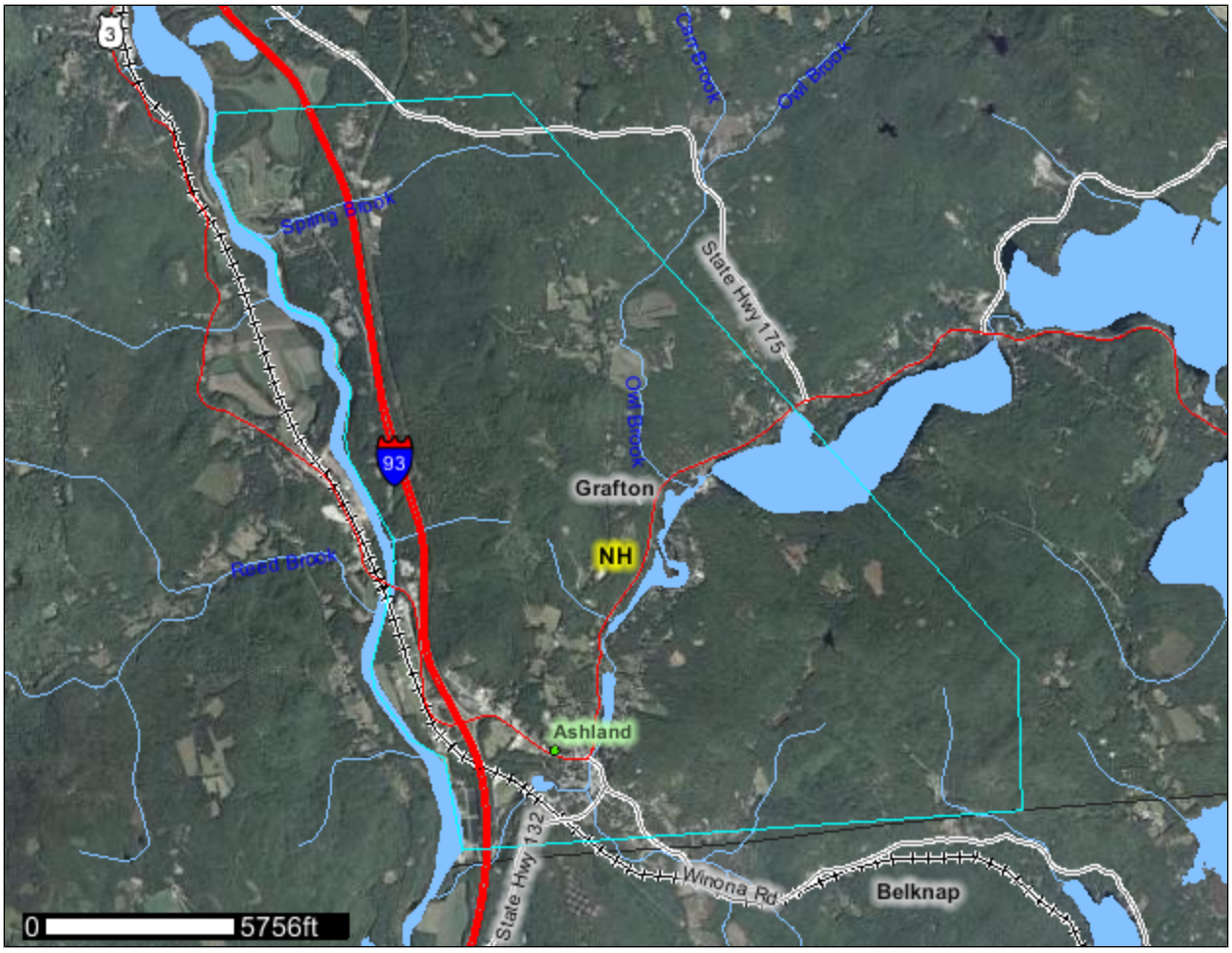
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product 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 participants

Custom Soil Resource Report for Grafton County, New Hampshire



May 15, 2013

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is 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.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://soils.usda.gov/sqi/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

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.

The National Cooperative Soil Survey is 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 (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various 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 observed and described many soil profiles. A soil profile 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 or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

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

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

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

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

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.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (Ashland Soil Map)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:58,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 15, Aug 27, 2012

Map Unit Legend (Ashland Soil Map)

Grafton County, New Hampshire (NH009)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
22B	Colton loamy sand, 3 to 8 percent slopes	17.8	0.2%
22E	Colton loamy sand, 15 to 60 percent slopes	24.3	0.3%
36A	Adams loamy sand, 0 to 3 percent slopes	160.4	2.2%
36B	Adams loamy sand, 3 to 8 percent slopes	346.1	4.7%
36C	Adams loamy sand, 8 to 15 percent slopes	506.4	6.9%
36E	Adams loamy sand, 15 to 60 percent slopes	581.6	8.0%
56C	Becket fine sandy loam, 8 to 15 percent slopes	181.5	2.5%
56D	Becket fine sandy loam, 15 to 25 percent slopes	95.1	1.3%
57B	Becket fine sandy loam, 3 to 8 percent slopes, very stony	0.1	0.0%
57C	Becket fine sandy loam, 8 to 15 percent slopes, very stony	115.0	1.6%
57D	Becket fine sandy loam, 15 to 25 percent slopes, very stony	420.9	5.8%
57E	Becket fine sandy loam, 25 to 35 percent slopes, very stony	55.5	0.8%
59B	Waumbek loamy sand, 3 to 8 percent slopes, very stony	10.9	0.1%
59C	Waumbek loamy sand, 8 to 15 percent slopes, very stony	36.5	0.5%
61B	Tunbridge-Lyman-Rock outcrop complex, 3 to 8 percent slopes	12.4	0.2%
61C	Tunbridge-Lyman-Rock outcrop complex, 8 to 15 percent slopes	421.6	5.8%
61D	Tunbridge-Lyman-Rock outcrop complex, 15 to 25 percent slopes	1,133.8	15.5%
61E	Tunbridge-Lyman-Rock outcrop complex, 25 to 60 percent slopes	867.8	11.9%
90B	Tunbridge-Lyman complex, 3 to 8 percent slopes	4.0	0.1%
90C	Tunbridge-Lyman complex, 8 to 15 percent slopes	34.9	0.5%
90D	Tunbridge-Lyman complex, 15 to 25 percent slopes	21.8	0.3%
101	Ondawa fine sandy loam, frequently flooded	12.4	0.2%
102	Sunday loamy sand	92.2	1.3%
104	Podunk fine sandy loam	68.3	0.9%
105	Rumney loam	42.7	0.6%
114	Walpole-Binghamville complex	30.9	0.4%
201	Ondawa fine sandy loam, occasionally flooded	65.0	0.9%
254B	Monadnock and Hermon soils, 3 to 8 percent slopes	6.2	0.1%

Grafton County, New Hampshire (NH009)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
254C	Monadnock and Hermon soils, 8 to 15 percent slopes	26.3	0.4%
254D	Monadnock and Hermon soils, 15 to 25 percent slopes	20.1	0.3%
255B	Monadnock and Hermon soils, 3 to 8 percent, very stony	9.8	0.1%
255C	Monadnock and Hermon soils, 8 to 15 percent, very stony	224.4	3.1%
255D	Monadnock and Hermon soils, 15 to 25 percent slopes, very stony	640.1	8.8%
255E	Monadnock and Hermon soils, 25 to 35 percent slopes, very stony	115.0	1.6%
298	Pits, gravel	6.2	0.1%
299	Udorthents, smoothed	8.4	0.1%
347B	Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony	6.2	0.1%
406	Medomak silt loam	19.9	0.3%
558B	Skerry fine sandy loam, 3 to 8 percent slopes	7.3	0.1%
559B	Skerry fine sandy loam, 3 to 8 percent slopes, very stony	113.2	1.5%
559C	Skerry fine sandy loam, 8 to 15 percent slopes, very stony	144.4	2.0%
559D	Skerry fine sandy loam, 15 to 25 percent slopes, very stony	5.8	0.1%
613	Croghan loamy fine sand	182.4	2.5%
614	Kinsman sand	57.2	0.8%
647B	Pillsbury fine sandy loam, 3 to 8 percent slopes, very stony	45.4	0.6%
731	Peacham and ossipee soils, very stony	33.4	0.5%
W	Water	281.0	3.8%
Totals for Area of Interest		**7,313.3**	**100.0%**

Map Unit Descriptions (Ashland Soil Map)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

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. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. 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 important soil properties and qualities.

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

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

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

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Grafton County, New Hampshire

22B—Colton loamy sand, 3 to 8 percent slopes

Map Unit Setting

Elevation: 10 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition

Colton and similar soils: 85 percent
Minor components: 15 percent

Description of Colton

Setting

Parent material: Stratified sandy and gravelly outwash derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.1 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3s
Hydrologic Soil Group: A

Typical profile

0 to 11 inches: Loamy sand
11 to 22 inches: Gravelly loamy sand
22 to 65 inches: Very gravelly loamy sand

Minor Components

Adams

Percent of map unit: 8 percent

Croghan

Percent of map unit: 7 percent

22E—Colton loamy sand, 15 to 60 percent slopes

Map Unit Setting

Elevation: 10 to 2,100 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Colton and similar soils: 75 percent
Minor components: 25 percent

Description of Colton

Setting

Parent material: Stratified sandy and gravelly outwash derived from granite and gneiss

Properties and qualities

Slope: 15 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.1 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7e
Hydrologic Soil Group: A

Typical profile

0 to 11 inches: Loamy sand
11 to 22 inches: Gravelly loamy sand
22 to 65 inches: Very gravelly loamy sand

Minor Components

Croghan

Percent of map unit: 10 percent

Not named

Percent of map unit: 5 percent

Kinsman

Percent of map unit: 3 percent
Landform: Ravines

Lyme
Percent of map unit: 3 percent
Landform: Ravines

Pillsbury
Percent of map unit: 2 percent
Landform: Recessionial moraines

Rock outcrop
Percent of map unit: 2 percent

36A—Adams loamy sand, 0 to 3 percent slopes

Map Unit Setting
Elevation: 10 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition
Adams and similar soils: 85 percent
Minor components: 15 percent

Description of Adams

Setting
Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3s
Hydrologic Soil Group: A

Typical profile
0 to 6 inches: Loamy sand
6 to 26 inches: Sand
26 to 65 inches: Sand

Minor Components

Colton
Percent of map unit: 3 percent

Croghan
Percent of map unit: 3 percent

Groveton
Percent of map unit: 3 percent

Kinsman
Percent of map unit: 3 percent
Landform: Outwash terraces

Not named
Percent of map unit: 3 percent

36B—Adams loamy sand, 3 to 8 percent slopes

Map Unit Setting
Elevation: 10 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition
Adams and similar soils: 85 percent
Minor components: 15 percent

Description of Adams

Setting
Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3s
Hydrologic Soil Group: A

Typical profile
0 to 6 inches: Loamy sand
6 to 26 inches: Sand
26 to 65 inches: Sand

Minor Components

Colton
Percent of map unit: 3 percent

Croghan
Percent of map unit: 3 percent

Groveton
Percent of map unit: 3 percent

Kinsman
Percent of map unit: 3 percent
Landform: Outwash terraces

Not named
Percent of map unit: 3 percent

36C—Adams loamy sand, 8 to 15 percent slopes

Map Unit Setting
Elevation: 10 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition
Adams and similar soils: 85 percent
Minor components: 15 percent

Description of Adams

Setting
Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 4e
Hydrologic Soil Group: A

Typical profile

0 to 6 inches: Loamy sand
6 to 26 inches: Sand
26 to 65 inches: Sand

Minor Components

Colton

Percent of map unit: 3 percent

Croghan

Percent of map unit: 3 percent

Groveton

Percent of map unit: 3 percent

Kinsman

Percent of map unit: 3 percent
Landform: Outwash terraces

Not named

Percent of map unit: 3 percent

36E—Adams loamy sand, 15 to 60 percent slopes

Map Unit Setting

Elevation: 150 to 2,200 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition

Adams and similar soils: 85 percent
Minor components: 15 percent

Description of Adams

Setting

Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Properties and qualities

Slope: 15 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.3 inches)

Interpretive groups
Farmland classification: Not prime farmland
Land capability (nonirrigated): 7e
Hydrologic Soil Group: A

Typical profile
0 to 6 inches: Loamy sand
6 to 26 inches: Sand
26 to 65 inches: Sand

Minor Components

Not named
Percent of map unit: 5 percent

Croghan
Percent of map unit: 4 percent

Kinsman
Percent of map unit: 3 percent
Landform: Depressions

Pillsbury
Percent of map unit: 3 percent
Landform: Ravines

56C—Becket fine sandy loam, 8 to 15 percent slopes

Map Unit Composition
Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting
Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 3e
Hydrologic Soil Group: C

Typical profile

0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named

Percent of map unit: 5 percent

Pillsbury

Percent of map unit: 5 percent
Landform: Depressions

Skerry

Percent of map unit: 5 percent

56D—Becket fine sandy loam, 15 to 25 percent slopes

Map Unit Composition

Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting

Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 4e
Hydrologic Soil Group: C

Typical profile

0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named
Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Skerry
Percent of map unit: 5 percent

57B—Becket fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Composition
Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting
Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities
Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.7 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile
0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named
Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Skerry
Percent of map unit: 5 percent

57C—Becket fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Composition
Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting
Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities
Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.7 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile
0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named
Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Skerry
Percent of map unit: 5 percent

57D—Becket fine sandy loam, 15 to 25 percent slopes, very stony

Map Unit Composition

Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting

Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.7 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile

0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named

Percent of map unit: 5 percent

Pillsbury

Percent of map unit: 5 percent
Landform: Depressions

Skerry

Percent of map unit: 5 percent

57E—Becket fine sandy loam, 25 to 35 percent slopes, very stony

Map Unit Composition

Becket and similar soils: 85 percent
Minor components: 15 percent

Description of Becket

Setting

Parent material: Basal melt-out till derived from granite and gneiss and/or basal melt-out till derived from schist

Properties and qualities

Slope: 25 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.7 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 7 inches: Fine sandy loam
7 to 22 inches: Fine sandy loam
22 to 65 inches: Gravelly loamy fine sand

Minor Components

Not named

Percent of map unit: 5 percent

Pillsbury

Percent of map unit: 5 percent
Landform: Depressions

Skerry

Percent of map unit: 5 percent

59B—Waumbek loamy sand, 3 to 8 percent slopes, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Waumbek and similar soils: 85 percent
Minor components: 15 percent

Description of Waumbek

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: B

Typical profile

0 to 4 inches: Slightly decomposed plant material
4 to 9 inches: Loamy sand
9 to 25 inches: Very cobbly loamy sand
25 to 65 inches: Very cobbly loamy sand

Minor Components

Hermon

Percent of map unit: 5 percent

Lyme

Percent of map unit: 5 percent
Landform: Depressions

Moosilauke

Percent of map unit: 5 percent
Landform: Depressions

59C—Waumbek loamy sand, 8 to 15 percent slopes, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Waumbek and similar soils: 85 percent
Minor components: 15 percent

Description of Waumbek

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: B

Typical profile

0 to 4 inches: Slightly decomposed plant material
4 to 9 inches: Loamy sand
9 to 25 inches: Very cobbly loamy sand
25 to 65 inches: Very cobbly loamy sand

Minor Components

Hermon

Percent of map unit: 5 percent

Lyme

Percent of map unit: 5 percent
Landform: Depressions

Moosilauke

Percent of map unit: 5 percent
Landform: Depressions

61B—Tunbridge-Lyman-Rock outcrop complex, 3 to 8 percent slopes

Map Unit Setting

Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition

Tunbridge and similar soils: 40 percent
Lyman and similar soils: 30 percent
Rock outcrop: 15 percent
Minor components: 15 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 3.0 inches)

Interpretive groups
Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C/D

Typical profile
0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Description of Rock Outcrop

Properties and qualities
Depth to restrictive feature: 0 inches to lithic bedrock

Minor Components

Not named
Percent of map unit: 5 percent

Marlow
Percent of map unit: 4 percent

Peru
Percent of map unit: 4 percent

Not named wet
Percent of map unit: 2 percent
Landform: Depressions

61C—Tunbridge-Lyman-Rock outcrop complex, 8 to 15 percent slopes

Map Unit Setting
Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition
Tunbridge and similar soils: 40 percent
Lyman and similar soils: 30 percent

Rock outcrop: 15 percent
Minor components: 15 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Description of Rock Outcrop

Properties and qualities

Depth to restrictive feature: 0 inches to lithic bedrock

Minor Components

Not named

Percent of map unit: 5 percent

Marlow

Percent of map unit: 4 percent

Peru

Percent of map unit: 4 percent

Not named wet

Percent of map unit: 2 percent
Landform: Depressions

61D—Tunbridge-Lyman-Rock outcrop complex, 15 to 25 percent slopes

Map Unit Setting

Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition

Tunbridge and similar soils: 40 percent
Lyman and similar soils: 30 percent
Rock outcrop: 15 percent
Minor components: 15 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Description of Rock Outcrop

Properties and qualities

Depth to restrictive feature: 0 inches to lithic bedrock

Minor Components

Not named

Percent of map unit: 5 percent

Marlow

Percent of map unit: 4 percent

Peru

Percent of map unit: 4 percent

Not named wet

Percent of map unit: 2 percent
Landform: Depressions

61E—Tunbridge-Lyman-Rock outcrop complex, 25 to 60 percent slopes

Map Unit Setting

Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition

Tunbridge and similar soils: 40 percent
Lyman and similar soils: 30 percent
Rock outcrop: 15 percent
Minor components: 15 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 25 to 60 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 25 to 60 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Description of Rock Outcrop

Properties and qualities

Depth to restrictive feature: 0 inches to lithic bedrock

Minor Components

Not named

Percent of map unit: 5 percent

Marlow

Percent of map unit: 4 percent

Peru

Percent of map unit: 4 percent

Not named wet

Percent of map unit: 2 percent
Landform: Depressions

90B—Tunbridge-Lyman complex, 3 to 8 percent slopes

Map Unit Setting

Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition

Tunbridge and similar soils: 45 percent
Lyman and similar soils: 30 percent
Minor components: 25 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 2e
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3e
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam

16 to 20 inches: Unweathered bedrock

Minor Components

Marlow
Percent of map unit: 5 percent

Not named
Percent of map unit: 5 percent

Not named wet
Percent of map unit: 5 percent
Landform: Depressions

Peru
Percent of map unit: 5 percent

Rock outcrop
Percent of map unit: 5 percent

90C—Tunbridge-Lyman complex, 8 to 15 percent slopes

Map Unit Setting
Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition
Tunbridge and similar soils: 45 percent
Lyman and similar soils: 30 percent
Minor components: 25 percent

Description of Tunbridge

Setting
Parent material: Ablation till derived from granite and gneiss

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.3 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3e

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 4e
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Minor Components

Marlow

Percent of map unit: 5 percent

Not named

Percent of map unit: 5 percent

Not named wet

Percent of map unit: 5 percent
Landform: Depressions

Peru

Percent of map unit: 5 percent

Rock outcrop

Percent of map unit: 5 percent

90D—Tunbridge-Lyman complex, 15 to 25 percent slopes

Map Unit Setting

Elevation: 10 to 2,500 feet
Mean annual precipitation: 35 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 160 days

Map Unit Composition

Tunbridge and similar soils: 45 percent
Lyman and similar soils: 30 percent
Minor components: 25 percent

Description of Tunbridge

Setting

Parent material: Ablation till derived from granite and gneiss

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 4e
Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam
3 to 21 inches: Fine sandy loam
21 to 28 inches: Fine sandy loam
28 to 32 inches: Unweathered bedrock

Description of Lyman

Setting

Parent material: Ablation till derived from granite and gneiss and/or ablation till derived from mica schist

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6e
Hydrologic Soil Group: C/D

Typical profile

0 to 7 inches: Fine sandy loam
7 to 16 inches: Loam
16 to 20 inches: Unweathered bedrock

Minor Components

Marlow

Percent of map unit: 5 percent

Not named

Percent of map unit: 5 percent

Not named wet

Percent of map unit: 5 percent
Landform: Depressions

Peru

Percent of map unit: 5 percent

Rock outcrop

Percent of map unit: 5 percent

101—Ondawa fine sandy loam, frequently flooded

Map Unit Setting

Elevation: 10 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Ondawa and similar soils: 90 percent
Minor components: 10 percent

Description of Ondawa

Setting

Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 1
Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Fine sandy loam
10 to 33 inches: Fine sandy loam
33 to 65 inches: Fine sand

Minor Components

Podunk

Percent of map unit: 4 percent

Rumney

Percent of map unit: 3 percent
Landform: Flood plains

Sunday

Percent of map unit: 3 percent

102—Sunday loamy sand

Map Unit Setting

Elevation: 10 to 1,750 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Sunday and similar soils: 90 percent
Minor components: 10 percent

Description of Sunday

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3s
Hydrologic Soil Group: A

Typical profile

0 to 9 inches: Loamy sand
9 to 65 inches: Sand

Minor Components

Not named

Percent of map unit: 4 percent

Ondawa

Percent of map unit: 3 percent

Podunk

Percent of map unit: 3 percent

104—Podunk fine sandy loam

Map Unit Setting

Elevation: 10 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Podunk and similar soils: 90 percent
Minor components: 10 percent

Description of Podunk

Setting

Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 18 to 36 inches

Frequency of flooding: Frequent
Frequency of ponding: None
Available water capacity: Moderate (about 7.4 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2w
Hydrologic Soil Group: B

Typical profile

0 to 14 inches: Fine sandy loam
14 to 24 inches: Fine sandy loam
24 to 65 inches: Coarse sand

Minor Components

Ondawa

Percent of map unit: 3 percent

Rumney

Percent of map unit: 3 percent
Landform: Flood plains

Not named

Percent of map unit: 2 percent

Sunday

Percent of map unit: 2 percent

105—Rumney loam

Map Unit Setting

Elevation: 10 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Rumney and similar soils: 90 percent
Minor components: 10 percent

Description of Rumney

Setting

Landform: Flood plains
Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 3w
Hydrologic Soil Group: C

Typical profile
0 to 8 inches: Loam
8 to 24 inches: Fine sandy loam
24 to 65 inches: Loamy sand

Minor Components

Podunk
Percent of map unit: 4 percent

Medomak
Percent of map unit: 3 percent
Landform: Flood plains

Ondawa
Percent of map unit: 3 percent

114—Walpole-Binghamville complex

Map Unit Setting
Elevation: 0 to 1,000 feet
Mean annual precipitation: 28 to 55 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 100 to 200 days

Map Unit Composition
Walpole and similar soils: 45 percent
Binghamville and similar soils: 40 percent
Minor components: 15 percent

Description of Walpole

Setting
Landform: Lake terraces

Properties and qualities
Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.9 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 4w
Hydrologic Soil Group: C

Typical profile

0 to 8 inches: Fine sandy loam
8 to 21 inches: Fine sandy loam
21 to 65 inches: Loamy sand

Description of Binghamville

Setting

Landform: Lake terraces
Parent material: Glaciolacustrine

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very high (about 12.1 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 4w
Hydrologic Soil Group: D

Typical profile

0 to 6 inches: Silt loam
6 to 18 inches: Very fine sandy loam
18 to 65 inches: Very fine sandy loam

Minor Components

Dartmouth

Percent of map unit: 4 percent

Not named

Percent of map unit: 4 percent

Not named wet

Percent of map unit: 4 percent
Landform: Depressions

Deerfield

Percent of map unit: 3 percent

201—Ondawa fine sandy loam, occasionally flooded

Map Unit Setting

Elevation: 10 to 1,750 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Ondawa and similar soils: 90 percent
Minor components: 10 percent

Description of Ondawa

Setting

Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 1
Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Fine sandy loam
10 to 33 inches: Fine sandy loam
33 to 65 inches: Fine sand

Minor Components

Podunk

Percent of map unit: 4 percent

Rumney

Percent of map unit: 3 percent
Landform: Flood plains

Sunday

Percent of map unit: 3 percent

254B—Monadnock and Hermon soils, 3 to 8 percent slopes

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.5 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 2e
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 2s
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Lyme

Percent of map unit: 5 percent
Landform: Ground moraines

Moosilauke

Percent of map unit: 5 percent
Landform: Depressions

Waumbek

Percent of map unit: 5 percent

254C—Monadnock and Hermon soils, 8 to 15 percent slopes

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.5 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 3e
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 3e
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek

Percent of map unit: 8 percent

Lyme

Percent of map unit: 7 percent
Landform: Depressions

254D—Monadnock and Hermon soils, 15 to 25 percent slopes

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.5 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 4e
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 4e
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek

Percent of map unit: 8 percent

Lyme

Percent of map unit: 7 percent
Landform: Depressions

255B—Monadnock and Hermon soils, 3 to 8 percent, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek

Percent of map unit: 8 percent

Lyme

Percent of map unit: 7 percent
Landform: Depressions

255C—Monadnock and Hermon soils, 8 to 15 percent, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek

Percent of map unit: 8 percent

Lyme

Percent of map unit: 7 percent
Landform: Depressions

255D—Monadnock and Hermon soils, 15 to 25 percent slopes, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek

Percent of map unit: 8 percent

Lyme

Percent of map unit: 7 percent
Landform: Depressions

255E—Monadnock and Hermon soils, 25 to 35 percent slopes, very stony

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 100 to 160 days

Map Unit Composition

Monadnock and similar soils: 45 percent
Hermon and similar soils: 40 percent
Minor components: 15 percent

Description of Monadnock

Setting

Parent material: Till

Properties and qualities

Slope: 25 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: B

Typical profile

0 to 6 inches: Fine sandy loam
6 to 23 inches: Very fine sandy loam
23 to 65 inches: Loamy sand

Description of Hermon

Setting

Parent material: Till

Properties and qualities

Slope: 25 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups
Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: A

Typical profile
0 to 5 inches: Fine sandy loam
5 to 7 inches: Fine sandy loam
7 to 22 inches: Gravelly fine sandy loam
22 to 65 inches: Very gravelly loamy sand

Minor Components

Waumbek
Percent of map unit: 8 percent

Lyme
Percent of map unit: 7 percent
Landform: Depressions

298—Pits, gravel

Map Unit Composition
Pits: 100 percent

299—Udorthents, smoothed

Map Unit Composition
Udorthents: 90 percent
Minor components: 10 percent

Minor Components

Miscellaneous areas
Percent of map unit: 10 percent

347B—Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony

Map Unit Composition

Lyme and similar soils: 55 percent
Moosilauke and similar soils: 30 percent
Minor components: 15 percent

Description of Lyme

Setting

Landform: Ground moraines
Parent material: Till

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.9 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 6 inches: Mucky peat
6 to 11 inches: Cobbly fine sandy loam
11 to 22 inches: Cobbly fine sandy loam
22 to 65 inches: Gravelly fine sandy loam

Description of Moosilauke

Setting

Landform: Ground moraines
Parent material: Glacial drift

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.7 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 5 inches: Fine sandy loam
5 to 22 inches: Fine sandy loam
22 to 65 inches: Sand

Minor Components

Not named

Percent of map unit: 8 percent

Not named wet

Percent of map unit: 7 percent
Landform: Depressions

406—Medomak silt loam

Map Unit Setting

Elevation: 10 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Medomak and similar soils: 90 percent
Minor components: 10 percent

Description of Medomak

Setting

Landform: Flood plains
Parent material: Sandy and/or coarse-loamy alluvium derived from granite, gneiss or schist

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Available water capacity: Very high (about 15.0 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 6w
Hydrologic Soil Group: D

Typical profile

0 to 11 inches: Silt loam
11 to 65 inches: Very fine sandy loam

Minor Components

Podunk

Percent of map unit: 5 percent

Rumney

Percent of map unit: 5 percent
Landform: Flood plains

558B—Skerry fine sandy loam, 3 to 8 percent slopes

Map Unit Composition

Skerry and similar soils: 85 percent
Minor components: 15 percent

Description of Skerry

Setting

Parent material: Basal melt-out till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2e
Hydrologic Soil Group: C

Typical profile

0 to 12 inches: Fine sandy loam
12 to 21 inches: Fine sandy loam
21 to 65 inches: Gravelly loamy fine sand

Minor Components

Becket

Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Not named
Percent of map unit: 3 percent

Rock outcrop
Percent of map unit: 2 percent

559B—Skerry fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Composition
Skerry and similar soils: 85 percent
Minor components: 15 percent

Description of Skerry

Setting
Parent material: Basal melt-out till derived from granite and gneiss

Properties and qualities
Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile
0 to 12 inches: Fine sandy loam
12 to 21 inches: Fine sandy loam
21 to 65 inches: Gravelly loamy fine sand

Minor Components

Becket
Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Not named
Percent of map unit: 3 percent

Rock outcrop
Percent of map unit: 2 percent

559C—Skerry fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Composition
Skerry and similar soils: 85 percent
Minor components: 15 percent

Description of Skerry

Setting
Parent material: Basal melt-out till derived from granite and gneiss

Properties and qualities
Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups
Farmland classification: Farmland of local importance
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile
0 to 12 inches: Fine sandy loam
12 to 21 inches: Fine sandy loam
21 to 65 inches: Gravelly loamy fine sand

Minor Components

Becket
Percent of map unit: 5 percent

Pillsbury
Percent of map unit: 5 percent
Landform: Depressions

Not named
Percent of map unit: 3 percent

Rock outcrop
Percent of map unit: 2 percent

559D—Skerry fine sandy loam, 15 to 25 percent slopes, very stony

Map Unit Composition

Skerry and similar soils: 85 percent
Minor components: 15 percent

Description of Skerry

Setting

Parent material: Basal melt-out till derived from granite and gneiss

Properties and qualities

Slope: 15 to 25 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: C

Typical profile

0 to 12 inches: Fine sandy loam
12 to 21 inches: Fine sandy loam
21 to 65 inches: Gravelly loamy fine sand

Minor Components

Becket

Percent of map unit: 5 percent

Pillsbury

Percent of map unit: 5 percent
Landform: Depressions

Not named

Percent of map unit: 3 percent

Rock outcrop

Percent of map unit: 2 percent

613—Croghan loamy fine sand

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 160 days

Map Unit Composition

Croghan and similar soils: 85 percent
Minor components: 15 percent

Description of Croghan

Setting

Parent material: Sandy outwash derived mainly from granite, gneiss and schist

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.2 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance
Land capability (nonirrigated): 2w
Hydrologic Soil Group: B

Typical profile

0 to 11 inches: Loamy fine sand
11 to 28 inches: Loamy fine sand
28 to 65 inches: Sand

Minor Components

Adams

Percent of map unit: 4 percent

Colton

Percent of map unit: 4 percent

Kinsman

Percent of map unit: 4 percent
Landform: Outwash terraces

Searsport

Percent of map unit: 3 percent
Landform: Bogs

614—Kinsman sand

Map Unit Setting

Elevation: 10 to 2,800 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days

Map Unit Composition

Kinsman and similar soils: 90 percent
Minor components: 10 percent

Description of Kinsman

Setting

Landform: Outwash terraces
Parent material: Outwash

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.5 inches)

Interpretive groups

Farmland classification: Farmland of local importance
Land capability (nonirrigated): 4w
Hydrologic Soil Group: C

Typical profile

0 to 8 inches: Sand
8 to 24 inches: Sand
24 to 65 inches: Gravelly sand

Minor Components

Croghan

Percent of map unit: 4 percent

Chocorua

Percent of map unit: 3 percent
Landform: Bogs

Searsport

Percent of map unit: 3 percent
Landform: Swamps

647B—Pillsbury fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

Elevation: 500 to 2,000 feet
Mean annual precipitation: 30 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 70 to 135 days

Map Unit Composition

Pillsbury and similar soils: 90 percent
Minor components: 10 percent

Description of Pillsbury

Setting

Landform: Ground moraines
Parent material: Basal lodgement till derived from granite and gneiss and/or basal lodgement till derived from schist

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 10 to 39 inches to densic material
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.8 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C

Typical profile

0 to 7 inches: Fine sandy loam
7 to 30 inches: Fine sandy loam
30 to 65 inches: Gravelly loam

Minor Components

Not named

Percent of map unit: 3 percent

Peacham

Percent of map unit: 3 percent
Landform: Depressions

Peru
Percent of map unit: 2 percent

Skerry
Percent of map unit: 2 percent

731—Peacham and ossipee soils, very stony

Map Unit Setting
Elevation: 500 to 2,000 feet
Mean annual precipitation: 28 to 50 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 60 to 140 days

Map Unit Composition
Ossipee and similar soils: 40 percent
Peacham and similar soils: 40 percent
Minor components: 20 percent

Description of Peacham

Setting
Landform: Ground moraines
Parent material: Basal lodgement till derived from granite and gneiss and/or basal lodgement till derived from schist

Properties and qualities
Slope: 0 to 2 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 10 to 39 inches to densic material
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water capacity: Low (about 4.6 inches)

Interpretive groups
Farmland classification: Not prime farmland
Land capability (nonirrigated): 5s
Hydrologic Soil Group: D

Typical profile
0 to 7 inches: Muck
7 to 15 inches: Gravelly fine sandy loam
15 to 65 inches: Sandy loam

Description of Ossipee

Setting

Landform: Bogs
Parent material: Organic material over till

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water capacity: Very high (about 24.5 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8w
Hydrologic Soil Group: D

Typical profile

0 to 6 inches: Mucky peat
6 to 41 inches: Mucky peat
41 to 65 inches: Silt loam

Minor Components

Greenwood

Percent of map unit: 10 percent
Landform: Bogs

Not named wet

Percent of map unit: 5 percent
Landform: Ground moraines

Lyme

Percent of map unit: 3 percent
Landform: Ground moraines

Pillsbury

Percent of map unit: 2 percent
Landform: Ground moraines

W—Water

Map Unit Composition

Water: 100 percent

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

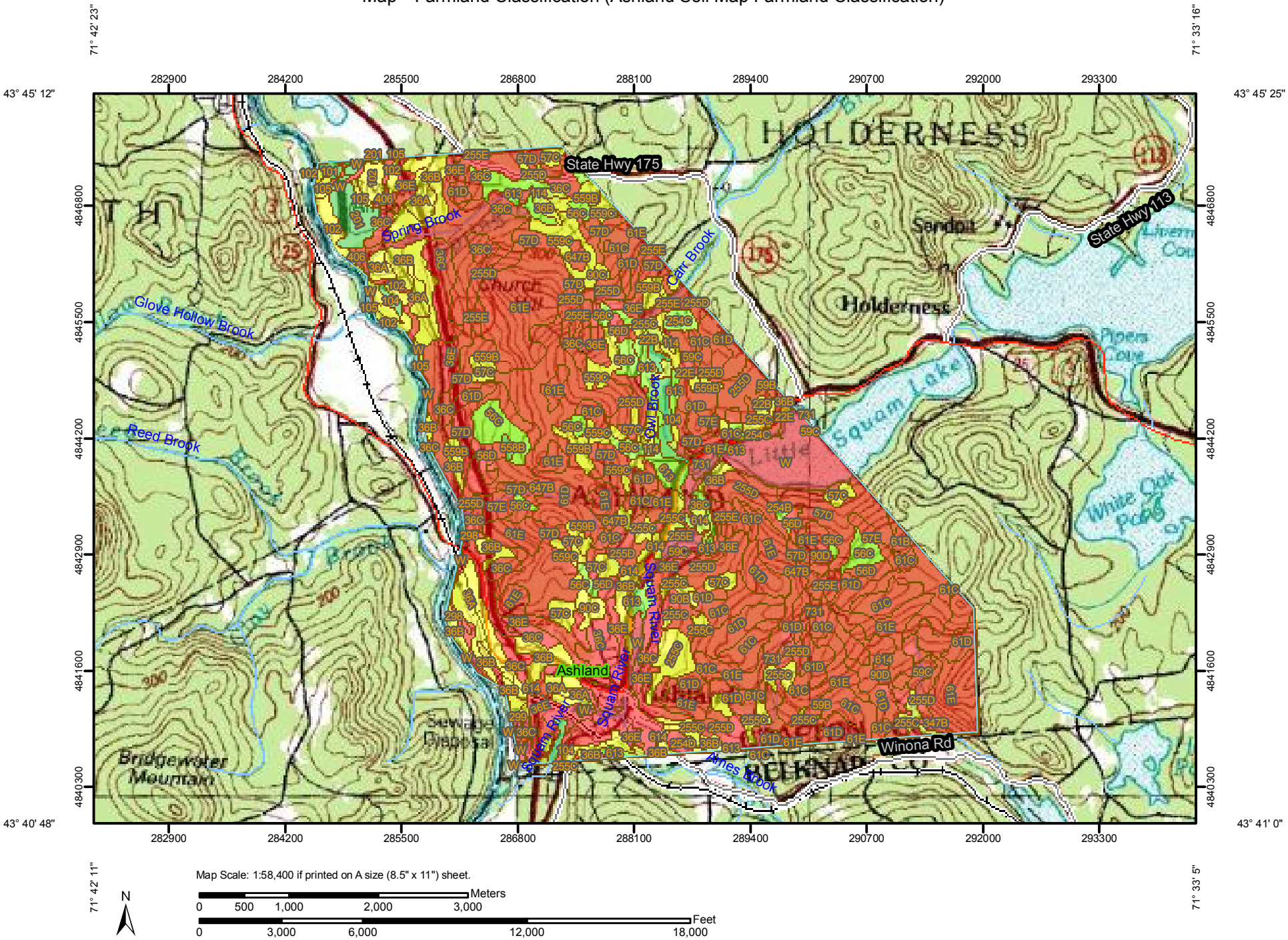
Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Ashland Soil Map Farmland Classification)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Custom Soil Resource Report
Map—Farmland Classification (Ashland Soil Map Farmland Classification)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Political Features

- Cities

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:58,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 15, Aug 27, 2012

Table—Farmland Classification (Ashland Soil Map Farmland Classification)

Farmland Classification— Summary by Map Unit — Grafton County, New Hampshire (NH009)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
22B	Colton loamy sand, 3 to 8 percent slopes	Farmland of local importance	17.8	0.2%
22E	Colton loamy sand, 15 to 60 percent slopes	Not prime farmland	24.3	0.3%
36A	Adams loamy sand, 0 to 3 percent slopes	Farmland of local importance	160.4	2.2%
36B	Adams loamy sand, 3 to 8 percent slopes	Farmland of local importance	346.1	4.7%
36C	Adams loamy sand, 8 to 15 percent slopes	Not prime farmland	506.4	6.9%
36E	Adams loamy sand, 15 to 60 percent slopes	Not prime farmland	581.6	8.0%
56C	Becket fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	181.5	2.5%
56D	Becket fine sandy loam, 15 to 25 percent slopes	Not prime farmland	95.1	1.3%
57B	Becket fine sandy loam, 3 to 8 percent slopes, very stony	Farmland of local importance	0.1	0.0%
57C	Becket fine sandy loam, 8 to 15 percent slopes, very stony	Farmland of local importance	115.0	1.6%
57D	Becket fine sandy loam, 15 to 25 percent slopes, very stony	Not prime farmland	420.9	5.8%
57E	Becket fine sandy loam, 25 to 35 percent slopes, very stony	Not prime farmland	55.5	0.8%
59B	Waumbek loamy sand, 3 to 8 percent slopes, very stony	Not prime farmland	10.9	0.1%
59C	Waumbek loamy sand, 8 to 15 percent slopes, very stony	Not prime farmland	36.5	0.5%
61B	Tunbridge-Lyman-Rock outcrop complex, 3 to 8 percent slopes	Not prime farmland	12.4	0.2%
61C	Tunbridge-Lyman-Rock outcrop complex, 8 to 15 percent slopes	Not prime farmland	421.6	5.8%
61D	Tunbridge-Lyman-Rock outcrop complex, 15 to 25 percent slopes	Not prime farmland	1,133.8	15.5%
61E	Tunbridge-Lyman-Rock outcrop complex, 25 to 60 percent slopes	Not prime farmland	867.8	11.9%
90B	Tunbridge-Lyman complex, 3 to 8 percent slopes	Farmland of local importance	4.0	0.1%
90C	Tunbridge-Lyman complex, 8 to 15 percent slopes	Farmland of local importance	34.9	0.5%
90D	Tunbridge-Lyman complex, 15 to 25 percent slopes	Not prime farmland	21.8	0.3%
101	Ondawa fine sandy loam, frequently flooded	All areas are prime farmland	12.4	0.2%

Farmland Classification— Summary by Map Unit — Grafton County, New Hampshire (NH009)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
102	Sunday loamy sand	Farmland of local importance	92.2	1.3%
104	Podunk fine sandy loam	All areas are prime farmland	68.3	0.9%
105	Rumney loam	Farmland of local importance	42.7	0.6%
114	Walpole-Binghamville complex	Farmland of local importance	30.9	0.4%
201	Ondawa fine sandy loam, occasionally flooded	All areas are prime farmland	65.0	0.9%
254B	Monadnock and Hermon soils, 3 to 8 percent slopes	Farmland of statewide importance	6.2	0.1%
254C	Monadnock and Hermon soils, 8 to 15 percent slopes	Farmland of statewide importance	26.3	0.4%
254D	Monadnock and Hermon soils, 15 to 25 percent slopes	Not prime farmland	20.1	0.3%
255B	Monadnock and Hermon soils, 3 to 8 percent, very stony	Farmland of local importance	9.8	0.1%
255C	Monadnock and Hermon soils, 8 to 15 percent, very stony	Farmland of local importance	224.4	3.1%
255D	Monadnock and Hermon soils, 15 to 25 percent slopes, very stony	Not prime farmland	640.1	8.8%
255E	Monadnock and Hermon soils, 25 to 35 percent slopes, very stony	Not prime farmland	115.0	1.6%
298	Pits, gravel	Not prime farmland	6.2	0.1%
299	Udorthents, smoothed	Not prime farmland	8.4	0.1%
347B	Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony	Not prime farmland	6.2	0.1%
406	Medomak silt loam	Not prime farmland	19.9	0.3%
558B	Skerry fine sandy loam, 3 to 8 percent slopes	All areas are prime farmland	7.3	0.1%
559B	Skerry fine sandy loam, 3 to 8 percent slopes, very stony	Farmland of local importance	113.2	1.5%
559C	Skerry fine sandy loam, 8 to 15 percent slopes, very stony	Farmland of local importance	144.4	2.0%
559D	Skerry fine sandy loam, 15 to 25 percent slopes, very stony	Not prime farmland	5.8	0.1%
613	Croghan loamy fine sand	Farmland of statewide importance	182.4	2.5%
614	Kinsman sand	Farmland of local importance	57.2	0.8%
647B	Pillsbury fine sandy loam, 3 to 8 percent slopes, very stony	Not prime farmland	45.4	0.6%
731	Peacham and ossipee soils, very stony	Not prime farmland	33.4	0.5%
W	Water	Not prime farmland	281.0	3.8%
Totals for Area of Interest			**7,313.3**	**100.0%**

Rating Options—Farmland Classification (Ashland Soil Map Farmland Classification)

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group (Ashland Soil Map Hydrologic Group)

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 soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

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.

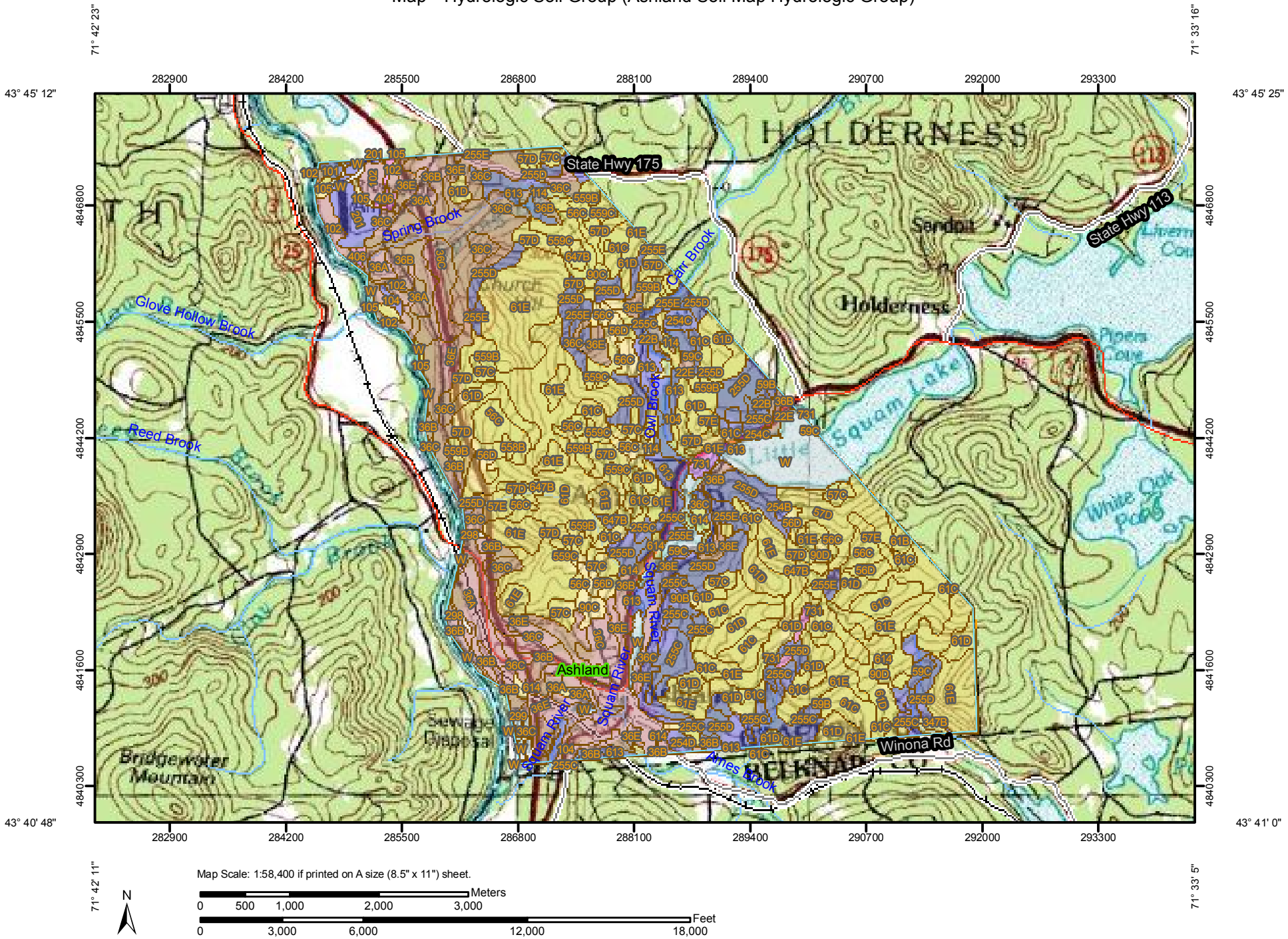
Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

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. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report
Map—Hydrologic Soil Group (Ashland Soil Map Hydrologic Group)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Political Features

- Cities

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:58,400 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 15, Aug 27, 2012

Table—Hydrologic Soil Group (Ashland Soil Map Hydrologic Group)

Hydrologic Soil Group— Summary by Map Unit — Grafton County, New Hampshire (NH009)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
22B	Colton loamy sand, 3 to 8 percent slopes	A	17.8	0.2%
22E	Colton loamy sand, 15 to 60 percent slopes	A	24.3	0.3%
36A	Adams loamy sand, 0 to 3 percent slopes	A	160.4	2.2%
36B	Adams loamy sand, 3 to 8 percent slopes	A	346.1	4.7%
36C	Adams loamy sand, 8 to 15 percent slopes	A	506.4	6.9%
36E	Adams loamy sand, 15 to 60 percent slopes	A	581.6	8.0%
56C	Becket fine sandy loam, 8 to 15 percent slopes	C	181.5	2.5%
56D	Becket fine sandy loam, 15 to 25 percent slopes	C	95.1	1.3%
57B	Becket fine sandy loam, 3 to 8 percent slopes, very stony	C	0.1	0.0%
57C	Becket fine sandy loam, 8 to 15 percent slopes, very stony	C	115.0	1.6%
57D	Becket fine sandy loam, 15 to 25 percent slopes, very stony	C	420.9	5.8%
57E	Becket fine sandy loam, 25 to 35 percent slopes, very stony	C	55.5	0.8%
59B	Waumbek loamy sand, 3 to 8 percent slopes, very stony	B	10.9	0.1%
59C	Waumbek loamy sand, 8 to 15 percent slopes, very stony	B	36.5	0.5%
61B	Tunbridge-Lyman-Rock outcrop complex, 3 to 8 percent slopes	C	12.4	0.2%
61C	Tunbridge-Lyman-Rock outcrop complex, 8 to 15 percent slopes	C	421.6	5.8%
61D	Tunbridge-Lyman-Rock outcrop complex, 15 to 25 percent slopes	C	1,133.8	15.5%
61E	Tunbridge-Lyman-Rock outcrop complex, 25 to 60 percent slopes	C	867.8	11.9%
90B	Tunbridge-Lyman complex, 3 to 8 percent slopes	C	4.0	0.1%
90C	Tunbridge-Lyman complex, 8 to 15 percent slopes	C	34.9	0.5%
90D	Tunbridge-Lyman complex, 15 to 25 percent slopes	C	21.8	0.3%
101	Ondawa fine sandy loam, frequently flooded	B	12.4	0.2%
102	Sunday loamy sand	A	92.2	1.3%
104	Podunk fine sandy loam	B	68.3	0.9%

Hydrologic Soil Group— Summary by Map Unit — Grafton County, New Hampshire (NH009)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
105	Rumney loam	C	42.7	0.6%
114	Walpole-Binghamville complex	C	30.9	0.4%
201	Ondawa fine sandy loam, occasionally flooded	B	65.0	0.9%
254B	Monadnock and Hermon soils, 3 to 8 percent slopes	B	6.2	0.1%
254C	Monadnock and Hermon soils, 8 to 15 percent slopes	B	26.3	0.4%
254D	Monadnock and Hermon soils, 15 to 25 percent slopes	B	20.1	0.3%
255B	Monadnock and Hermon soils, 3 to 8 percent, very stony	B	9.8	0.1%
255C	Monadnock and Hermon soils, 8 to 15 percent, very stony	B	224.4	3.1%
255D	Monadnock and Hermon soils, 15 to 25 percent slopes, very stony	B	640.1	8.8%
255E	Monadnock and Hermon soils, 25 to 35 percent slopes, very stony	B	115.0	1.6%
298	Pits, gravel		6.2	0.1%
299	Udorthents, smoothed		8.4	0.1%
347B	Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony	C	6.2	0.1%
406	Medomak silt loam	D	19.9	0.3%
558B	Skerry fine sandy loam, 3 to 8 percent slopes	C	7.3	0.1%
559B	Skerry fine sandy loam, 3 to 8 percent slopes, very stony	C	113.2	1.5%
559C	Skerry fine sandy loam, 8 to 15 percent slopes, very stony	C	144.4	2.0%
559D	Skerry fine sandy loam, 15 to 25 percent slopes, very stony	C	5.8	0.1%
613	Croghan loamy fine sand	B	182.4	2.5%
614	Kinsman sand	C	57.2	0.8%
647B	Pillsbury fine sandy loam, 3 to 8 percent slopes, very stony	C	45.4	0.6%
731	Peacham and ossipee soils, very stony	D	33.4	0.5%
W	Water		281.0	3.8%
Totals for Area of Interest			**7,313.3**	**100.0%**

Rating Options—Hydrologic Soil Group (Ashland Soil Map Hydrologic Group)

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie.

The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://soils.usda.gov/

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://soils.usda.gov/

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://soils.usda.gov/

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.glti.nrcs.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://soils.usda.gov/

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.