27	1.00-1.30	4.00-14.00	0.18-0.22	0.0-2.9	1.0-3.0	.28	.28	3	6	48
	5-30	5-35	20-65	35-60	1.20-1.50	1.40-4.00	0.10-0.16	6.0-8.9	0.0-0.5	.28	.28			
	30-72	---	---	---	---	0.00-0.42	---	---	---	---	---			
21B:														
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
21C:														
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			
21D:														
Littlejoe------------	0-5	15-70	10-70	12-27	1.10-1.40	4.00-14.00	0.16-0.20	0.0-2.9	0.5-2.0	.32	.37	4	5	56
	5-38	5-40	10-65	35-60	1.40-1.60	1.40-14.00	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	38-56	5-40	45-80	7-40	1.35-1.45	4.00-42.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.37			
	56-66	---	---	---	---	0.00-14.00	---	---	---	---	---			
22B:														
Minnieville, severely eroded--------------	0-6	25-45	20-45	27-40	1.30-1.40	4.00-14.00	0.15-0.16	0.0-2.9	0.5-1.0	.24	.24	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			
22C:														
Minnieville, severely eroded--------------	0-6	25-45	20-45	27-40	1.30-1.40	4.00-14.00	0.15-0.16	0.0-2.9	0.5-1.0	.24	.24	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			
22D:														
Minnieville, severely eroded--------------	0-6	25-45	20-45	27-40	1.30-1.40	4.00-14.00	0.15-0.16	0.0-2.9	0.5-1.0	.24	.24	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			
23B:														
Minnieville----------	0-6	30-50	30-50	10-27	1.25-1.35	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			
23C:														
Minnieville----------	0-6	30-50	30-50	10-27	1.25-1.35	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
23D:														
Minnieville----------	0-6	30-50	30-50	10-27	1.25-1.35	4.00-14.00	0.18-0.22	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	6-46	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	46-52	5-35	10-60	35-70	1.25-1.45	4.00-14.00	0.10-0.14	3.0-5.9	0.0-0.5	.17	.17			
	52-72	5-45	20-75	15-40	1.25-1.45	4.00-14.00	0.10-0.12	3.0-5.9	0.0-0.5	.43	.43			
24C:														
Myersville-----------	0-3	10-40	50-75	5-20	1.20-1.50	14.00-42.00	0.20-0.22	0.0-2.9	0.5-2.0	.43	.43	4	5	56
	3-28	10-50	20-75	18-35	1.20-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.37	.43			
	28-50	10-50	25-75	10-32	1.20-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.32	.43			
	50-60	---	---	---	---	0.00-14.00	---	---	---	---	---			
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
24D:														
Myersville-----------	0-3	10-40	50-75	5-20	1.20-1.50	14.00-42.00	0.20-0.22	0.0-2.9	0.5-2.0	.43	.43	4	5	56
	3-28	10-50	20-75	18-35	1.20-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.37	.43			
	28-50	10-50	25-75	10-32	1.20-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.32	.43			
	50-60	---	---	---	---	0.00-14.00	---	---	---	---	---			
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
24E:														
Myersville-----------	0-3	10-40	50-75	5-20	1.20-1.50	14.00-42.00	0.20-0.22	0.0-2.9	0.5-2.0	.43	.43	4	5	56
	3-28	10-50	20-75	18-35	1.20-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.37	.43			
	28-50	10-50	25-75	10-32	1.20-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.32	.43			
	50-60	---	---	---	---	0.00-14.00	---	---	---	---	---			
Catoctin-------------	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
24F:														
Myersville-----------	0-3	10-40	50-75	5-20	1.20-1.50	14.00-42.00	0.20-0.22	0.0-2.9	0.5-2.0	.43	.43	4	5	56
	3-28	10-50	20-75	18-35	1.20-1.50	4.00-14.00	0.09-0.22	0.0-2.9	0.0-0.5	.37	.43			
	28-50	10-50	25-75	10-32	1.20-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.32	.43			
	50-60	---	---	---	---	0.00-14.00	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
24F:														
Catoctin	0-4	15-45	50-75	5-20	1.20-1.50	14.00-42.00	0.15-0.19	0.0-2.9	0.5-2.0	.24	.43	2	6	48
	4-22	15-45	30-75	10-35	1.20-1.50	14.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.20	.55			
	22-30	---	---	---	---	0.01-1.40	---	---	---	---	---			
	30-40	---	---	---	---	0.00-0.07	---	---	---	---	---			
25B:														
Orenda	0-6	30-50	30-50	10-20	1.25-1.35	4.00-14.00	0.13-0.19	0.0-2.9	1.0-2.0	.32	.37	5	5	56
	6-40	20-45	20-50	35-60	1.25-1.45	1.40-4.00	0.07-0.14	3.0-5.9	0.0-0.5	.28	.28			
	40-60	20-75	10-70	10-35	1.45-1.65	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.24	.24			
25C:														
Orenda	0-6	30-50	30-50	10-20	1.25-1.35	4.00-14.00	0.13-0.19	0.0-2.9	1.0-2.0	.32	.37	5	5	56
	6-40	20-45	20-50	35-60	1.25-1.45	1.40-4.00	0.07-0.14	3.0-5.9	0.0-0.5	.28	.28			
	40-60	20-75	10-70	10-35	1.45-1.65	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.24	.24			
25D:														
Orenda	0-6	30-50	30-50	10-20	1.25-1.35	4.00-14.00	0.13-0.19	0.0-2.9	1.0-2.0	.32	.37	5	5	56
	6-40	20-45	20-50	35-60	1.25-1.45	1.40-4.00	0.07-0.14	3.0-5.9	0.0-0.5	.28	.28			
	40-60	20-75	10-70	10-35	1.45-1.65	4.00-14.00	0.08-0.22	0.0-2.9	0.0-0.5	.24	.24			
26C:														
Peaks	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
26D:														
Peaks	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
26E:														
Peaks	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
26F:														
Peaks----------------	0-6	30-75	10-50	4-18	1.20-1.40	42.00-141.00	0.08-0.12	0.0-2.9	1.0-3.0	.17	.37	2	6	48
	6-20	30-75	10-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.24			
	20-34	30-90	2-50	5-18	1.20-1.40	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.5	.10	.28			
	34-50	---	---	---	---	0.00-14.00	---	---	---	---	---			
	50-60	---	---	---	---	0.00-0.07	---	---	---	---	---			
Rock outcrop.														
27A:														
Pineywoods-----------	0-6	15-40	30-75	10-27	1.35-1.45	4.00-14.00	0.15-0.22	0.0-2.9	2.0-4.0	.37	.37	4	5	56
	6-22	5-40	10-65	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.32	.32			
	22-41	10-80	10-75	10-35	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.28	.32			
	41-62	---	---	---	---	0.00-14.00	---	---	---	---	---			
27B:														
Pineywoods-----------	0-6	15-40	30-75	10-27	1.35-1.45	4.00-14.00	0.15-0.22	0.0-2.9	2.0-4.0	.37	.37	4	5	56
	6-22	5-40	10-65	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.32	.32			
	22-41	10-80	10-75	10-35	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.28	.32			
	41-62	---	---	---	---	0.00-14.00	---	---	---	---	---			
28.														
Pits, quarry														
29B:														
Saunook--------------	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
29C:														
Saunook--------------	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
29D:														
Saunook--------------	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
30B:														
Saunook, very stony--	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
30C:														
Saunook, very stony--	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
30D:														
Saunook, very stony--	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
30E:														
Saunook, very stony--	0-19	30-50	30-50	7-20	1.35-1.60	14.00-42.00	0.17-0.21	0.0-2.9	3.0-10	.15	.17	5	5	56
	19-60	25-65	15-50	18-35	1.30-1.50	4.00-14.00	0.07-0.19	0.0-2.9	0.2-2.0	.20	.28			
31A:														
Sindion--------------	0-14	25-50	30-50	15-27	1.35-1.60	4.00-14.00	0.15-0.19	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	14-62	10-50	25-80	18-35	1.45-1.70	4.00-14.00	0.10-0.22	0.0-2.9	1.0-3.0	.28	.28			
	62-72	10-75	10-50	2-35	1.50-1.70	4.00-42.00	0.02-0.22	0.0-2.9	1.0-3.0	.10	.20			
Yogaville------------	0-16	25-50	30-50	10-27	1.35-1.60	4.00-14.00	0.14-0.19	0.0-2.9	1.0-4.0	.28	.28	5	5	56
	16-72	10-65	20-80	18-35	1.45-1.70	4.00-14.00	0.10-0.22	0.0-2.9	0.5-2.0	.28	.28			
32B:														
Sketerville----------	0-4	10-50	50-80	10-27	1.35-1.45	4.00-14.00	0.15-0.22	0.0-2.9	1.0-3.0	.37	.37	5	6	48
	4-42	5-40	20-80	35-60	1.45-1.55	0.42-1.40	0.10-0.15	3.0-5.9	0.0-0.5	.32	.32			
	42-70	5-75	5-75	10-55	1.45-1.55	1.40-4.00	0.10-0.15	3.0-5.9	0.0-0.5	.28	.32			
	70-74	---	---	---	---	0.00-0.07	---	---	---	---	---			
33A:														
Speedwell------------	0-20	25-50	30-50	15-27	1.35-1.60	4.00-14.00	0.15-0.21	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	20-72	10-60	15-75	18-35	1.45-1.70	4.00-14.00	0.10-0.22	0.0-2.9	1.0-3.0	.28	.28			
34C:														
Spriggs--------------	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
34D:														
Spriggs--------------	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
34E:														
Spriggs--------------	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
35B:														
Spriggs, very stony--	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
35C:														
Spriggs, very stony--	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
35D:														
Spriggs, very stony--	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
35E:														
Spriggs, very stony--	0-6	30-50	30-50	10-27	1.30-1.40	4.00-14.00	0.17-0.19	0.0-2.9	0.5-2.0	.32	.37	3	5	56
	6-18	15-50	25-65	20-35	1.33-1.40	4.00-14.00	0.07-0.22	3.0-5.9	0.0-0.5	.28	.37			
	18-30	15-75	10-70	15-27	1.40-1.50	4.00-14.00	0.07-0.22	0.0-2.9	0.0-0.5	.24	.28			
	30-41	---	---	---	---	0.00-14.00	---	---	---	---	---			
	41-51	---	---	---	---	0.00-0.07	---	---	---	---	---			
36D:														
Stott Knob-----------	0-9	30-50	30-50	8-27	1.35-1.50	4.00-42.00	0.14-0.19	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	9-21	25-70	10-50	18-35	1.40-1.55	4.00-14.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	21-30	30-80	10-50	5-27	1.35-1.50	4.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.37			
	30-40	---	---	---	---	0.00-14.00	---	---	---	---	---			
Rhodhiss-------------	0-8	30-50	30-50	5-27	1.35-1.50	4.00-42.00	0.11-0.19	0.0-2.9	0.5-2.0	.32	.32	5	5	56
	8-40	25-75	10-50	18-35	1.40-1.55	4.00-14.00	0.08-0.16	0.0-2.9	0.0-0.5	.28	.28			
	40-60	30-75	10-50	5-27	1.35-1.50	4.00-42.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
36E:														
Stott Knob-----------	0-9	30-50	30-50	8-27	1.35-1.50	4.00-42.00	0.14-0.19	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	9-21	25-70	10-50	18-35	1.40-1.55	4.00-14.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	21-30	30-80	10-50	5-27	1.35-1.50	4.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.37			
	30-40	---	---	---	---	0.00-14.00	---	---	---	---	---			
Rhodhiss-------------	0-8	30-50	30-50	5-27	1.35-1.50	4.00-42.00	0.11-0.19	0.0-2.9	0.5-2.0	.32	.32	5	5	56
	8-40	25-75	10-50	18-35	1.40-1.55	4.00-14.00	0.08-0.16	0.0-2.9	0.0-0.5	.28	.28			
	40-60	30-75	10-50	5-27	1.35-1.50	4.00-42.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
37D:														
Stott Knob, very stony---------------	0-9	30-50	30-50	8-27	1.35-1.50	4.00-42.00	0.14-0.19	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	9-21	25-70	10-50	18-35	1.40-1.55	4.00-14.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	21-30	30-80	10-50	5-27	1.35-1.50	4.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.37			
	30-40	---	---	---	---	0.00-14.00	---	---	---	---	---			
Rhodhiss, very stony-	0-8	30-50	30-50	5-27	1.35-1.50	4.00-42.00	0.11-0.19	0.0-2.9	0.5-2.0	.32	.32	5	5	56
	8-40	25-75	10-50	18-35	1.40-1.55	4.00-14.00	0.08-0.16	0.0-2.9	0.0-0.5	.28	.28			
	40-60	30-75	10-50	5-27	1.35-1.50	4.00-42.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
37E:														
Stott Knob, very stony---------------	0-9	30-50	30-50	8-27	1.35-1.50	4.00-42.00	0.14-0.19	0.0-2.9	0.5-2.0	.37	.37	3	5	56
	9-21	25-70	10-50	18-35	1.40-1.55	4.00-14.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	21-30	30-80	10-50	5-27	1.35-1.50	4.00-42.00	0.07-0.19	0.0-2.9	0.0-0.5	.28	.37			
	30-40	---	---	---	---	0.00-14.00	---	---	---	---	---			
Rhodhiss, very stony-	0-8	30-50	30-50	5-27	1.35-1.50	4.00-42.00	0.11-0.19	0.0-2.9	0.5-2.0	.32	.32	5	5	56
	8-40	25-75	10-50	18-35	1.40-1.55	4.00-14.00	0.08-0.16	0.0-2.9	0.0-0.5	.28	.28			
	40-60	30-75	10-50	5-27	1.35-1.50	4.00-42.00	0.11-0.17	0.0-2.9	0.0-0.5	.32	.32			
38A:														
Suches---------------	0-8	30-50	30-50	10-25	1.30-1.50	4.00-14.00	0.15-0.21	0.0-2.9	2.0-4.0	.24	.24	5	5	56
	8-35	10-70	10-60	18-38	1.45-1.65	4.00-14.00	0.12-0.21	0.0-2.9	0.5-2.0	.28	.28			
	35-45	10-70	10-75	8-35	1.45-1.65	4.00-14.00	0.12-0.22	0.0-2.9	0.5-2.0	.28	.28			
	45-60	10-85	5-75	5-35	1.55-1.70	4.00-14.00	0.08-0.22	0.0-2.9	0.5-1.0	.28	.28			
39C:														
Sylco----------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus-------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
39D:														
Sylco----------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
39D:														
Sylvatus-------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
39E:														
Sylco----------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus-------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
39F:														
Sylco----------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus-------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
40C:														
Sylco, extremely stony---------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
40D:														
Sylco, extremely stony---------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
40D:														
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
40E:														
Sylco, extremely stony---------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
40F:														
Sylco, extremely stony---------------	0-7	10-40	50-80	10-27	1.00-1.20	14.00-42.00	0.12-0.17	0.0-2.9	0.5-2.0	.15	.32	2	7	38
	7-26	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.08-0.19	0.0-2.9	0.0-0.5	.15	.43			
	26-33	10-50	30-75	10-35	1.20-1.50	14.00-42.00	0.05-0.14	0.0-2.9	0.0-0.5	.10	.55			
	33-42	---	---	---	---	0.00-0.42	---	---	---	---	---			
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
41E:														
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
Rock outcrop.														

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
41F:														
Sylvatus, extremely stony---------------	0-5	10-40	50-80	10-27	1.00-1.20	4.00-14.00	0.13-0.19	0.0-2.9	0.5-2.0	.17	.43	1	8	0
	5-14	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.03-0.17	0.0-2.9	0.0-0.5	.17	.55			
	14-16	10-50	25-75	10-35	1.20-1.50	4.00-14.00	0.02-0.13	0.0-2.9	0.0-0.5	.15	.55			
	16-25	---	---	---	---	0.00-0.42	---	---	---	---	---			
Rock outcrop.														
42.														
Udorthents														
43B:														
Unison---------------	0-6	30-50	30-50	10-25	1.35-1.65	4.00-42.00	0.14-0.20	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	6-30	5-40	25-60	35-60	1.30-1.60	4.00-14.00	0.06-0.15	3.0-5.9	0.0-0.5	.15	.17			
	30-62	5-45	25-65	25-45	1.30-1.60	4.00-14.00	0.06-0.19	3.0-5.9	0.0-0.5	.20	.24			
43C:														
Unison---------------	0-6	30-50	30-50	10-25	1.35-1.65	4.00-42.00	0.14-0.20	0.0-2.9	1.0-3.0	.28	.28	5	5	56
	6-30	5-40	25-60	35-60	1.30-1.60	4.00-14.00	0.06-0.15	3.0-5.9	0.0-0.5	.15	.17			
	30-62	5-45	25-65	25-45	1.30-1.60	4.00-14.00	0.06-0.19	3.0-5.9	0.0-0.5	.20	.24			
44B:														
Unison, very stony---	0-6	30-50	30-50	10-25	1.35-1.65	4.00-42.00	0.14-0.20	0.0-2.9	1.0-3.0	.28	.28	4	5	56
	6-30	5-40	25-60	35-60	1.30-1.60	4.00-14.00	0.06-0.15	3.0-5.9	0.0-0.5	.15	.17			
	30-62	5-45	25-65	25-45	1.30-1.60	4.00-14.00	0.06-0.19	3.0-5.9	0.0-0.5	.20	.24			
44C:														
Unison, very stony---	0-6	30-50	30-50	10-25	1.35-1.65	4.00-42.00	0.14-0.20	0.0-2.9	1.0-3.0	.28	.28	4	5	56
	6-30	5-40	25-60	35-60	1.30-1.60	4.00-14.00	0.06-0.15	3.0-5.9	0.0-0.5	.15	.17			
	30-62	5-45	25-65	25-45	1.30-1.60	4.00-14.00	0.06-0.19	3.0-5.9	0.0-0.5	.20	.24			
45B:														
Wintergreen, severely eroded--------------	0-7	25-45	20-50	27-40	1.20-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.20	.20	5	6	48
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.17	.17			
45C:														
Wintergreen, severely eroded--------------	0-7	25-45	20-50	27-40	1.20-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.20	.20	5	6	48
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.17	.17			
45D:														
Wintergreen, severely eroded--------------	0-7	25-45	20-50	27-40	1.20-1.50	4.00-14.00	0.10-0.19	0.0-2.9	0.5-1.0	.20	.20	5	6	48
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.17	.17			

Table 17.—Physical Soil Properties—Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	Pct	Pct	g/cc	um/sec	In/in	Pct	Pct					
46B:														
Wintergreen----------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
46C:														
Wintergreen----------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
46D:														
Wintergreen----------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
47B:														
Wintergreen, very stony---------------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
47C:														
Wintergreen, very stony---------------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
47D:														
Wintergreen, very stony---------------	0-7	30-50	30-50	10-25	1.20-1.50	4.00-42.00	0.14-0.19	0.0-2.9	1.0-2.0	.32	.32	5	5	56
	7-62	20-65	10-50	35-55	1.20-1.50	4.00-14.00	0.12-0.17	3.0-5.9	0.0-0.5	.24	.28			
W.														
Water														

Table 18.—Chemical Soil Properties

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
1B:				
Buffstat-------------	0-3	4.8-11	3.6-8.4	4.5-5.5
	3-7	3.6-9.0	3.0-7.0	4.5-5.5
	7-39	8.8-14	6.6-10	4.5-5.5
	39-50	5.0-11	4.0-8.0	4.5-5.5
	50-60	---	---	---
1C:				
Buffstat-------------	0-3	4.8-11	3.6-8.4	4.5-5.5
	3-7	3.6-9.0	3.0-7.0	4.5-5.5
	7-39	8.8-14	6.6-10	4.5-5.5
	39-50	5.0-11	4.0-8.0	4.5-5.5
	50-60	---	---	---
1D:				
Buffstat-------------	0-3	4.8-11	3.6-8.4	4.5-5.5
	3-7	3.6-9.0	3.0-7.0	4.5-5.5
	7-39	8.8-14	6.6-10	4.5-5.5
	39-50	5.0-11	4.0-8.0	4.5-5.5
	50-60	---	---	---
2C:				
Bugley---------------	0-2	3.6-14	2.7-10	3.5-5.5
	2-6	2.5-12	1.8-8.8	3.5-5.5
	6-16	3.5-12	2.6-10	3.5-5.5
	16-26	---	---	---
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---
2D:				
Bugley---------------	0-2	3.6-14	2.7-10	3.5-5.5
	2-6	2.5-12	1.8-8.8	3.5-5.5
	6-16	3.5-12	2.6-10	3.5-5.5
	16-26	---	---	---
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---
2E:				
Bugley---------------	0-2	3.6-14	2.7-10	3.5-5.5
	2-6	2.5-12	1.8-8.8	3.5-5.5
	6-16	3.5-12	2.6-10	3.5-5.5
	16-26	---	---	---
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
3C:				
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
Rock outcrop.				
3D:				
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
Rock outcrop.				
3E:				
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
Rock outcrop.				
4B:				
Clifford, severely eroded--------------	0-10	3.8-6.2	2.9-4.7	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
4C:				
Clifford, severely eroded--------------	0-10	3.8-6.2	2.9-4.7	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
4D:				
Clifford, severely eroded--------------	0-10	3.8-6.2	2.9-4.7	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
4E:				
Clifford, severely eroded--------------	0-10	3.8-6.2	2.9-4.7	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
5B:				
Clifford-------------	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
5C:				
Clifford-------------	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
5D:				
Clifford-------------	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
5E:				
Clifford-------------	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
6B:				
Clifford, very stony-	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
6C:				
Clifford, very stony-	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
6D:				
Clifford, very stony-	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
6E:				
Clifford, very stony-	0-10	1.8-4.2	1.4-3.2	4.5-6.0
	10-50	3.5-8.1	2.6-6.1	4.5-6.0
	50-72	3.5-7.1	2.6-5.3	4.5-6.0
7A:				
Codorus--------------	0-7	10-18	7.0-14	4.5-6.0
	7-40	6.0-13	5.0-10	5.1-6.5
	40-58	2.0-15	1.0-11	5.1-6.5
	58-65	2.0-16	1.0-12	5.1-6.5
8B:				
Colleen--------------	0-6	2.1-7.2	1.6-5.4	4.5-6.5
	6-50	3.5-7.1	2.6-5.3	3.5-5.5
	50-65	1.0-4.6	0.8-3.5	4.5-6.0
8C:				
Colleen--------------	0-6	2.1-7.2	1.6-5.4	4.5-6.5
	6-50	3.5-7.1	2.6-5.3	3.5-5.5
	50-65	1.0-4.6	0.8-3.5	4.5-6.0
8D:				
Colleen--------------	0-6	2.1-7.2	1.6-5.4	4.5-6.5
	6-50	3.5-7.1	2.6-5.3	3.5-5.5
	50-65	1.0-4.6	0.8-3.5	4.5-6.0
9A:				
Combs----------------	0-12	4.0-18	3.0-13	5.6-7.3
	12-72	2.9-11	2.2-8.1	5.6-7.3
10A:				
Comus----------------	0-8	4.0-13	3.0-10	4.5-6.0
	8-45	3.0-11	2.0-8.0	4.5-6.0
	45-65	2.0-13	1.0-10	4.5-6.0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
11A:				
Craigsville----------	0-5	4.0-12	3.0-9.0	4.5-5.5
	5-32	1.8-6.4	1.3-4.8	4.5-5.5
	32-72	1.8-4.6	1.3-3.5	4.5-5.5
12D:				
Dekalb---------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-26	2.5-7.4	1.8-5.6	3.5-5.5
	26-31	1.8-6.4	1.3-4.8	3.5-5.5
	31-41	---	---	---
Hazleton-------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-31	2.5-7.4	1.8-5.6	3.5-5.5
	31-43	1.8-6.4	1.3-4.8	3.5-5.5
	43-53	---	---	---
12E:				
Dekalb---------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-26	2.5-7.4	1.8-5.6	3.5-5.5
	26-31	1.8-6.4	1.3-4.8	3.5-5.5
	31-41	---	---	---
Hazleton-------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-31	2.5-7.4	1.8-5.6	3.5-5.5
	31-43	1.8-6.4	1.3-4.8	3.5-5.5
	43-53	---	---	---
12F:				
Dekalb---------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-26	2.5-7.4	1.8-5.6	3.5-5.5
	26-31	1.8-6.4	1.3-4.8	3.5-5.5
	31-41	---	---	---
Hazleton-------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-31	2.5-7.4	1.8-5.6	3.5-5.5
	31-43	1.8-6.4	1.3-4.8	3.5-5.5
	43-53	---	---	---
13E:				
Dekalb---------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-26	2.5-7.4	1.8-5.6	3.5-5.5
	26-31	1.8-6.4	1.3-4.8	3.5-5.5
	31-41	---	---	---
Rock outcrop.				
13F:				
Dekalb---------------	0-4	8.0-18	6.0-14	3.5-5.5
	4-26	2.5-7.4	1.8-5.6	3.5-5.5
	26-31	1.8-6.4	1.3-4.8	3.5-5.5
	31-41	---	---	---
Rock outcrop.				
14B:				
Delanco--------------	0-4	6.2-16	4.7-12	3.5-5.5
	4-35	6.3-12	4.7-8.7	3.5-5.5
	35-60	1.8-8.8	1.3-7.4	3.5-5.5

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
15B:				
Delanco	0-4	6.2-16	4.7-12	3.5-5.5
	4-35	6.3-12	4.7-8.7	3.5-5.5
	35-60	1.8-8.8	1.3-7.4	3.5-5.5
Elsinboro	0-8	6.2-16	4.7-12	4.5-5.5
	8-38	6.3-12	4.7-8.7	4.5-5.5
	38-60	1.8-8.8	1.3-7.4	4.5-5.5
15C:				
Delanco	0-4	6.2-16	4.7-12	3.5-5.5
	4-35	6.3-12	4.7-8.7	3.5-5.5
	35-60	1.8-8.8	1.3-7.4	3.5-5.5
Elsinboro	0-8	6.2-16	4.7-12	4.5-5.5
	8-38	6.3-12	4.7-8.7	4.5-5.5
	38-60	1.8-8.8	1.3-7.4	4.5-5.5
16C:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
16D:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
16E:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
17B:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
Peaks	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-40	---	---	---
	40-50	---	---	---
17C:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
Peaks	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
17D:				
Edneytown	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
17D:				
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
17E:				
Edneytown------------	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
17F:				
Edneytown------------	0-7	3.5-10	2.6-7.9	4.5-6.0
	7-39	5.0-9.9	3.8-7.4	4.5-5.5
	39-60	1.0-4.9	0.8-3.7	4.5-5.5
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
18B:				
Elsinboro------------	0-8	6.2-16	4.7-12	4.5-5.5
	8-38	6.3-12	4.7-8.7	4.5-5.5
	38-60	1.8-8.8	1.3-7.4	4.5-5.5
19C:				
Fauquier-------------	0-4	5.8-16	4.3-12	4.5-6.0
	4-25	13-23	10-17	4.5-6.0
	25-38	13-23	10-17	4.5-6.0
	38-55	2.5-11	1.8-7.9	5.1-6.0
	55-65	---	---	---
19D:				
Fauquier-------------	0-4	5.8-16	4.3-12	4.5-6.0
	4-25	13-23	10-17	4.5-6.0
	25-38	13-23	10-17	4.5-6.0
	38-55	2.5-11	1.8-7.9	5.1-6.0
	55-65	---	---	---
19E:				
Fauquier-------------	0-4	5.8-16	4.3-12	4.5-6.0
	4-25	13-23	10-17	4.5-6.0
	25-38	13-23	10-17	4.5-6.0
	38-55	2.5-11	1.8-7.9	5.1-6.0
	55-65	---	---	---
20B:				
Haymarket------------	0-7	7.2-20	5.4-15	4.5-6.0
	7-35	17-31	13-23	4.5-6.0
	35-45	10-24	7.5-18	4.5-6.0
	45-65	7.5-19	5.6-14	5.1-7.3

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
20B:				
Mirerock-------------	0-5	7.2-20	5.4-15	5.1-7.3
	5-30	18-25	13-23	5.1-7.3
	30-72	---	---	---
20C:				
Haymarket------------	0-7	7.2-20	5.4-15	4.5-6.0
	7-35	17-31	13-23	4.5-6.0
	35-45	10-24	7.5-18	4.5-6.0
	45-65	7.5-19	5.6-14	5.1-7.3
Mirerock-------------	0-5	7.2-20	5.4-15	5.1-7.3
	5-30	18-25	13-23	5.1-7.3
	30-72	---	---	---
21B:				
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---
21C:				
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---
21D:				
Littlejoe------------	0-5	4.1-11	3.1-8.4	4.5-5.5
	5-38	8.8-16	6.6-12	4.5-5.5
	38-56	1.8-11	1.3-8.3	4.5-5.5
	56-66	---	---	---
22B:				
Minnieville, severely eroded--------------	0-6	3.8-6.2	2.9-4.7	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0
22C:				
Minnieville, severely eroded--------------	0-6	3.8-6.2	2.9-4.7	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0
22D:				
Minnieville, severely eroded--------------	0-6	3.8-6.2	2.9-4.7	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0
23B:				
Minnieville----------	0-6	3.2-7.2	2.4-5.4	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
23C:				
Minnieville----------	0-6	3.2-7.2	2.4-5.4	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0
23D:				
Minnieville----------	0-6	3.2-7.2	2.4-5.4	5.1-6.0
	6-46	3.5-8.1	2.6-6.1	5.1-6.0
	46-52	3.5-8.1	2.6-6.1	5.1-6.0
	52-72	3.0-8.1	2.2-6.1	5.1-6.0
24C:				
Myersville-----------	0-3	2.9-12	2.2-8.6	4.5-6.0
	3-28	6.3-13	4.7-10	4.5-6.0
	28-50	3.5-12	2.6-9.2	4.5-6.0
	50-60	---	---	---
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
24D:				
Myersville-----------	0-3	2.9-12	2.2-8.6	4.5-6.0
	3-28	6.3-13	4.7-10	4.5-6.0
	28-50	3.5-12	2.6-9.2	4.5-6.0
	50-60	---	---	---
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
24E:				
Myersville-----------	0-3	2.9-12	2.2-8.6	4.5-6.0
	3-28	6.3-13	4.7-10	4.5-6.0
	28-50	3.5-12	2.6-9.2	4.5-6.0
	50-60	---	---	---
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---
24F:				
Myersville-----------	0-3	2.9-12	2.2-8.6	4.5-6.0
	3-28	6.3-13	4.7-10	4.5-6.0
	28-50	3.5-12	2.6-9.2	4.5-6.0
	50-60	---	---	---
Catoctin-------------	0-4	2.9-12	2.2-8.6	5.1-6.5
	4-22	3.5-13	2.6-10	5.1-6.5
	22-30	---	---	---
	30-40	---	---	---

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
25B:				
Orenda---------------	0-6	5.8-12	4.3-8.6	5.1-6.0
	6-40	12-22	9.2-17	5.1-6.0
	40-60	7.0-13	5.2-10	5.1-6.0
25C:				
Orenda---------------	0-6	5.8-12	4.3-8.6	5.1-6.0
	6-40	12-22	9.2-17	5.1-6.0
	40-60	7.0-13	5.2-10	5.1-6.0
25D:				
Orenda---------------	0-6	5.8-12	4.3-8.6	5.1-6.0
	6-40	12-22	9.2-17	5.1-6.0
	40-60	7.0-13	5.2-10	5.1-6.0
26C:				
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
Rock outcrop.				
26D:				
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
Rock outcrop.				
26E:				
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
Rock outcrop.				
26F:				
Peaks----------------	0-6	3.2-11	2.4-8.1	4.5-6.0
	6-20	2.4-7.9	1.8-5.9	4.5-6.0
	20-34	2.4-7.9	1.8-5.9	4.5-6.0
	34-50	---	---	---
	50-60	---	---	---
Rock outcrop.				
27A:				
Pineywoods-----------	0-6	5.5-12	4.1-8.8	3.6-6.5
	6-22	3.5-7.1	2.6-5.3	4.5-5.5
	22-41	1.0-4.6	0.8-3.5	5.1-6.5
	41-62	---	---	---

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
27B:				
Pineywoods-----------	0-6	5.5-12	4.1-8.8	3.6-6.5
	6-22	3.5-7.1	2.6-5.3	4.5-5.5
	22-41	1.0-4.6	0.8-3.5	5.1-6.5
	41-62	---	---	---
28.				
Pits, quarry				
29B:				
Saunook--------------	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
29C:				
Saunook--------------	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
29D:				
Saunook--------------	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
30B:				
Saunook, very stony--	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
30C:				
Saunook, very stony--	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
30D:				
Saunook, very stony--	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
30E:				
Saunook, very stony--	0-19	9.2-30	6.9-22	3.5-6.0
	19-60	6.8-17	5.1-13	4.5-6.5
31A:				
Sindion--------------	0-14	6.0-14	---	5.5-8.4
	14-62	7.0-16	---	5.5-8.4
	62-72	7.0-16	---	5.5-8.4
Yogaville------------	0-16	6.0-14	---	5.1-7.3
	16-72	7.0-16	---	5.1-7.3
32B:				
Sketerville----------	0-4	3.2-9.4	2.4-7.1	3.6-6.5
	4-42	3.5-7.1	2.6-5.3	3.6-5.5
	42-70	1.0-6.6	0.8-5.0	4.5-6.0
	70-74	---	---	---
33A:				
Speedwell------------	0-20	6.0-14	---	6.1-8.4
	20-72	7.0-16	---	6.1-8.4

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
34C:				
Spriggs	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
34D:				
Spriggs	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
34E:				
Spriggs	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
35B:				
Spriggs, very stony	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
35C:				
Spriggs, very stony	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
35D:				
Spriggs, very stony	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
35E:				
Spriggs, very stony	0-6	6.1-18	4.6-14	4.5-6.0
	6-18	10-19	7.5-14	4.5-6.0
	18-30	7.5-15	5.6-11	4.5-6.0
	30-41	---	---	---
	41-51	---	---	---
36D:				
Stott Knob	0-9	1.8-11	1.3-7.9	3.5-6.0
	9-21	5.2-15	3.9-11	3.5-6.0
	21-30	1.8-13	1.3-10	3.5-6.0
	30-40	---	---	---
Rhodhiss	0-8	1.8-11	1.3-7.9	4.5-6.5
	8-40	5.2-15	3.9-11	4.5-6.5
	40-60	1.8-13	1.3-10	4.5-6.5

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
36E:				
Stott Knob-----------	0-9	1.8-11	1.3-7.9	3.5-6.0
	9-21	5.2-15	3.9-11	3.5-6.0
	21-30	1.8-13	1.3-10	3.5-6.0
	30-40	---	---	---
Rhodhiss-------------	0-8	1.8-11	1.3-7.9	4.5-6.5
	8-40	5.2-15	3.9-11	4.5-6.5
	40-60	1.8-13	1.3-10	4.5-6.5
37D:				
Stott Knob, very stony---------------	0-9	1.8-11	1.3-7.9	3.5-6.0
	9-21	5.2-15	3.9-11	3.5-6.0
	21-30	1.8-13	1.3-10	3.5-6.0
	30-40	---	---	---
Rhodhiss, very stony-	0-8	1.8-11	1.3-7.9	4.5-6.5
	8-40	5.2-15	3.9-11	4.5-6.5
	40-60	1.8-13	1.3-10	4.5-6.5
37E:				
Stott Knob, very stony---------------	0-9	1.8-11	1.3-7.9	3.5-6.0
	9-21	5.2-15	3.9-11	3.5-6.0
	21-30	1.8-13	1.3-10	3.5-6.0
	30-40	---	---	---
Rhodhiss, very stony-	0-8	1.8-11	1.3-7.9	4.5-6.5
	8-40	5.2-15	3.9-11	4.5-6.5
	40-60	1.8-13	1.3-10	4.5-6.5
38A:				
Suches---------------	0-8	8.0-18	6.0-13	4.5-6.0
	8-35	7.4-18	5.6-13	4.5-6.0
	35-45	7.4-18	5.6-13	4.5-6.0
	45-60	3.9-14	2.9-11	4.5-6.0
39C:				
Sylco----------------	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus-------------	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
39D:				
Sylco----------------	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus-------------	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
39E:				
Sylco	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
39F:				
Sylco	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
40C:				
Sylco, extremely stony	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus, extremely stony	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
40D:				
Sylco, extremely stony	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus, extremely stony	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
40E:				
Sylco, extremely stony	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus, extremely stony	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
40F:				
Sylco, extremely stony---------------	0-7	6.4-13	4.8-9.9	4.5-5.5
	7-26	5.2-13	3.9-10	4.5-5.5
	26-33	5.2-13	3.9-10	4.5-5.5
	33-42	---	---	---
Sylvatus, extremely stony---------------	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
41E:				
Sylvatus, extremely stony---------------	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
Rock outcrop.				
41F:				
Sylvatus, extremely stony---------------	0-5	6.4-13	4.8-9.9	3.5-5.0
	5-14	5.2-13	3.9-10	3.5-5.0
	14-16	5.2-13	3.9-10	3.5-5.0
	16-25	---	---	---
Rock outcrop.				
42.				
Udorthents				
43B:				
Unison---------------	0-6	4.8-13	3.6-9.8	4.5-6.0
	6-30	7.5-19	5.6-14	4.5-6.0
	30-62	7.5-19	5.6-14	4.5-6.0
43C:				
Unison---------------	0-6	4.8-13	3.6-9.8	4.5-6.0
	6-30	7.5-19	5.6-14	4.5-6.0
	30-62	7.5-19	5.6-14	4.5-6.0
44B:				
Unison, very stony---	0-6	4.8-13	3.6-9.8	4.5-6.0
	6-30	7.5-19	5.6-14	4.5-6.0
	30-62	7.5-19	5.6-14	4.5-6.0
44C:				
Unison, very stony---	0-6	4.8-13	3.6-9.8	4.5-6.0
	6-30	7.5-19	5.6-14	4.5-6.0
	30-62	7.5-19	5.6-14	4.5-6.0
45B:				
Wintergreen, severely eroded--------------	0-7	7.9-12	5.9-9.2	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5

Table 18.—Chemical Soil Properties—Continued

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction
	Inches	meq/100 g	meq/100 g	pH
45C:				
Wintergreen, severely eroded----------------	0-7	7.9-12	5.9-9.2	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
45D:				
Wintergreen, severely eroded----------------	0-7	7.9-12	5.9-9.2	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
46B:				
Wintergreen----------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
46C:				
Wintergreen----------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
46D:				
Wintergreen----------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
47B:				
Wintergreen, very stony---------------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
47C:				
Wintergreen, very stony---------------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
47D:				
Wintergreen, very stony---------------	0-7	4.8-11	3.6-8.1	3.6-5.5
	7-62	8.8-15	6.6-11	3.6-5.5
W.				
Water				

Table 19.—Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
1B:										
Buffstat	C	Medium	Jan-Dec	---	---	---	---	None	---	None
1C:										
Buffstat	C	Medium	Jan-Dec	---	---	---	---	None	---	None
1D:										
Buffstat	C	High	Jan-Dec	---	---	---	---	None	---	None
2C:										
Bugley	C/D	Very high	Jan-Dec	---	---	---	---	None	---	None
Littlejoe	B	Medium	Jan-Dec	---	---	---	---	None	---	None
2D:										
Bugley	C/D	Very high	Jan-Dec	---	---	---	---	None	---	None
Littlejoe	B	High	Jan-Dec	---	---	---	---	None	---	None
2E:										
Bugley	C/D	Very high	Jan-Dec	---	---	---	---	None	---	None
Littlejoe	B	High	Jan-Dec	---	---	---	---	None	---	None
3C:										
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	---	Jan-Dec	---	---	---	---	---	---	None
3D:										
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	---	Jan-Dec	---	---	---	---	---	---	None
3E:										
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	---	Jan-Dec	---	---	---	---	---	---	None
4B:										
Clifford	B	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
4C:										
Clifford------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
4D:										
Clifford------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
4E:										
Clifford------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
5B:										
Clifford------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
5C:										
Clifford------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
5D:										
Clifford------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
5E:										
Clifford------------------	B	High	Jan-Dec	---	---	---	---	None	---	None
6B:										
Clifford------------------	C	Medium	Jan-Dec	---	---	---	---	None	---	None
6C:										
Clifford------------------	C	Medium	Jan-Dec	---	---	---	---	None	---	None
6D:										
Clifford------------------	C	High	Jan-Dec	---	---	---	---	None	---	None
6E:										
Clifford------------------	C	High	Jan-Dec	---	---	---	---	None	---	None
7A:										
Codorus-------------------	C	Very high	Jan-Apr	1.0-2.0	>6.0	---	---	None	Very brief	Frequent
			May	1.0-2.0	>6.0	---	---	None	---	---
			Jun-Oct	---	---	---	---	None	---	---
			Nov	1.0-2.0	>6.0	---	---	None	---	---
			Dec	1.0-2.0	>6.0	---	---	None	Very brief	Frequent
8B:										
Colleen-------------------	C	Medium	Jan-Dec	---	---	---	---	None	---	None
8C:										
Colleen-------------------	C	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
8D:										
Colleen	C	High	Jan-Dec	---	---	---	---	None	---	None
9A:										
Combs	B	Very low	Jan-Apr	---	---	---	---	None	Very brief	Frequent
			May-Nov	---	---	---	---	None	---	---
			Dec	---	---	---	---	None	Very brief	Frequent
10A:										
Comus	B	Low	Jan-Apr	---	---	---	---	None	Very brief	Frequent
			May-Nov	---	---	---	---	None	---	---
			Dec	---	---	---	---	None	Very brief	Frequent
11A:										
Craigsville	B	Very low	Jan-Apr	---	---	---	---	None	Very brief	Frequent
			May-Nov	---	---	---	---	None	---	---
			Dec	---	---	---	---	None	Very brief	Frequent
12D:										
Dekalb	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Hazleton	B	Medium	Jan-Dec	---	---	---	---	None	---	None
12E:										
Dekalb	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Hazleton	B	Medium	Jan-Dec	---	---	---	---	None	---	None
12F:										
Dekalb	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Hazleton	B	Medium	Jan-Dec	---	---	---	---	None	---	None
13E:										
Dekalb	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
13F:										
Dekalb	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro- logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
14B:										
Delanco	C	Medium	Jan-Apr	1.0-2.5	>6.0	---	---	None	---	Rare
			May	2.5-4.5	>6.0	---	---	None	---	Rare
			Jun-Oct	---	---	---	---	None	---	Rare
			Nov	2.5-4.5	>6.0	---	---	None	---	Rare
			Dec	1.0-2.5	>6.0	---	---	None	---	Rare
15B:										
Delanco	C	Medium	Jan-Apr	1.0-2.5	>6.0	---	---	None	---	Rare
			May	2.5-4.5	>6.0	---	---	None	---	Rare
			Jun-Oct	---	---	---	---	None	---	Rare
			Nov	2.5-4.5	>6.0	---	---	None	---	Rare
			Dec	1.0-2.5	>6.0	---	---	None	---	Rare
Elsinboro	B	Medium	Jan-Apr	5.0-6.6	>6.0	---	---	None	---	Rare
			May-Nov	---	---	---	---	None	---	Rare
			Dec	5.0-6.6	>6.0	---	---	None	---	Rare
15C:										
Delanco	C	Medium	Jan-Apr	1.0-2.5	>6.0	---	---	None	---	Rare
			May	2.5-4.5	>6.0	---	---	None	---	Rare
			Jun-Oct	---	---	---	---	None	---	Rare
			Nov	2.5-4.5	>6.0	---	---	None	---	Rare
			Dec	1.0-2.5	>6.0	---	---	None	---	Rare
Elsinboro	B	Medium	Jan-Apr	5.0-6.6	>6.0	---	---	None	---	Rare
			May-Nov	---	---	---	---	None	---	Rare
			Dec	5.0-6.6	>6.0	---	---	None	---	Rare
16C:										
Edneytown	B	Medium	Jan-Dec	---	---	---	---	None	---	None
16D:										
Edneytown	B	High	Jan-Dec	---	---	---	---	None	---	None
16E:										
Edneytown	B	High	Jan-Dec	---	---	---	---	None	---	None
17B:										
Edneytown	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Peaks	C	Medium	Jan-Dec	---	---	---	---	None	---	None
17C:										
Edneytown	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Peaks	C	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
17D:										
Edneytown	B	High	Jan-Dec	---	---	---	---	None	---	None
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
17E:										
Edneytown	B	High	Jan-Dec	---	---	---	---	None	---	None
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
17F:										
Edneytown	B	High	Jan-Dec	---	---	---	---	None	---	None
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
18B:										
Elsinboro	B	Medium	Jan-Apr	5.0-6.6	>6.0	---	---	None	---	Rare
			May-Nov	---	---	---	---	None	---	Rare
			Dec	5.0-6.6	>6.0	---	---	None	---	Rare
19C:										
Fauquier	C	Medium	Jan-Dec	---	---	---	---	None	---	None
19D:										
Fauquier	C	High	Jan-Dec	---	---	---	---	None	---	None
19E:										
Fauquier	C	High	Jan-Dec	---	---	---	---	None	---	None
20B:										
Haymarket	D	Medium	Jan-Dec	---	---	---	---	None	---	None
Mirerock	D	High	Jan-Dec	---	---	---	---	None	---	None
20C:										
Haymarket	D	Medium	Jan-Dec	---	---	---	---	None	---	None
Mirerock	D	High	Jan-Dec	---	---	---	---	None	---	None
21B:										
Littlejoe	B	Medium	Jan-Dec	---	---	---	---	None	---	None
21C:										
Littlejoe	B	Medium	Jan-Dec	---	---	---	---	None	---	None
21D:										
Littlejoe	B	High	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
22B:										
Minnieville	C	Medium	Jan-Dec	---	---	---	---	None	---	None
22C:										
Minnieville	C	Medium	Jan-Dec	---	---	---	---	None	---	None
22D:										
Minnieville	C	High	Jan-Dec	---	---	---	---	None	---	None
23B:										
Minnieville	C	Medium	Jan-Dec	---	---	---	---	None	---	None
23C:										
Minnieville	C	Medium	Jan-Dec	---	---	---	---	None	---	None
23D:										
Minnieville	C	High	Jan-Dec	---	---	---	---	None	---	None
24C:										
Myersville	B	Medium	Jan-Dec	---	---	---	---	None	---	None
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
24D:										
Myersville	B	High	Jan-Dec	---	---	---	---	None	---	None
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
24E:										
Myersville	B	High	Jan-Dec	---	---	---	---	None	---	None
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
24F:										
Myersville	B	High	Jan-Dec	---	---	---	---	None	---	None
Catoctin	C	Very high	Jan-Dec	---	---	---	---	None	---	None
25B:										
Orenda	B	Medium	Jan-Dec	---	---	---	---	None	---	None
25C:										
Orenda	B	Medium	Jan-Dec	---	---	---	---	None	---	None
25D:										
Orenda	B	High	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
26C:										
Peaks	C	Medium	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
26D:										
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
26E:										
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
26F:										
Peaks	C	High	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
27A:										
Pineywoods	D	Very high	Jan-Mar	0.0-1.0	>6.0	---	---	None	---	None
			Apr-Oct	---	---	---	---	None	---	None
			Nov-Dec	0.0-1.0	>6.0	---	---	None	---	None
27B:										
Pineywoods	D	Very high	Jan-Mar	0.0-1.0	>6.0	---	---	None	---	None
			Apr-Oct	---	---	---	---	None	---	None
			Nov-Dec	0.0-1.0	>6.0	---	---	None	---	None
28.										
Pits, quarry										
29B:										
Saunook	B	Medium	Jan-Dec	---	---	---	---	None	---	None
29C:										
Saunook	B	Medium	Jan-Dec	---	---	---	---	None	---	None
29D:										
Saunook	B	High	Jan-Dec	---	---	---	---	None	---	None
30B:										
Saunook	B	Medium	Jan-Dec	---	---	---	---	None	---	None
30C:										
Saunook	B	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
30D:										
Saunook	B	High	Jan-Dec	---	---	---	---	None	---	None
30E:										
Saunook	B	High	Jan-Dec	---	---	---	---	None	---	None
31A:										
Sindion	B	Low	Jan-Apr	1.5-3.0	>6.0	---	---	None	Brief	Frequent
			May	3.0-6.6	>6.0	---	---	None	---	---
			Jun-Oct	---	---	---	---	None	---	---
			Nov	3.0-6.6	>6.0	---	---	None	---	---
			Dec	1.5-3.0	>6.0	---	---	None	Brief	Frequent
Yogaville	B/D	Negligible	Jan-Apr	0.0-1.0	>6.0	0.1-0.3	Very brief	Occasional	Brief	Frequent
			May	1.0-6.6	>6.0	0.1-0.3	Very brief	Occasional	---	---
			Jun-Oct	---	---	---	---	None	---	---
			Nov	1.0-6.6	>6.0	---	---	None	---	---
			Dec	0.0-1.0	>6.0	0.1-0.3	Very brief	Occasional	Brief	Frequent
32B:										
Sketerville	C	Medium	Jan-Mar	1.5-2.5	>6.0	---	---	None	---	None
			Apr-Oct	---	---	---	---	None	---	None
			Nov-Dec	1.5-2.5	>6.0	---	---	None	---	None
33A:										
Speedwell	B	Low	Jan-Apr	---	---	---	---	None	Brief	Frequent
			May-Nov	---	---	---	---	None	---	---
			Dec	---	---	---	---	None	Brief	Frequent
34C:										
Spriggs	C	Medium	Jan-Dec	---	---	---	---	None	---	None
34D:										
Spriggs	C	High	Jan-Dec	---	---	---	---	None	---	None
34E:										
Spriggs	C	High	Jan-Dec	---	---	---	---	None	---	None
35B:										
Spriggs	C	Medium	Jan-Dec	---	---	---	---	None	---	None
35C:										
Spriggs	C	Medium	Jan-Dec	---	---	---	---	None	---	None
35D:										
Spriggs	C	High	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
35E:										
Spriggs	C	High	Jan-Dec	---	---	---	---	None	---	None
36D:										
Stott Knob	B	High	Jan-Dec	---	---	---	---	None	---	None
Rhodhiss	B	High	Jan-Dec	---	---	---	---	None	---	None
36E:										
Stott Knob	B	High	Jan-Dec	---	---	---	---	None	---	None
Rhodhiss	B	High	Jan-Dec	---	---	---	---	None	---	None
37D:										
Stott Knob	B	High	Jan-Dec	---	---	---	---	None	---	None
Rhodhiss	B	High	Jan-Dec	---	---	---	---	None	---	None
37E:										
Stott Knob	B	High	Jan-Dec	---	---	---	---	None	---	None
Rhodhiss	B	High	Jan-Dec	---	---	---	---	None	---	None
38A:										
Suches	B	Low	Jan-Apr	2.5-4.0	>6.0	---	---	None	Brief	Frequent
			May	4.0-6.6	>6.0	---	---	None	---	---
			Jun-Oct	---	---	---	---	None	---	---
			Nov	4.0-6.6	>6.0	---	---	None	---	---
			Dec	2.5-4.0	>6.0	---	---	None	Brief	Frequent
39C:										
Sylco	C	High	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	High	Jan-Dec	---	---	---	---	None	---	None
39D:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
39E:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
39F:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
40C:										
Sylco	C	High	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	High	Jan-Dec	---	---	---	---	None	---	None
40D:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
40E:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
40F:										
Sylco	C	Very high	Jan-Dec	---	---	---	---	None	---	None
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
41E:										
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
41F:										
Sylvatus	D	Very high	Jan-Dec	---	---	---	---	None	---	None
Rock outcrop	D	Very high	Jan-Dec	---	---	---	---	---	---	None
42. Udorthents										
43B:										
Unison	B	Medium	Jan-Dec	---	---	---	---	None	---	None
43C:										
Unison	B	Medium	Jan-Dec	---	---	---	---	None	---	None
44B:										
Unison	B	Medium	Jan-Dec	---	---	---	---	None	---	None

Table 19.—Water Features—Continued

Map symbol and soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
44C:										
Unison--------------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
45B:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
45C:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
45D:										
Wintergreen---------------	B	High	Jan-Dec	---	---	---	---	None	---	None
46B:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
46C:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
46D:										
Wintergreen---------------	B	High	Jan-Dec	---	---	---	---	None	---	None
47B:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
47C:										
Wintergreen---------------	B	Medium	Jan-Dec	---	---	---	---	None	---	None
47D:										
Wintergreen---------------	B	High	Jan-Dec	---	---	---	---	None	---	None
W.										
Water										

Table 20.—Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
1B:						
Buffstat	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	High
1C:						
Buffstat	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	High
1D:						
Buffstat	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	High
2C:						
Bugley	Lithic bedrock	10-20	Indurated	Moderate	Low	High
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
2D:						
Bugley	Lithic bedrock	10-20	Indurated	Moderate	Low	High
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
2E:						
Bugley	Lithic bedrock	10-20	Indurated	Moderate	Low	High
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
3C:						
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
3D:						
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
3E:						
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
4B:						
Clifford, severely eroded	---	---	---	Moderate	Moderate	Moderate

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
4C:						
Clifford, severely eroded	---	---	---	Moderate	Moderate	Moderate
4D:						
Clifford, severely eroded	---	---	---	Moderate	Moderate	Moderate
4E:						
Clifford, severely eroded	---	---	---	Moderate	Moderate	Moderate
5B:						
Clifford	---	---	---	Moderate	Moderate	Moderate
5C:						
Clifford	---	---	---	Moderate	Moderate	Moderate
5D:						
Clifford	---	---	---	Moderate	Moderate	Moderate
5E:						
Clifford	---	---	---	Moderate	Moderate	Moderate
6B:						
Clifford, very stony	---	---	---	Moderate	Moderate	Moderate
6C:						
Clifford, very stony	---	---	---	Moderate	Moderate	Moderate
6D:						
Clifford, very stony	---	---	---	Moderate	Moderate	Moderate
6E:						
Clifford, very stony	---	---	---	Moderate	Moderate	Moderate
7A:						
Codorus	---	---	---	Moderate	High	Moderate
8B:						
Colleen	---	---	---	Moderate	High	High
8C:						
Colleen	---	---	---	Moderate	High	High
8D:						
Colleen	---	---	---	Moderate	High	High
9A:						
Combs	---	---	---	Moderate	Low	Low
10A:						
Comus	---	---	---	Moderate	Low	High
11A:						
Craigsville	---	---	---	Moderate	Moderate	Moderate
12D:						
Dekalb	Lithic bedrock	20-40	Indurated	Moderate	Low	High
Hazleton	Lithic bedrock	40-60	Indurated	Moderate	Low	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
12E:						
Dekalb	Lithic bedrock	20-40	Indurated	Moderate	Low	High
Hazleton	Lithic bedrock	40-60	Indurated	Moderate	Low	High
12F:						
Dekalb	Lithic bedrock	20-40	Indurated	Moderate	Low	High
Hazleton	Lithic bedrock	40-60	Indurated	Moderate	Low	High
13E:						
Dekalb	Lithic bedrock	20-40	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
13F:						
Dekalb	Lithic bedrock	20-40	Indurated	Moderate	Low	High
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
14B:						
Delanco	---	---	---	Moderate	High	High
15B:						
Delanco	---	---	---	Moderate	High	High
Elsinboro	---	---	---	Moderate	Moderate	High
15C:						
Delanco	---	---	---	Moderate	High	High
Elsinboro	---	---	---	Moderate	Moderate	High
16C:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
16D:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
16E:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
17B:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
Peaks	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
17C:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
Peaks	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
17D:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
Peaks	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
17E:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
Peaks	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
17F:						
Edneytown	---	---	---	Moderate	Moderate	Moderate
Peaks	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
18B:						
Elsinboro	---	---	---	Moderate	Moderate	High
19C:						
Fauquier	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
19D:						
Fauquier	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
19E:						
Fauquier	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
20B:						
Haymarket	---	---	---	Moderate	High	Low
Mirerock	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Low
20C:						
Haymarket	---	---	---	Moderate	High	Low
Mirerock	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Low
21B:						
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
21C:						
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High
21D:						
Littlejoe	Paralithic bedrock	40-60	Moderately cemented	Moderate	High	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
22B:						
Minnieville, severely eroded	---	---	---	Moderate	High	Moderate
22C:						
Minnieville, severely eroded	---	---	---	Moderate	High	Moderate
22D:						
Minnieville, severely eroded	---	---	---	Moderate	High	Moderate
23B:						
Minnieville	---	---	---	Moderate	High	Moderate
23C:						
Minnieville	---	---	---	Moderate	High	Moderate
23D:						
Minnieville	---	---	---	Moderate	High	Moderate
24C:						
Myersville	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	Moderate
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
24D:						
Myersville	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	Moderate
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
24E:						
Myersville	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	Moderate
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
24F:						
Myersville	Paralithic bedrock	40-60	Moderately cemented	Moderate	Moderate	Moderate
Catoctin	Paralithic bedrock	20-40	Moderately cemented	Moderate	High	Moderate
	Lithic bedrock	20-40	Indurated			
25B:						
Orenda	---	---	---	Moderate	High	Moderate
25C:						
Orenda	---	---	---	Moderate	High	Moderate

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Hardness	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In				
25D:						
Orenda-----------------	---	---	---	Moderate	High	Moderate
26C:						
Peaks------------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
Rock outcrop-----------	Lithic bedrock	0-0	Indurated	None	---	---
26D:						
Peaks------------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
Rock outcrop-----------	Lithic bedrock	0-0	Indurated	None	---	---
26E:						
Peaks------------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
Rock outcrop-----------	Lithic bedrock	0-0	Indurated	None	---	---
26F:						
Peaks------------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	High
	Lithic bedrock	20-40	Indurated			
Rock outcrop-----------	Lithic bedrock	0-0	Indurated	None	---	---
27A:						
Pineywoods-------------	Paralithic bedrock	40-60	Moderately cemented	High	High	High
27B:						
Pineywoods-------------	Paralithic bedrock	40-60	Moderately cemented	High	High	High
28:						
Pits, quarry-----------	Lithic bedrock	0-0	---	None	---	---
29B:						
Saunook----------------	---	---	---	Moderate	Low	High
29C:						
Saunook----------------	---	---	---	Moderate	Low	High
29D:						
Saunook----------------	---	---	---	Moderate	Low	High
30B:						
Saunook, very stony----	---	---	---	Moderate	Low	High
30C:						
Saunook, very stony----	---	---	---	Moderate	Low	High
30D:						
Saunook, very stony----	---	---	---	Moderate	Low	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
30E:						
Saunook, very stony----	---	---	---	Moderate	Low	High
31A:						
Sindion----------------	---	---	---	Moderate	Low	Moderate
Yogaville--------------	---	---	---	High	Low	Moderate
32B:						
Sketerville------------	---	---	---	Moderate	High	High
33A:						
Speedwell--------------	---	---	---	Moderate	Low	Moderate
34C:						
Spriggs----------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
34D:						
Spriggs----------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
34E:						
Spriggs----------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
35B:						
Spriggs, very stony----	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
35C:						
Spriggs, very stony----	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
35D:						
Spriggs, very stony----	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
35E:						
Spriggs, very stony----	Paralithic bedrock	20-40	Moderately cemented	Moderate	Low	Moderate
	Lithic bedrock	40-60	Indurated			
36D:						
Stott Knob-------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Moderate	High
Rhodhiss---------------	---	---	---	Moderate	Moderate	High
36E:						
Stott Knob-------------	Paralithic bedrock	20-40	Moderately cemented	Moderate	Moderate	High
Rhodhiss---------------	---	---	---	Moderate	Moderate	High

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
37D:						
Stott Knob, very stony	Paralithic bedrock	20-40	Moderately cemented	Moderate	Moderate	High
Rhodhiss, very stony	---	---	---	Moderate	Moderate	High
37E:						
Stott Knob, very stony	Paralithic bedrock	20-40	Moderately cemented	Moderate	Moderate	High
Rhodhiss, very stony	---	---	---	Moderate	Moderate	High
38A:						
Suches	---	---	---	Moderate	High	Moderate
39C:						
Sylco	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
39D:						
Sylco	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
39E:						
Sylco	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
39F:						
Sylco	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
40C:						
Sylco, extremely stony	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
40D:						
Sylco, extremely stony	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
40E:						
Sylco, extremely stony	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
40F:						
Sylco, extremely stony	Lithic bedrock	20-40	Indurated	Moderate	Low	Moderate
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate

Table 20.—Soil Features—Continued

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Hardness		Uncoated steel	Concrete
		In				
41E:						
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
41F:						
Sylvatus, extremely stony	Lithic bedrock	10-20	Indurated	Moderate	Moderate	Moderate
Rock outcrop	Lithic bedrock	0-0	Indurated	None	---	---
42. Udorthents						
43B:						
Unison	---	---	---	Moderate	High	Moderate
43C:						
Unison	---	---	---	Moderate	High	Moderate
44B:						
Unison, very stony	---	---	---	Moderate	High	Moderate
44C:						
Unison, very stony	---	---	---	Moderate	High	Moderate
45B:						
Wintergreen, severely eroded	---	---	---	Moderate	High	Moderate
45C:						
Wintergreen, severely eroded	---	---	---	Moderate	High	Moderate
45D:						
Wintergreen, severely eroded	---	---	---	Moderate	High	Moderate
46B:						
Wintergreen	---	---	---	Moderate	High	Moderate
46C:						
Wintergreen	---	---	---	Moderate	High	Moderate
46D:						
Wintergreen	---	---	---	Moderate	High	Moderate
47B:						
Wintergreen, very stony	---	---	---	Moderate	High	Moderate
47C:						
Wintergreen, very stony	---	---	---	Moderate	High	Moderate
47D:						
Wintergreen, very stony	---	---	---	Moderate	High	Moderate
W. Water						

Table 21.—Classification of the Soils

Soil name	Family or higher taxonomic class
Buffstat	Fine, mixed, semiactive, mesic Typic Hapludults
Bugley	Loamy-skeletal, mixed, semiactive, mesic Lithic Dystrudepts
Catoctin	Loamy-skeletal, mixed, superactive, mesic Ruptic-Alfic Eutrudepts
Clifford	Fine, kaolinitic, mesic Typic Kanhapludults
Codorus	Fine-loamy, mixed, active, mesic Fluvaquentic Dystrudepts
Colleen	Fine, kaolinitic, mesic Typic Hapludults
Combs	Coarse-loamy, mixed, active, mesic Fluventic Hapludolls
Comus	Coarse-loamy, mixed, active, mesic Fluventic Dystrudepts
Craigsville	Loamy-skeletal, mixed, superactive, mesic Fluventic Dystrudepts
Dekalb	Loamy-skeletal, siliceous, active, mesic Typic Dystrudepts
Delanco	Fine-loamy, mixed, semiactive, mesic Aquic Hapludults
Edneytown	Fine-loamy, mixed, active, mesic Typic Hapludults
Elsinboro	Fine-loamy, mixed, semiactive, mesic Typic Hapludults
Fauquier	Fine, mixed, active, mesic Ultic Hapludalfs
Haymarket	Fine, smectitic, mesic Typic Hapludalfs
Hazleton	Loamy-skeletal, siliceous, subactive, mesic Typic Dystrudepts
Littlejoe	Fine, mixed, subactive, mesic Typic Hapludults
Minnieville	Fine, kaolinitic, mesic Typic Hapludults
Mirerock	Fine, smectitic, mesic Typic Hapludalfs
Myersville	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Orenda	Fine, mixed, active, mesic Ultic Hapludalfs
Peaks	Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
Pineywoods	Clayey over loamy, kaolinitic, mesic Kandic Albaquults
Rhodhiss	Fine-loamy, mixed, semiactive, mesic Typic Hapludults
Saunook	Fine-loamy, mixed, superactive, mesic Humic Hapludults
Sindion	Fine-loamy, mixed, active, mesic Fluvaquentic Hapludolls
Sketerville	Fine, kaolinitic, mesic Aquultic Hapludalfs
Speedwell	Fine-loamy, mixed, active, mesic Fluventic Hapludolls
Spriggs	Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Stott Knob	Fine-loamy, parasesquic, mesic Typic Hapludults
Suches	Fine-loamy, mixed, semiactive, mesic Fluventic Dystrudepts
Sylco	Loamy-skeletal, mixed, active, mesic Typic Dystrudepts
Sylvatus	Loamy-skeletal, mixed, active, mesic Lithic Dystrudepts
Udorthents	Udorthents
Unison	Fine, mixed, semiactive, mesic Typic Hapludults
Wintergreen	Fine, mixed, subactive, mesic Typic Paleudults
Yogaville	Fine-loamy, mixed, active, mesic Fluvaquentic Endoaquolls

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