United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with Maine Agricultural and Forest Experiment Station and Maine Soil and Water Conservation Commission

Soil Survey of Franklin County Area and Part of Somerset County, Maine

How To Use This Soil Survey

General Soil Map

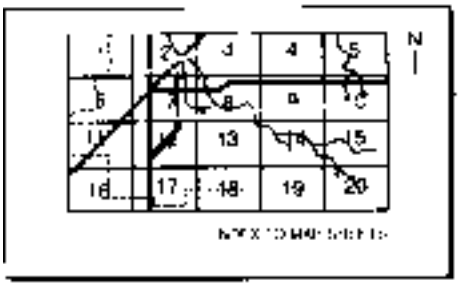
The general soil map, which is a color map, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

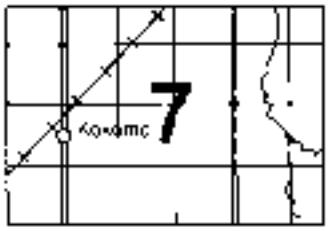
To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

Detailed Soil Maps

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

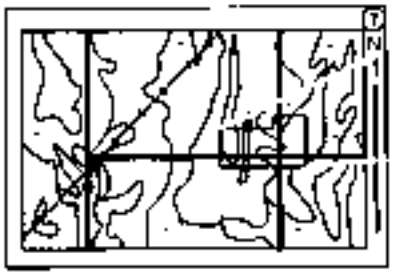
To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.





MAP SHEET

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



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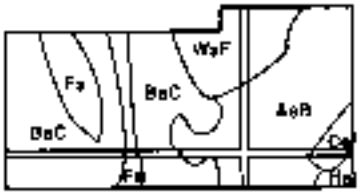

AREA OF INTEREST

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

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

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

Major fieldwork for this soil survey was completed in 1990. Soil names and descriptions were approved in 1992. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1990. This survey was made cooperatively by the Natural Resources Conservation Service and the Maine Agricultural and Forest Experiment Station and the Maine Soil and Water Conservation Commission. The survey is part of the technical assistance furnished to the Franklin County Soil and Water Conservation District.

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

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Cover: A view of the Sandy River valley with glacial till soils in the foreground and in the distance and terrace soils on the lower elevations.

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

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Foreword

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

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

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

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

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

Russell A. Collett
State Conservationist
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Soil Survey of
Franklin County Area and Part of Somerset County, Maine

By Gary T. Hedstrom, Natural Resources Conservation Service

Fieldwork by Gary T. Hedstrom, Wayne D. Hoar, Paul A. Hughes, and Lisa Krall, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with
Maine Agricultural and Forest Experiment Station and the Maine Soil and Water Conservation Commission

Franklin County and the part of Somerset County in the survey area are in the west central area of Maine (fig. 1). The survey area includes the southern part of Franklin County and the towns of Jackman and Moose River in Somerset County. The survey area has a total land area of 1166 square miles, or 746,528 acres. The survey area is composed of the twenty organized towns and ten of the unorganized townships or plantations (Coplin, Dallas, Freeman, Mt. Abraham, Perkins, Rangeley, Redington, Salem, Sandy River, and Washington). The total population of Franklin County is about 25,000. Farmington, the county seat, has a population of about 6,710. The population of Moose River and Jackman is about 1,250.

The survey area is in the New England glaciated uplands and Northeastern mountains. Relief ranges from about 280 feet in New Sharon to 4,237 feet above sea level on Sugarloaf Mountain in the northeastern part of the survey area. The area is characterized by mountains, rolling hills, and stream and river valleys. Several mountain peaks are over 3,000 feet in elevation.

Forestry is the main economic enterprise in the survey area. Two paper mills and several wood product mills utilize the local forest base. Tourism is another economic enterprise important to the area. The many lakes, rivers, and streams attract many summer visitors as well as summer residents. Winter recreational activities such as skiing and snow sledding contribute to the economy of the survey area and attract many visitors. Dairy and beef farms are the primary livestock operations. Corn, potatoes, apples, squash, and dry beans are the main cash crops. The survey area has about 280 farms that cover approximately 50,000 acres. Along with the processing of forest products, other industries include shoe manufacturing and a tannery.

General Nature of the Survey Area

This section provides general information about the history and development, the climate, and the drainage of Franklin County and part of Somerset County.

History and Development

The first settlers came to southern Franklin County in the late 1770s. Their settlement spread north along the Sandy River. They cleared land for farming and built mills along the rivers and streams, utilizing the available waterpower. During the Revolutionary War, Benedict Arnold and his men camped in what is now the town of Eustis while on their ill-fated expedition to capture Quebec City.

Maine became a state in 1820, and Franklin County was incorporated in 1836 from parts of Kennebec, Oxford, and Somerset Counties. At that time, Franklin County had a population of about 20,000. The estimated population of the County in 1990 was 25,000.

Many of the farmers in the county left for the mid-western United States during the mid-1880s after experiencing a few unusually cold years. They left seeking a more favorable climate with more naturally fertile, less stony soils. Many of the farms on the

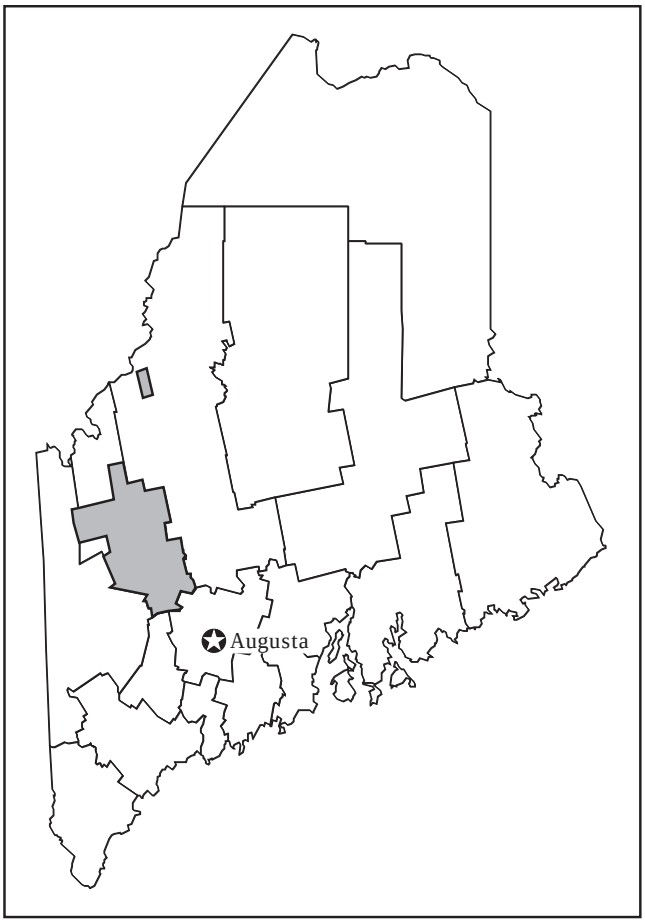

Figure 1.—Location of Franklin County Area and Part of Somerset County, ME.

shallow or wetter soils of the hills and ridges have been abandoned and returned to woodland, while the more productive soils in the valleys and the deeper, better drained soils on the ridges are still farmed intensively.

Maine Central Railroad came north to Farmington where it met the narrow gauge Sandy River and Rangeley Lakes Railroad, which served the county north of Farmington as far as Rangeley and Carrabassett Valley. The narrow gauge railroad opened up the county during the late 1800s, carrying logs to the mills and the lumber from the mills to market. The Rangeley Lakes region became a popular resort and rail traffic was busy from Boston to Rangeley, where vacationers enjoyed hunting and fishing. The narrow gauge rail was torn up during the 1930s and in the 1980s the Maine Central rails were removed south to the town of Jay, where the paper mills are still served. Today, logs and lumber products are hauled by truck over a network of state and federal highways. The Canadian Atlantic Railway passes through Jackman providing freight service for the wood products industry and also passenger service.

Today, forestry is still the main enterprise in the county. Two paper mills and several wood product mills utilize the local forest base.

Climate

In Franklin County and the part of Somerset County in the soil survey area, winters are cold and summers are warm and have occasional hot spells. In winter, the precipitation is mainly snow, but occasional rainstorms resulting from southwesterly weather patterns are a common occurrence in the southern part of Franklin County. Total annual precipitation is normally adequate for the crops commonly grown in the survey area.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Farmington, Maine in the period 1951 to 1981. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is 17 degrees F and the average daily minimum temperature is 6 degrees. The lowest temperature on record, which occurred on February 2, 1962, is -37 degrees. In summer, the average temperature is 64 degrees and the average daily maximum temperature is 77 degrees. The highest recorded temperature, which occurred on August 3, 1975, is 101 degrees.

Growing degree days are shown in table 1. They are equivalent to “heat units.” During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 44 inches. Of this, 22 inches, or 50 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 19 inches. The heaviest 1-day rainfall during the period of record was 5.99 inches on December 28, 1969. Thunderstorms occur on about 18 days each year, and most occur in summer.

The average seasonal snowfall is about 91 inches. The greatest snow depth at any one time during the period of record was 84 inches. On the average, 64 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

The average relative humidity in midafternoon is about 60 percent. Humidity is higher at night, and the

average at dawn is about 80 percent. The sun shines 63 percent of the time possible in summer and 56 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 10 miles per hour, in spring.

Drainage

Most of the drainage in the Franklin County Area is through streams and brooks that flow into the Sandy River. The Androscoggin River drains the south-western corner of the area, the Carrabassett River drains the north-eastern corner and the Dead River drains the Eustis area. Moose River and Jackman are drained primarily through the Moose River and its tributaries.

The streams and rivers are generally post-glacial and, along with the associated lakes, bogs and swamps, formed the general pattern of glacial drainage during the recession of the last ice sheet. The general direction of this drainage pattern is northwest-southeast. The largest bodies of water are Rangeley, Mooselookmeguntic, Cupsuptic, Flagstaff, and Webb Lakes and Clearwater, Wilson, and Wood Ponds.

The rivers and streams provide adequate drainage for the Franklin County area except for the large flats and bogs in the town of Chesterville. These swamps and others in isolated areas have no pronounced drainage, but streams do pass through them.

How This Survey Was Made

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

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

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

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

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

For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

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

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

This survey area was mapped at two levels of detail. At the more detailed level, map units are narrowly defined. Map unit boundaries were plotted and verified at closely spaced intervals. At the less detailed level, map units are broadly defined. Boundaries were plotted and verified at wider intervals. In the legend for the detailed soil maps, narrowly defined units are indicated by symbols in which the first letter is a capital and the second is lowercase. For broadly defined units, the first and second letters are capitals.

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

Map Unit Composition

A map unit delineation on a soil map represents an area dominated by one major kind of soil or an area dominated by several kinds of soil. A map unit is identified and named according to the taxonomic classification of the dominant soil or soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural objects. In common with other natural objects, they have a characteristic variability in their properties. 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 soils of other taxonomic classes. Consequently, every map unit is made up of the soil or soils for which it is named and some soils that belong to other taxonomic classes. These latter soils are called inclusions or included soils.

Most inclusions have properties and behavioral patterns 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 (similar) inclusions. They may or may not be mentioned in the map unit descriptions. Other inclusions, however, have properties and behavior divergent enough to affect use or require different management. These are contrasting (dissimilar) inclusions. They generally occupy small areas and cannot be shown separately on the soil maps because of the scale used in mapping. The inclusions of contrasting soils are mentioned in the map unit descriptions. A few inclusions may not have been observed and consequently are not mentioned in the descriptions, especially where the soil pattern was so complex that it was impractical to make enough observations to identify all the kinds of soil on the landscape.

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

Survey Procedures

Prior to field mapping of this survey area, general field investigations were made to determine patterns of landform. Spot checks of various soils in the field were made. Where available, surficial and bedrock geology maps were used to correlate landforms and the individual soil sites.

Field mapping was done primarily by soil scientists making traverses on foot. The traverses were made at intervals of one-half mile or more depending on the complexity of the topography and soil patterns. Some areas of high variability are along streams and lakeshores and in river valleys.

Soil examinations along the traverses were made at intervals of 300 to 800 yards, depending on the landscape and soil patterns. Broadly defined areas were examined at wider intervals. The soil material was examined with the aid of a shovel or hand auger

to a depth of about 5 feet or to bedrock within a depth of 5 feet. The pedons described as typical were observed and studied in pits. Some of these pedons were sampled for laboratory analysis.

All information about the soils was recorded on aerial photographs. Initially, these photographs were at a scale of 1:15,840 (4 inches equals one mile) but later 1:20,000 scale photographs were used. The latter is the scale of final publication. Surface drainage features also were recorded on the aerial photographs. Cultural features are from U.S. Geological Survey 7.5-minute topographic maps.

General Soil Map Units

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

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

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

The names and delineations of the soils on these maps do not, in all instances, agree with those on published maps of the surveys of adjacent counties. The differences are the result of changes in soil classification and mapping procedures.

The soils in the Franklin County Area and part of Somerset County vary widely in their suitability for major land uses. Approximately 3 percent of the land in the survey area is used for cropland, including hay and cultivated crops. This cropland is scattered throughout the survey area, but it is concentrated largely in the southern half of the survey area in map units 1, 5, 7, and 8, which have good suitability for cropland. Soils in map unit 1 are on upland areas with long, broad-topped ridges. These are primarily Dixfield, Colonel, Marlow, Brayton, and Lyman soils. Soils in map unit 5 are on higher terraces along the river and on glacial outwash plains. These are primarily Adams, Croghan, Naumburg, Madawaska, and Allagash soils. Soils in unit 7 are on low-lying areas with rolling topography in the southern half of the area. These are primarily the Swanville, Boothbay, and Nicholville soils. Soils in map unit 8 are on lower terraces along rivers and streams and are subject to periodic flooding or are organic bogs. These are primarily the Charles, Medomak, Cornish, Fryeburg, and Lovewell soils.

About 91 percent of the survey area is used for woodland. The productivity for softwoods is good on map units 1, 2, 4, 5, 6, and 7. Productivity for hardwoods is good on map unit 1. The use of equipment is restricted on some of the soils in these map units except during drier seasons or during winter months.

Urban areas make up a very small percentage of the total acreage of the survey area. Most soils do not have good suitability for urban uses. Slow permeability, wetness, slope, shallow depth to bedrock, and surface stoniness are some of the limiting factors affecting the use of the soils in Franklin County for septic sewage disposal systems, homesites, sanitary fill areas, commercial buildings, and road location. Many limitations can be overcome with proper engineering, but suitability of the soils for urban uses depends on the location and need.

The suitability of the soils in the soil survey area for recreational uses varies depending on the use and the intensity of use. Soils of all map units have some suitability for certain recreational uses.

Suitability for wildlife habitat is generally good throughout the soil survey area. Soils in all map units are suitable for openland, wildlife or woodland wildlife habitats. Some soils in map units 5 and 8 have good suitability for wetland wildlife habitats.

1. Dixfield-Colonel-Marlow

Very deep, gently sloping to moderately steep, well drained to somewhat poorly drained soils formed in dominantly moderately coarse textured, dense glacial till; on ridges and in valleys

This map unit consists of glaciated upland ridges throughout the Franklin County part of the soil survey area. The landscape is characterized by prominent relief. Hills and ridges with moderately steep sideslopes are separated by long, narrow to broad valleys having gentle relief. Slopes range from 3 to 25 percent. Several short drainageways are on the

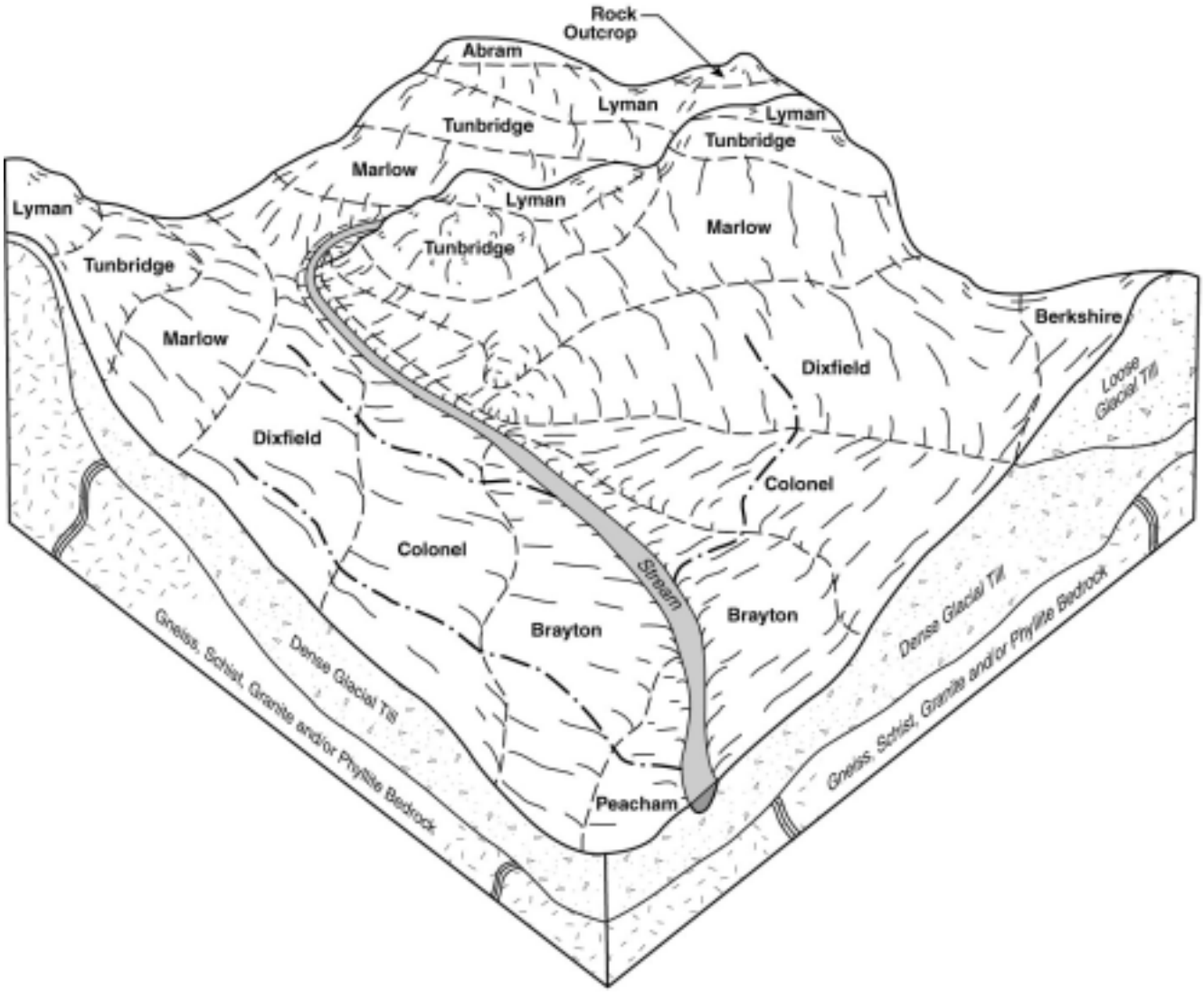

Figure 2.—Typical pattern of the soils and underlying material in the Dixfield-Colonel-Marlow general soil map unit.

sideslopes. The drainageways join and form streams and rivers that wind through narrow flood plains in the valleys. Numerous ponds and lakes are in the area. The natural vegetation is mostly softwoods on the lower slopes, with hardwoods on the hills and ridges.

The unit makes up about 59 percent of the survey area. It is about 33 percent Dixfield soils, 17 percent Colonel soils, 15 percent Marlow soils, and 35 percent soils of minor extent (fig. 2).

Dixfield soils are on the lower sideslopes of the hills and ridges and in the valleys. They are very deep, gently sloping to moderately steep, and moderately well drained. They have a moderately coarse textured surface layer and subsoil and a moderately coarse textured dense substratum.

Colonel soils are on the lowest sideslopes of the hills and ridges and in the valleys. They are very deep, gently sloping to strongly sloping and somewhat poorly drained. They have a moderately coarse textured surface layer and subsoil and a moderately coarse textured, dense substratum.

Marlow soils are on the tops and sides of hills and ridges and on the higher landscape positions in the valleys. They are very deep, gently sloping to moderately steep, and well drained. They have a moderately coarse textured surface layer and subsoil and a moderately coarse textured, dense substratum.

The minor soils in this map unit are excessively drained, very shallow Abram soils; somewhat excessively drained, shallow Lyman soils; well drained, moderately deep Tunbridge soils; and areas of Rock outcrop on the tops and upper sideslopes of

the ridges. Areas of poorly drained Brayton soils and very poorly drained Peacham soils are in depressions and along drainageways.

The soils in this map unit are used primarily for woodland, but some cleared areas are used for hayland, pastureland, and cultivated cropland. Areas around ponds and lakes are used for seasonal or year-round homes and for recreation. The woodland is predominantly sugar maple, American beech, paper birch, and eastern white pine in the better-drained areas of the unit and balsam fir, red spruce, white spruce, white cedar, and red maple in the wetter areas.

A seasonal perched water table, slow permeability of the dense substratum, depth to bedrock of the included Abram, Lyman, and Tunbridge soils, rockiness, steep sideslopes of included soils, and stones on the surface are the main limitations of the soils in this map unit.

2. Telos-Chesuncook-Monarda

Very deep, nearly level to moderately steep, moderately well drained to poorly drained soils formed in dominantly medium textured, dense glacial till; on ridges and in valleys

This map unit consists of glaciated upland ridges primarily in the northwestern part of the Franklin County soil survey area and in the Moose River-Jackman area of Somerset County. The landscape is characterized by prominent relief. Hills and ridges with moderately steep sideslopes are separated by narrow valleys having gentle relief. Slopes range from 0 to 25 percent. Several short drainageways are on the sideslopes (fig. 3). The drainageways join and form streams and rivers that wind through the valleys. Numerous ponds and lakes are in the area. The natural vegetation is

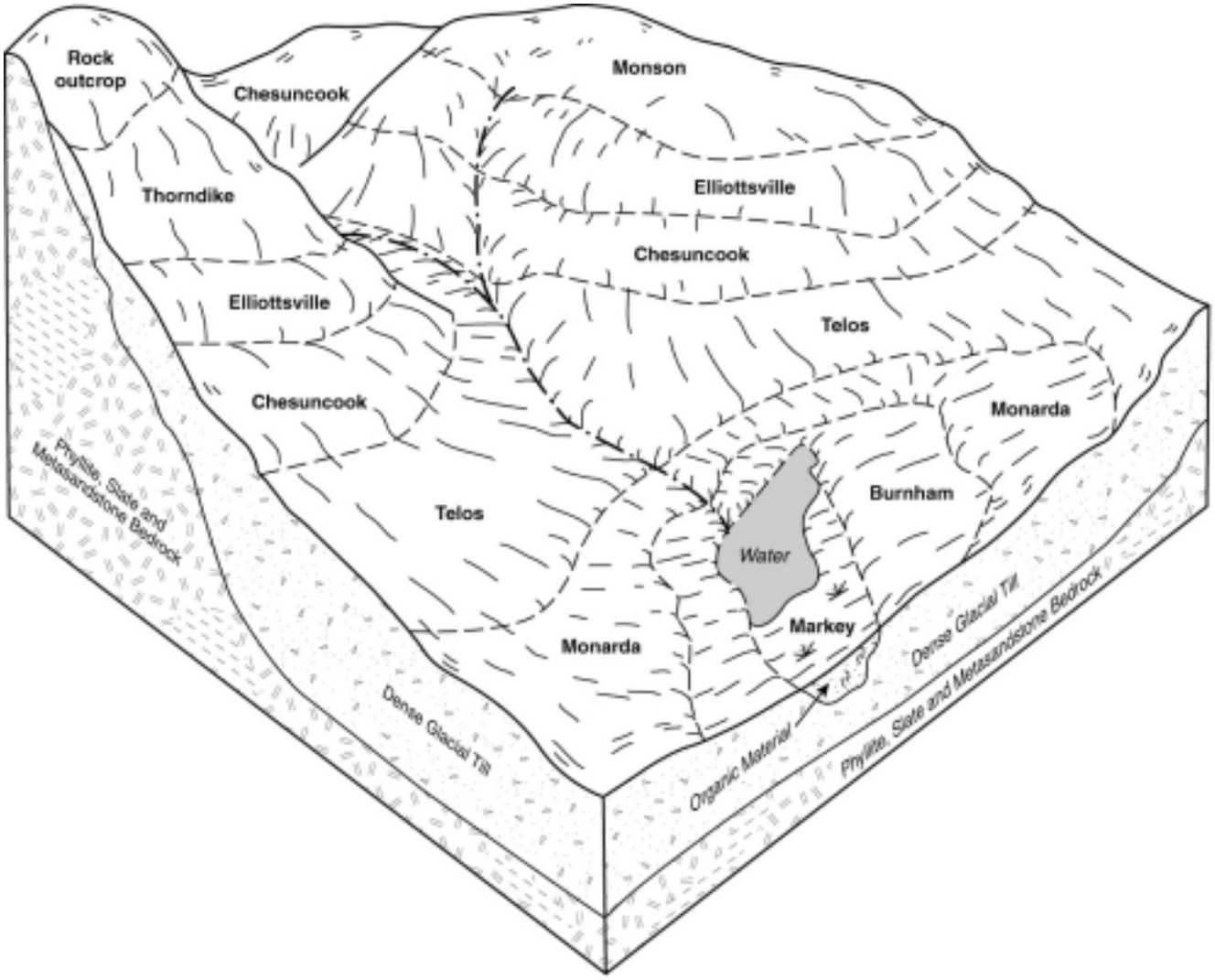

Figure 3.—Typical pattern of the soils and underlying material in the Telos-Chesuncook-Monarda general soil map unit.

mostly softwoods on the lower slopes, with hardwoods on the hills and ridges.

The unit makes up about 14 percent of the survey area. It is about 36 percent Telos soils, 22 percent Chesuncook soils, 15 percent Monarda soils, and 27 percent soils of minor extent.

Telos soils are on gently sloping tops and lower sideslopes of broad ridges. They are very deep, nearly level to moderately steep, and somewhat poorly drained. They have a medium textured surface layer and subsoil and a medium textured, dense substratum.

Chesuncook soils are on the sideslopes of hills and ridges, and in the valleys. They are very deep, gently sloping to moderately steep, and moderately well drained. They have a medium textured surface layer and subsoil and a medium textured, dense substratum.

Monarda soils are on the lower slopes and in depressions of hills and ridges and in the valleys adjacent to drainageways. They are very deep, nearly level to gently sloping, and poorly drained. They have a medium textured surface layer and subsoil and a medium textured, dense substratum.

The dominant minor soils in this map unit are somewhat excessively drained, shallow Thorndike and Monson soils; well drained, moderately deep Elliottsville soils; and Rock outcrop on similar positions at higher elevations on the landscape. Areas of very poorly drained Burnham and Markey soils are in depressions and along drainageways.

The soils in this map unit are used primarily for woodland, but some cleared areas are used for hayland and pastureland. Areas around ponds and lakes are used for seasonal or year-round homes or for recreation. The woodland is predominantly balsam fir, red spruce, white spruce, white cedar, and paper birch with some sugar maple and eastern white pine.

A seasonal water table, slow permeability of the dense substratum, depth to bedrock of the included Monson, Thorndike, and Elliottsville soils, rockiness, steep sideslopes of the included soils, and stones on the surface are the main limitations of the soils in this map unit.

3. Tunbridge-Lyman-Abram

Very shallow to moderately deep, gently sloping to very steep, excessively drained to well drained soils formed in glacial till; on hills and mountains

This map unit consists of glaciated hills and mountains throughout the soil survey area. The landscape is characterized by prominent relief. Hills, ridges, and mountains with steep sides are present. Slopes range form 3 to 80 percent. The natural vegetation is mostly softwoods with some hardwoods on the lower slopes.

This map unit makes up about 12 percent of the survey area. It is about 27 percent Tunbridge soils, 21 percent Lyman soils, 18 percent Abram soils, and 34 percent soils of minor extent (fig. 4).

Tunbridge soils are on the tops and sides of hills, ridges, and mountains. They are moderately deep, gently sloping to steep, and well drained. They have a moderately coarse textured surface layer, subsoil, and substratum underlain by hard, unweathered bedrock.

Lyman soils are on the tops and sides of hills, ridges, and mountains. They are shallow, gently sloping to steep, and somewhat excessively drained. They have a moderately coarse textured surface layer and subsoil underlain by hard, unweathered bedrock.

Abram soils are on the tops of hills, ridges, and mountains. They are very shallow, gently sloping to very steep, and excessively drained. They have a medium textured surface layer underlain by hard, unweathered bedrock.

The dominant minor soils in this map unit are well drained Marlow soils; moderately well drained Dixfield soils; somewhat poorly drained Colonel soils; poorly drained Brayton soils; and very shallow to moderately deep, well drained to excessively drained Ricker soils and Rock outcrop in the same landscape.

The soils in this map unit are used primarily for woodland and recreation. Some areas have been cleared for ski slopes. Hiking trails ascend many of the mountains. Several mountainous areas have been designated state parks or wilderness preserves. The woodland is predominantly balsam fir, paper birch, red spruce, sugar maple, white spruce, white ash, and yellow birch.

Depth to bedrock, rockiness, steep slopes, and stones on the surface are the main limitations of the soils in this map unit.

4. Sisk-Saddleback-Ricker

Very shallow to very deep, strongly sloping to very steep, excessively drained to well drained soils formed in glacial till; on mountains

This map unit consists of glaciated mountains and ridges in the northern part of the Franklin County soil survey area characterized by prominent relief. Mountains and ridges with steep and very steep sideslopes are separated by narrow valleys. Slopes range from 12 to 80 percent. The natural vegetation is mostly softwoods on the lower slopes with alpine mosses and shrubs on the tops of mountains.

The unit makes up about 6 percent of the survey area. It is about 25 percent Sisk soils, 24 percent

Saddleback soils, 19 percent Ricker soils, and 32 percent soils of minor extent (fig. 5).

Sisk soils are on the lower sideslopes of the mountain and ridges and in the valleys. They are very deep, strongly sloping to moderately steep, and well drained. They have a moderately coarse textured surface layer and subsoil and a moderately coarse textured, dense substratum.

Saddleback soils are on the upper sideslopes of the mountains and ridges. They are shallow, moderately steep to very steep, and well drained. They have a moderately coarse textured surface layer and subsoil underlain by hard, unweathered bedrock.

Ricker soils are on the tops and sides of mountains and ridges. They are very shallow to moderately deep, moderately steep to very steep, and well drained to excessively drained. They have an organic surface layer underlain by a thin medium textured subsurface layer over weathered granitic bedrock.

The dominant minor soils in this map unit are somewhat excessively drained Mahoosuc soils, moderately well drained Surplus soils, and Rock outcrop in similar positions on the landscape. Poorly drained Bemis soils are on the lower slopes and in the valleys along drainageways.

The soils in this map unit are used primarily for woodland. Some areas of this unit are used for recreation. The woodland is predominantly balsam fir, red spruce, mountain paper birch, American mountain ash, yellow birch, mountain maple, and striped maple. Non forested areas have a ground cover of alpine grasses, mosses, and shrubs.

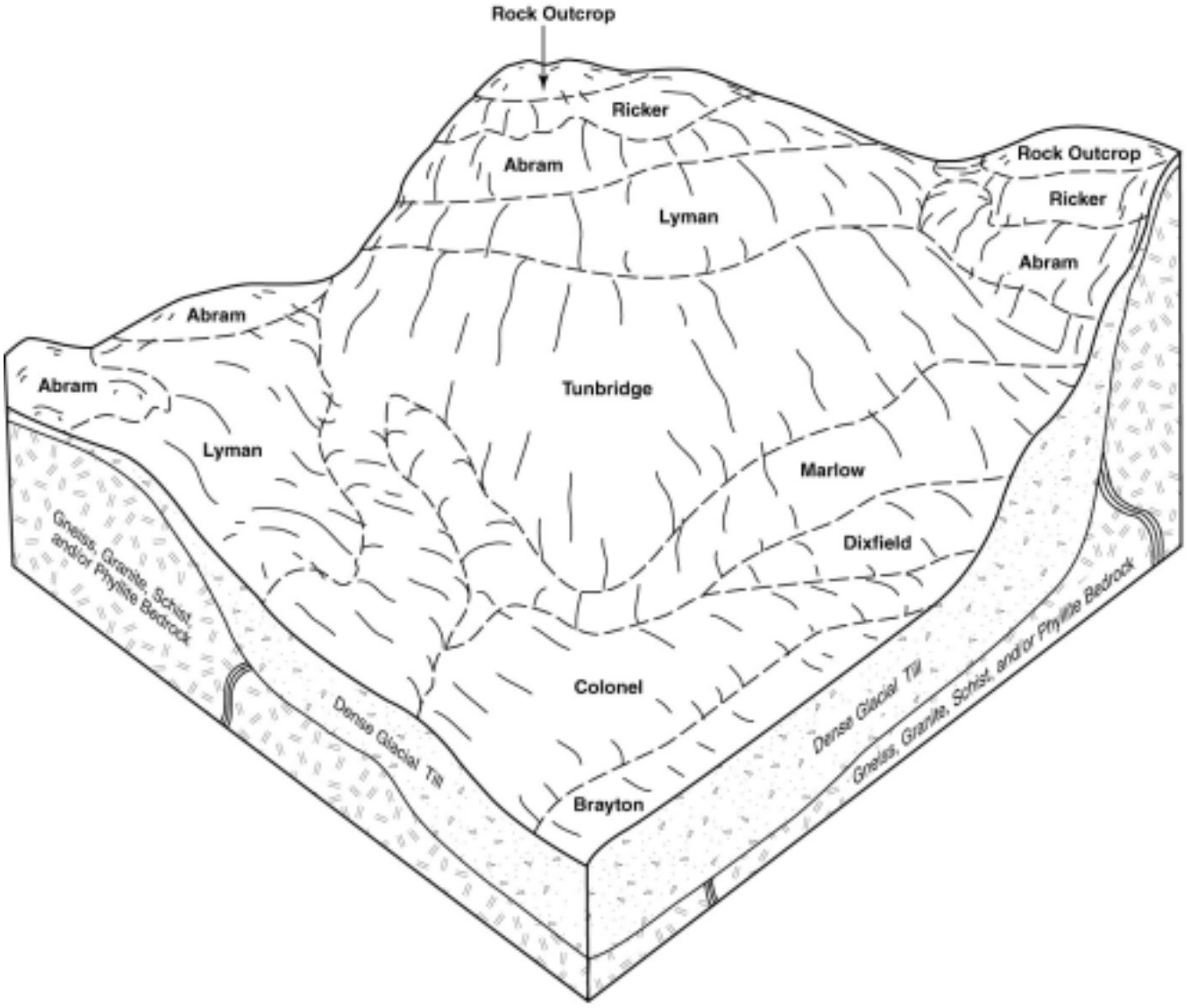

Figure 4.—Typical pattern of the soils and underlying material in the Tunbridge-Lyman-Abram general soil map unit.

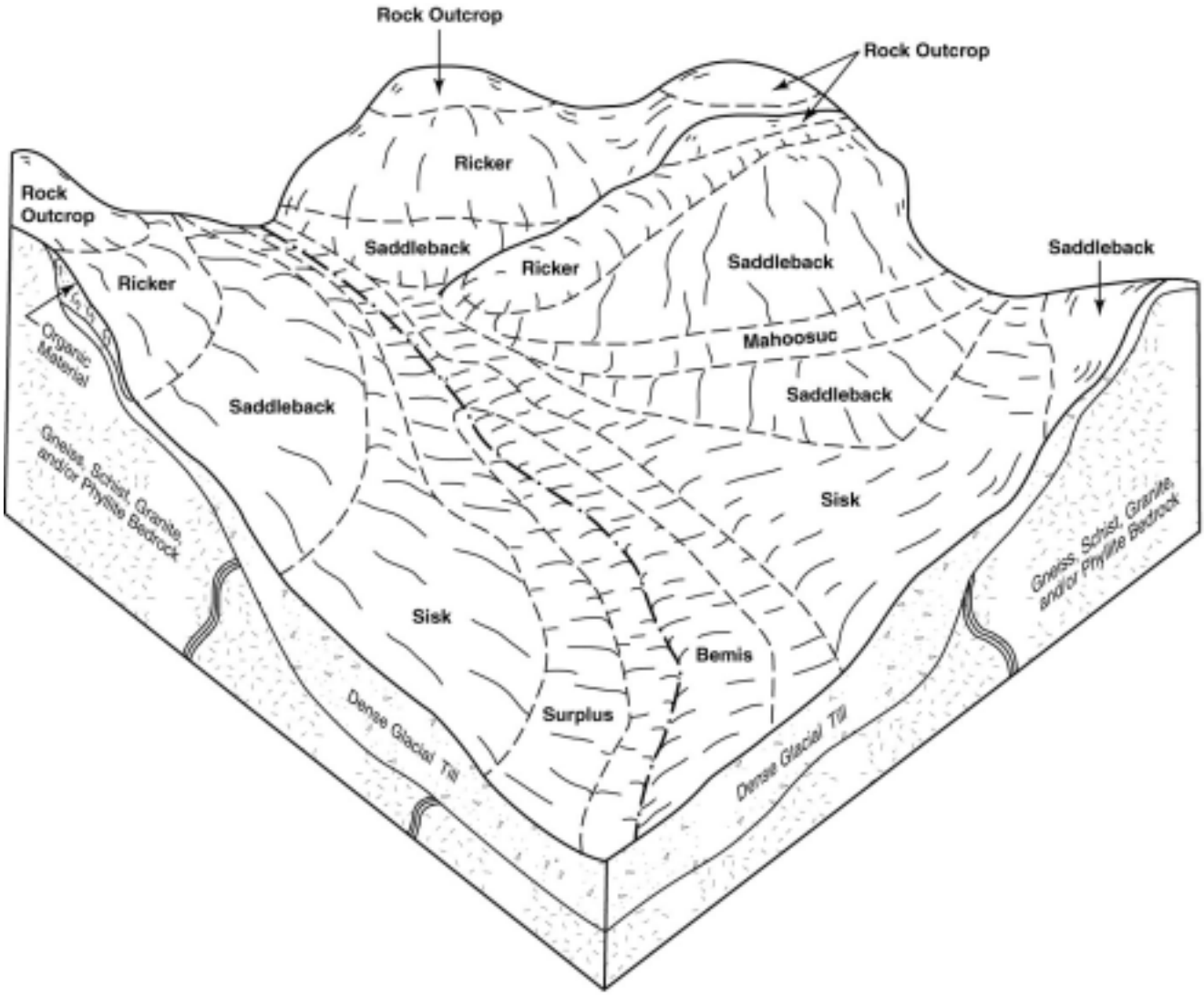

Figure 5. —Typical pattern of the soils and underlying material in the Sisk-Saddleback-Ricker general soil map unit.

Slope, depth to bedrock, rockiness, surface stoniness, and wetness of included soils are the main limitations of the soils in this unit.

5. Adams-Croghan-Naumburg

Very deep, nearly level to steep, somewhat excessively drained to poorly drained soils formed in glaciofluvial deposits

This map unit consists of sand plains, terraces, and deltas in valleys along major rivers and streams throughout the Franklin County soil survey area. The landscape is characterized by broad flat plains and deltas, and terraces with short steep sides. Kames and eskers with prominent relief are present. Depressions and kettle holes occur throughout the area. Slopes range from 0 to 45 percent. The natural vegetation is mostly softwoods with a few hardwoods.

The unit makes up about 3 percent of the survey area. It is about 48 percent Adams soils, 22 percent Croghan soils, 16 percent Naumburg soils, and 14 percent other soils (fig. 6).

Adams soils are on the tops and sideslopes of deltas and sand plains. They are very deep, nearly level to steep, and somewhat excessively drained. They have a coarse textured surface layer and subsoil underlain by a loose, coarse textured substratum.

Croghan soils are on the lower elevations of deltas and plains. They are very deep, nearly level and gently sloping, and moderately well drained. They have a coarse textured surface layer and subsoil underlain by a loose, coarse textured substratum.

Naumburg soils are in depressional areas on deltas and plains. They are very deep, nearly level, and somewhat poorly drained or poorly drained. They have a coarse textured surface layer and subsoil underlain by a loose coarse textured substratum.

The dominant minor soils in this map unit are

excessively drained Colton and Masardis soils; well drained Allagash soils; moderately well drained Nicholville soils; and poorly drained Swanville soils on similar landscapes. Very poorly drained Searsport and Markey soils are in depressions on the landscape.

Most of the soils in this map unit are in woodland. Some areas have been cleared and are used for hayland, pastureland and cropland. Some areas are reverting to woodland. In a few areas sand and gravel have been excavated. Many of the major towns and villages in the survey area are situated on these soils. The woodland is predominantly eastern white pine, red pine, white spruce, and sugar maple on the better-drained areas of the map unit and balsam fir, eastern hemlock, and red maple on the wetter areas.

Pollution of the groundwater table by pollutants seeping through the very rapidly permeable substratum is a major concern. Droughtiness, seepage, and a seasonal high water table are the main limitations of the soils in this map unit.

6. Colton-Sheepscot-Markey

Very deep, nearly level to steep, excessively drained to moderately well drained soils formed in glaciofluvial deposits; and very deep, nearly level, very poorly drained soils formed in organic deposits

This map unit consists of sandy and gravelly deposits intermingled with organic deposits in valleys along the major rivers and streams in the survey area. The landscape is characterized by broad flat deltas and plains, and terraces with short steep sides. Kames and eskers with prominent relief as well as depressions and kettle holes occur throughout the area. Slopes range from 0 to 45 percent. The natural vegetation is primarily softwoods.

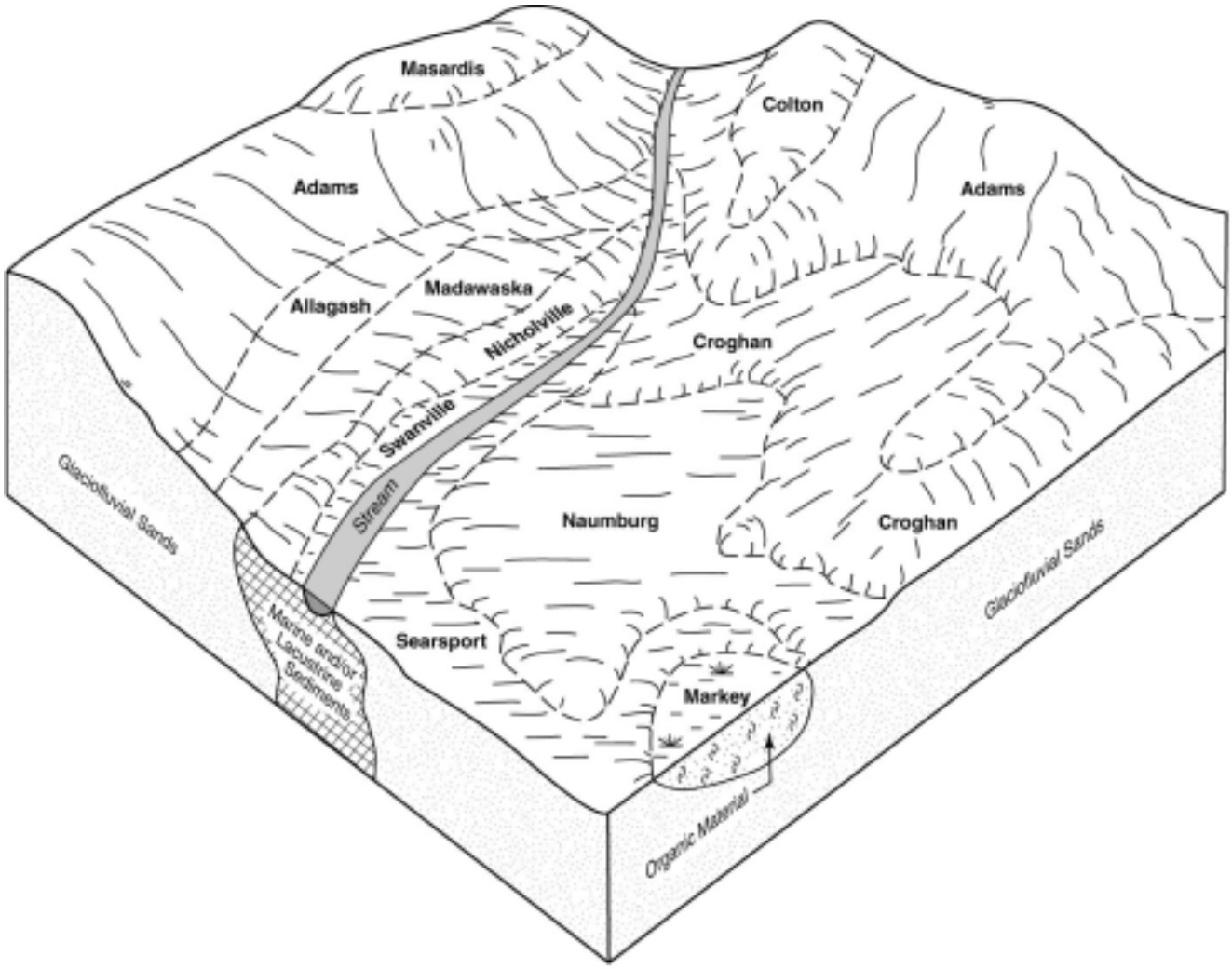

Figure 6.—Typical pattern of the soils and underlying material in the Adams-Croghan-Naumburg general soil map unit.

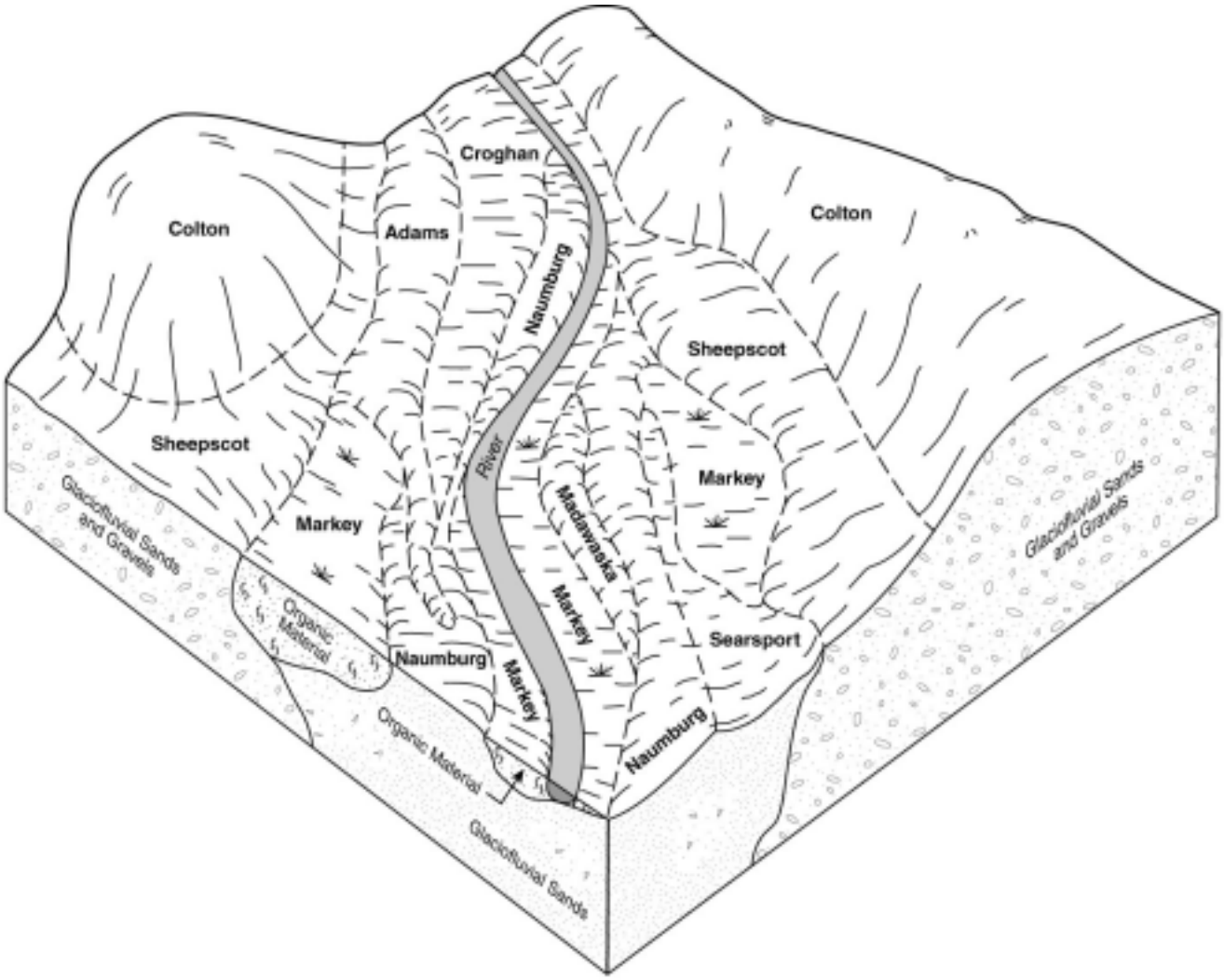

Figure 7.—Typical pattern of the soils and underlying material in the Colton-Sheepscot-Markey general soil map unit.

The unit makes up about 2 percent of the survey area. It is about 36 percent Colton soils, 22 percent Sheepscot soils, 20 percent Markey soils, and 22 percent soils of minor extent (fig. 7).

Colton soils are on the tops and sideslopes of eskers, kames, and deltas. They are very deep, nearly level to steep, and excessively drained. They have a moderately coarse textured surface layer and a moderately coarse and coarse textured subsoil underlain by a loose, very gravelly coarse textured substratum.

Sheepscot soils are on the lower elevations of deltas and plains. They are very deep, nearly level and gently sloping, and moderately well drained. They have a moderately coarse textured surface layer and subsoil underlain by a loose, very gravelly coarse textured substratum.

Markey soils are in depressions and kettle holes on the landscape. They are very deep, nearly level, and very poorly drained. They have surface, subsurface, and bottom tiers of partially or highly decomposed organic matter.

The dominant minor soils in this map unit are somewhat excessively drained Adams soils; moderately well drained Croghan and Madawaska soils; somewhat poorly drained or poorly drained Naumburg soils; and very poorly drained Searsport soils on similar landscapes.

The soils in this map unit are used primarily for woodland. Some areas have been cleared and are used for cropland, hayland, and pastureland. Many cleared areas are reverting to woodland. In some areas gravel and sand have been excavated. Some of the towns and villages in the survey area are situated on these soils. The woodland is predominantly eastern white pine, red pine, white spruce, red spruce, and

sugar maple on the better-drained areas of the map unit and balsam fir, black spruce, tamarack, and northern whitecedar on the wetter areas.

Pollution of the groundwater by pollutants seeping through the very rapidly permeable substratum is a major concern. Droughtiness, seepage, rock fragments in the subsoil, a seasonal high water table, and excess humus are the main limitations of the soils in this map unit.

7. Swanville-Boothbay-Nicholville

Very deep, nearly level to strongly sloping, poorly drained to moderately well drained soils formed in marine or lacustrine sediments

This map unit consists of areas of lake plains and upland till plains in the southeastern part of the Franklin County soil survey area along the Sandy River and in Jackman. The area is characterized by broad nearly level to gently sloping lacustrine or marine plains. Slopes range from 0 to 15 percent. The natural vegetation is mostly softwoods.

The unit makes up about 2 percent of the survey area. It is about 40 percent Swanville soils, 25 percent Boothbay soils, 10 percent Nicholville soils, and 25 percent soils of minor extent (fig. 8).

Swanville soils are on lower elevations of the landscape. They are very deep, nearly level, and poorly drained. They have a medium textured surface layer, subsoil, and substratum.

Boothbay soils are on the higher areas of the landscape. They are very deep, gently sloping to strongly sloping, and moderately well drained or somewhat poorly drained. They have a medium textured surface layer and subsoil underlain by a medium and moderately fine textured substratum.

Nicholville soils are on the highest areas of the landscape. They are very deep, gently sloping to

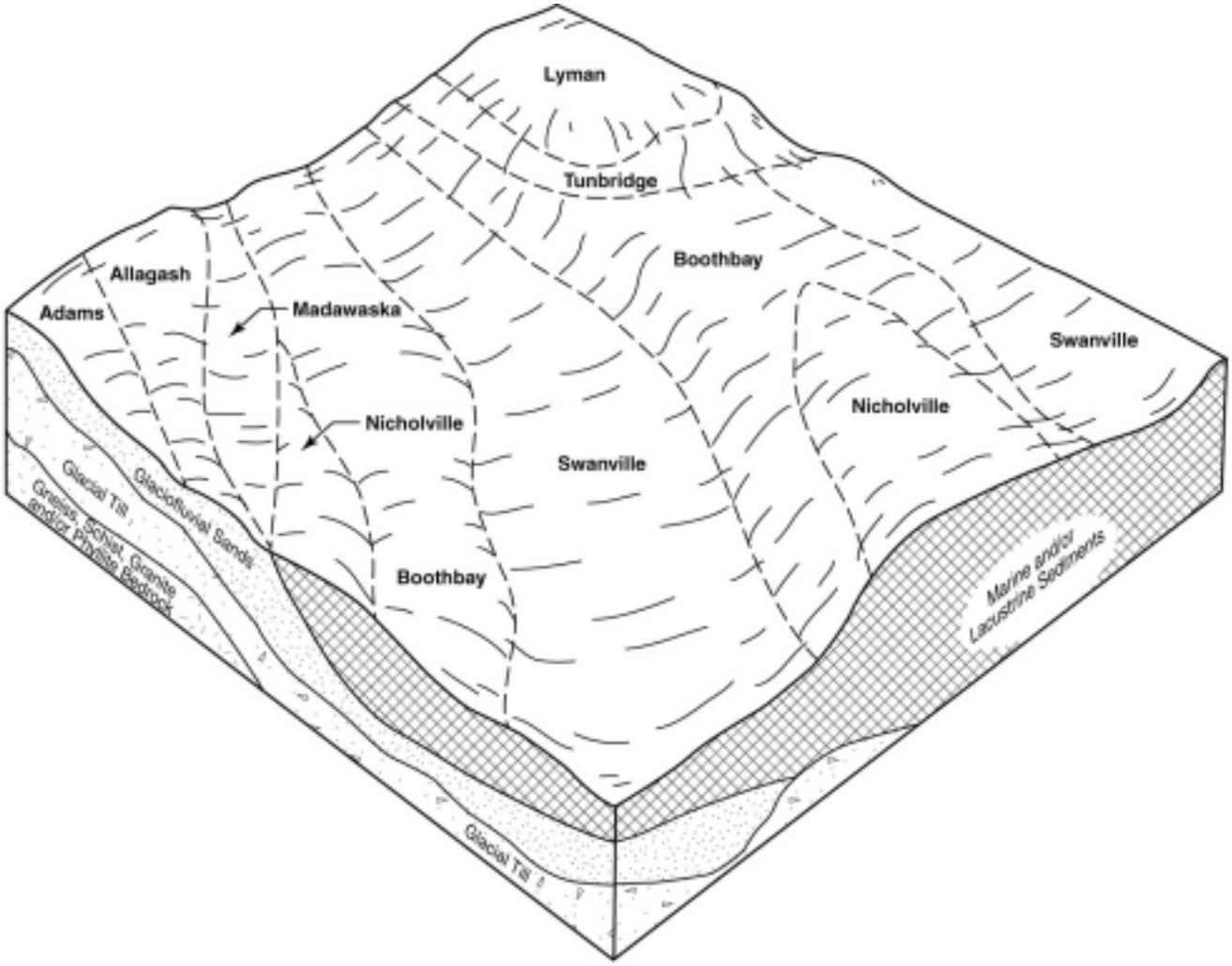

Figure 8.—Typical pattern of the soils and underlying material in the Swanville-Boothbay-Nicholville general soil map unit.

strongly sloping, and moderately well drained. They have a medium textured surface layer and subsoil underlain by a medium textured substratum.

The dominant minor soils in this map unit are somewhat excessively drained Adams soils; somewhat excessively drained, shallow Lyman soils; well drained Allagash soils; well drained, moderately deep Tunbridge soils; and moderately well drained Madawaska soils.

Most of the soils in this map unit have been cleared and are used for hay, pasture, and silage corn. Some areas are reverting to woodland. The high water table in the spring and fall presents problems in using these soils for cropland. The woodland is predominantly eastern white pine, balsam fir, white spruce, paper birch, and red maple.

A seasonal high water table, a silty clay loam substratum, slow percolation, erosion, frost action, and depth to bedrock of included soils are the main limitations of the soils in this map unit.

8. Charles-Medomak-Cornish

Very deep, nearly level, somewhat poorly drained to very poorly drained soils formed in recent alluvial deposits

This map unit consists of flood plains along rivers and streams throughout the soil survey area. The areas are characterized by long, narrow to broad valleys having gentle relief along major rivers and streams. Slopes range from 0 to 2 percent. Numerous oxbows, old river channel segments, occur within this map unit. The natural vegetation is both hardwoods and softwoods.

The unit makes up about 2 percent of the survey area. It is about 30 percent Charles soils, 21 percent

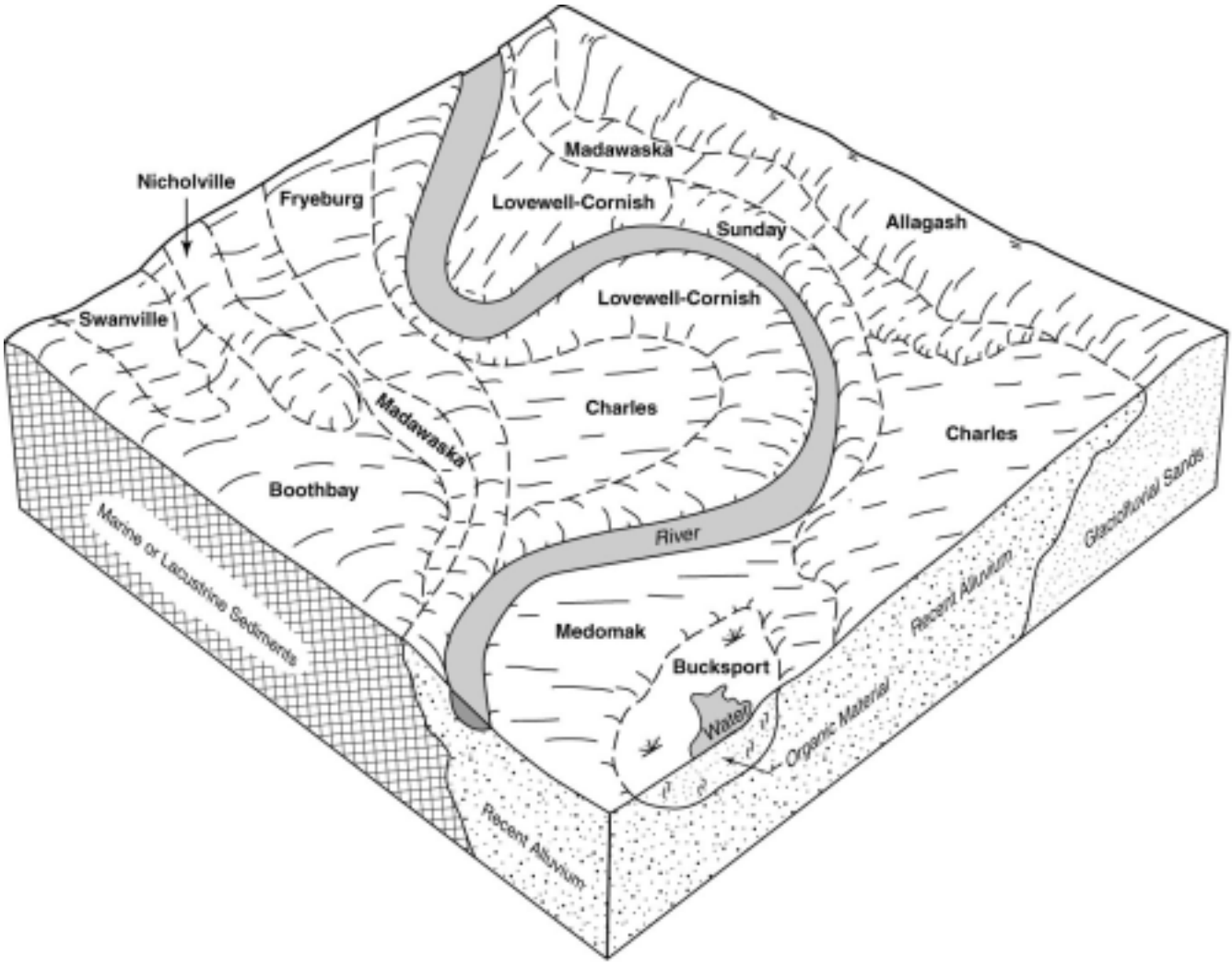

Figure 9.—Typical pattern of the soils and the underlying material in the Charles-Medomak-Cornish general soil map unit.

Figure 10.—An aerial view of the Sandy River valley showing old river channels and oxbows. The areas adjacent to the river are of the Charles-Medomak-Cornish map unit, which are alluvial soils used primarily for cropland.

Medomak soils, 20 percent Cornish soils, and 29 percent soils of minor extent (fig. 9).

Charles soils are on the lower elevations of flood plains. They are very deep, nearly level, and poorly drained. They have a medium textured surface layer and substratum.

Medomak soils are in depressions on flood plains. They are very deep, nearly level, and very poorly drained. They have a medium textured surface layer underlain by a medium textured and moderately coarse textured substratum.

Cornish soils are very deep, nearly level, and somewhat poorly drained. They are on the intermediate elevations of flood plains. They have a medium textured surface layer, subsoil, and substratum.

The dominant minor soils in this unit are the well drained Allagash and Fryeburg soils; moderately well drained Lovewell, Madawaska, and Nicholville soils; moderately well drained or somewhat poorly drained Boothbay soils; and poorly drained Swanville soils on higher elevations on the landscape; and the very poorly drained Bucksport soils in depressions.

The soils in this map unit are used for cropland and hayland (fig. 10). Some of the wettest areas are in woodland. The areas that are wooded are predominantly American elm, gray birch, tamarack, black spruce, red maple, and balsam fir.

Flooding, a seasonal high water table, frost action, and seepage are the main limitations of the soils in this map unit.

Detailed Soil Map Units

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

A map unit delineation on a 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 “included” areas that belong to other taxonomic classes.

Most included 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, inclusions. They may or may not be mentioned in the map unit description. Other included soils and miscellaneous areas, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, inclusions. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The included areas of contrasting soils or miscellaneous areas are mentioned in the map unit descriptions. A few included areas 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 included areas in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

Soils of one series can differ in texture of the surface layer, slope, stoniness, 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, Marlow fine sandy loam, 8 to 15 percent slopes, very stony is a phase of the Marlow 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. Tunbridge-Lyman complex, 3 to 8 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. Hermon-Monadnock association, rolling, very stony is an example.

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

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

Two intensities of mapping have been done in this survey area. Narrowly defined map units have been used in open areas and areas of land adjacent to rivers, lakes, and major roads. These are areas where there is a need for soil interpretations for yields of specific crops, important farmlands, sanitary facilities, urban development, and intensive recreation. Most of the map units will be phases of soil series. A few map units will be complexes or undifferentiated units. The minimum-size delineation on the maps will be about 3 acres.

Broadly defined map units have been used in the extensively forested areas. These are areas where there is a need for soil interpretations for woodland management and productivity, watershed management, and extensive outdoor recreation. The map units are phases of soil associations or complexes with some undifferentiated units. The minimum-size delineation on the maps will be about 15 acres.

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

AdB—Adams loamy sand, 0 to 8 percent slopes

This map unit is nearly level to gently sloping or undulating, very deep, and somewhat excessively drained. It is on outwash plains, deltas, and terraces. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to 200 acres.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer is 2 inches of black loamy sand underlain by a light brownish gray loamy sand subsurface layer, 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy fine sand or fine sand.

Included in mapping are small areas of well drained Allagash soils, moderately well drained Madawaska and Croghan soils, excessively drained Colton soils, and somewhat excessively drained Masardis soils. Allagash and Madawaska soils are on stream terraces lower on the landscape. Colton and Masardis soils are on convex knolls generally on higher elevations. Croghan soils are in small, nearly level depressions. Also included are Adams soils with slopes greater than 8 percent. Included soils make up about 15 percent of the unit.

Adams soils have rapid permeability in the surface layer and upper part of the subsoil and very rapid permeability in the lower part of the subsoil and substratum. Surface runoff is very slow or slow and erosion is a slight hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this soil are used for woodland. A few areas are used for hayland and pastureland or as sites for residential development.

This map unit is poorly suited to cultivated crops and orchards. The main limitation is droughtiness because of the low available water capacity. Irrigation is needed to obtain satisfactory yields. Low natural fertility and leaching of added nutrients are also management considerations. Increasing organic matter content by adding manure and crop residue will improve soil structure and increase available water capacity and nutrient content. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will conserve moisture, maintain tilth, and control erosion.

This map unit is poorly suited to hay and pasture. The main limitations are droughtiness and low natural fertility. Using drought tolerant species, proper stocking rates, pasture rotation, and restricted grazing during dry periods helps to keep the pasture in good condition and to protect the soil from erosion. Applications of lime and fertilizer are needed to maintain production.

The potential productivity of this map unit for trees such as eastern white pine is high. Droughtiness is the main limitation. Seedling mortality is severe because of the low available water capacity, but can be reduced by planting in the spring, when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid permeability of this map unit is the main limitation for septic tank absorption fields. If this soil is used for septic tank absorption fields, there is a possibility of groundwater contamination. Seepage is a severe limitation in sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements and slope is a moderate limitation for small commercial buildings and for local roads and streets. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This soil is a good source of roadfill and a probable source of sand.

This map unit has slight limitations for camp areas, picnic areas, and paths and trails. It has moderate limitations for playgrounds. Slope is the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This soil has poor potential for openland wildlife habitat and woodland wildlife habitat and very poor potential for wetland wildlife habitat because of droughtiness.

The land capability classification is 3s. The woodland ordination symbol is 8S.

AdC—Adams loamy sand, 8 to 15 percent slopes

This map unit is strongly sloping or rolling, very deep, and somewhat excessively drained. It is on outwash plains, deltas, and terraces. Slopes are smooth and slightly convex. Areas are elongated and irregular in shape and are on the side slopes of the landform. They range from 3 to 200 acres.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer is 2 inches of black loamy sand underlain by a light brownish gray loamy sand subsurface layer, 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy fine sand or fine sand.

Included in mapping are a few small areas of well drained Allagash soils, moderately well drained Croghan and Madawaska soils, excessively drained Colton soils, and somewhat excessively drained Masardis soils. Allagash and Madawaska soils are on stream terraces lower on the landscape, and Colton and Masardis soils are on convex knolls generally on higher elevations. Croghan soils are in small, nearly level depressions. Also included are Adams soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Adams soils have rapid permeability in the surface layer and upper part of the subsoil and very rapid permeability in the lower part of the subsoil and substratum. Surface runoff is slow or medium and erosion is a moderate hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this soil are used for woodland. A few areas are used as sites for residential development.

This map unit is poorly suited to cultivated crops and orchards. The main limitations are droughtiness because of the low available water capacity, and slope. Irrigation is needed to obtain satisfactory yields. Low natural fertility and leaching of added nutrients are also management concerns. Increasing organic matter content by adding manure and crop residue will improve soil structure and increase available water capacity and nutrient content. Planting of drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will conserve moisture, maintain tilth, and control erosion. If this soil is cultivated, erosion could be a hazard. Stripcropping, contour farming, no-till planting, and terracing help control erosion.

This map unit is poorly suited to hay and pasture. The main limitations are droughtiness and slope. Use of drought tolerant species, proper stocking rates, pasture rotation, and restricted grazing during dry periods help keep the pasture in good condition and protect the soil from erosion. Application of lime and fertilizer is needed to maintain production.

The potential productivity of this map unit is high for trees such as eastern white pine. Droughtiness is the main limitation. Seedling mortality is severe because of the low available water capacity, but can be reduced by planting in the spring, when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid permeability of this map unit, resulting in poor filtering action, is the main limitation for septic tank absorption fields. If this soil is used for septic tank absorption fields, there is a possibility of groundwater contamination. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations in sewage lagoons and seepage is a severe limitation in sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a moderate limitation for dwellings with or without basements and for local roads and streets, and a severe limitation for small commercial buildings. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This soil is a good source of roadfill and a probable source of sand.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope is the main limitation. Grading, seeding, and mulching are necessary when preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has poor potential for openland and woodland wildlife habitat and very poor potential for wetland wildlife habitat because of droughtiness and slope.

The land capability classification is 4e. The woodland ordination symbol is 8S.

AdD—Adams loamy sand, l5 to 25 percent slopes

This map unit is moderately steep, very deep, and somewhat excessively drained. It is on the side slopes of outwash plains, deltas and terraces. Areas are usually elongated and range from 3 to 60 acres.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer is 2 inches of black loamy sand underlain by a light brownish gray loamy sand subsurface layer, 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy fine sand or fine sand.

Included in mapping are small areas of well drained Allagash soils, moderately well drained Madawaska soils, excessively drained Colton soils, and somewhat excessively drained Masardis soils. Allagash and Madawaska soils are on stream terraces lower on the landscape, and Colton and Masardis soils are on convex knolls. Also included are Adams soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about l5 percent of the unit.

Adams soils have rapid permeability in the surface layer and upper part of the subsoil and very rapid permeability in the lower part of the subsoil and substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. The main limitations are slope, erosion, and droughtiness because of the low available water capacity. Irrigation is needed to obtain satisfactory yields. Low natural fertility and leaching of added nutrients are also management concerns. Increasing the organic matter content by adding manure and crop residue will improve soil structure and increase available water capacity and nutrient content. Planting of drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will conserve moisture, maintain tilth, and control erosion. If this soil is cultivated, erosion could be a hazard. Stripcropping, contour farming, no-till planting, and terracing help control erosion.

This map unit is very poorly suited to hay and pasture. The main limitations are slope and droughtiness. The use of proper stocking rates, pasture rotation, and restricted grazing during dry periods help keep the pasture in good condition and protect the soil from erosion. Equipment use is limited by slope and seedbed preparation should be on the contour or across the slope where practical. Erosion control is needed in areas where the pasture is tilled and newly seeded. Timely tillage and a quickly established ground cover help to prevent erosion.

The potential productivity of this map unit for trees such as eastern white pine is high. Droughtiness and slope are the main limitations. Logging roads and skid trails should be constructed on the contour to reduce

the moderate erosion hazard. Equipment limitation is moderate because of slope. Seedling mortality is severe because of the low available water capacity, but can be reduced by planting in the spring, when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid permeability of this map unit, resulting in poor filtering action, and slope are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations in sewage lagoons and sanitary landfills. Because of the unstable substratum and slope, sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a severe limitation for dwellings with or without basements, small commercial buildings, and for local roads and streets. Roads should be constructed on the contour to help reduce erosion. Droughtiness and slope are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This soil is a probable source of sand and only a fair source of roadfill because of slope.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope is the main limitation.

This map unit has poor potential for openland and woodland wildlife habitat and very poor potential for wetland wildlife habitat because of slope and droughtiness.

The land capability classification is 6e. The woodland ordination symbol is 8S.

AED—Adams-Colton association, steep

This map unit consist of very deep, moderately steep and steep, somewhat excessively drained and excessively drained soils. It is on terraces and eskers in large river valleys and along small streams. Slopes range from 15 to 35 percent and are mostly convex. Areas are elongated or irregular in shape and range from 15 to over 100 acres.

Units of this association consist of about 45 percent Adams soils, 35 percent Colton soils, and 20 percent other soils. The excessively drained and somewhat excessively drained Adams soils and excessively drained Colton soils are on similar positions on the landscape, but the Colton soils are more likely to make up a larger proportion of the association on eskers.

Typically, beneath a litter of leaves, needles and twigs, the surface layer of the Adams soil is 2 inches of black loamy sand underlain by a light brownish gray loamy sand subsurface layer 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy fine sand or fine sand.

Typically, beneath a litter of leaves, the surface layer of the Colton soil is 3 inches of black highly decomposed organic material underlain by a light brownish gray gravelly fine sandy loam subsurface layer 2 inches thick. The subsoil, 23 inches thick, is dark reddish brown gravelly fine sandy loam in the upper part, reddish brown gravelly loamy sand in the middle part, and dark yellowish brown very gravelly loamy sand in the lower part. The substratum is dark brown very gravelly sand grading to yellowish brown very gravelly sand to a depth of 65 inches or more. In some areas the subsurface layer is gravelly loamy sand, gravelly loamy fine sand or gravelly sandy loam.

Included in mapping are small areas of somewhat excessively drained Hermon and Masardis soils, well drained Allagash soils, and moderately well drained Croghan soils and areas of rock outcrop. Hermon soils are coarse textured soils on transitional areas adjacent to glacial till ridges. Masardis soils are on landscape positions similar to those of the Colton soils, but have a thicker loamy surface layer. Allagash and Croghan soils are on terraces. Also included are areas with slopes less than 15 percent or greater than 35 percent and areas with a few surface stones and areas of exposed bedrock in areas transitional to the upland soils.

Adams soils have rapid permeability in the surface layer and upper part of the subsoil and very rapid in the lower part of the subsoil and substratum. Colton soils have rapid permeability or very rapid permeability throughout. Surface runoff is slow and medium and

erosion is a moderate hazard. Available water capacity is low in the Adams soils and very low in the Colton soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, hazard of erosion, and droughtiness because of the low available water capacity are the main limitations. Irrigation is needed to obtain satisfactory yields. Low natural fertility and leaching of added nutrients are also management concerns. Increasing organic matter content by the addition of manure and crop residues will improve soil structure and increase available water capacity and nutrient content. If these soils are cultivated, erosion could be a hazard. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will conserve moisture, maintain tilth, and control erosion. Stripcropping, contour farming, no-till planting, and terracing can help to control erosion.

This map unit is very poorly suited to hayland and pastureland. Slope and droughtiness are the main limitations. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods helps keep the pasture in good condition and protects the soil from erosion. Equipment use is limited by slope. Seedbed preparation should be on the contour or across the slope where practical. Erosion control is needed in areas where the pasture is tilled and newly seeded. Timely tillage and a quickly established ground cover prevent erosion.

The potential productivity of this map unit is high for trees such as eastern white pine. Droughtiness and slope are the main limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitation is moderate because of slope. Seedling mortality is severe because of the low and very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid permeability or very rapid permeability of this map unit and slope are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from the septic tank absorption field can surface in down slope areas and thus create a health hazard. Seepage and slope are severe limitations in sewage lagoons and sanitary landfills. Because of the unstable substratum and slope, sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a severe limitation for dwellings with or without basements, small commercial buildings, and for local roads and streets. Roads should be constructed on the contour to help reduce erosion. Droughtiness, slope, and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a probable source of sand and Colton soil is a probable source of gravel (fig. 11).

This map unit has severe limitations for camp areas, picnic areas, paths and trails, and playgrounds. Slope is the main limitation.

This map unit has poor potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat because of slope and droughtiness.

The land capability classification for both soils is 7e.

The woodland ordination symbol for Adams is 8S and for Colton is 7S.

AFC—Adams-Croghan association, strongly sloping

This association is very deep, nearly level to strongly sloping, and somewhat excessively drained to moderately well drained. It is on outwash plains, deltas, and terraces. Slopes range from 0 to 15 percent and are concave or convex. Areas are irregular in shape and range from 15 to over 300 acres.

Areas of this association consist of about 45 percent Adams soils, 35 percent Croghan soils, and 20 percent other soils. The somewhat excessively drained Adams soils are on the steeper slopes and the moderately well drained Croghan soils are on lower slopes and nearly level areas.

Typically, the surface layer of the Adams soil is 2 inches of black loamy sand underlain by light brownish gray loamy sand subsurface layer, 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more.

In some areas the surface layer is loamy fine sand or fine sand.

Typically, beneath a litter of leaves, needles, and twigs the surface layer of the Croghan soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray loamy sand subsurface layer, 3 inches thick. The subsoil, 29 inches thick, is dark reddish brown loamy sand in the upper part, yellowish red loamy sand grading to mottled yellowish brown loamy sand in the middle part, and mottled light olive brown loamy sand in the lower part. The substratum is mottled olive sand grading to olive gray sand to a depth of 65 inches or more. In some areas the surface mineral layer is loamy fine sand, fine sand, or sand.

Included in mapping are small areas of poorly drained and somewhat poorly drained Naumburg soils, well drained Allagash soils, moderately well drained Madawaska soils, somewhat excessively drained Hermon and Masardis soils, and excessively drained Colton soils and areas of Rock outcrop. Naumburg soils are in depressions. Colton and Masardis soils are on some of the higher and steeper areas of the unit. Allagash and Madawaska soils are on lower-lying areas. Hermon soils are on isolated rises in the landscape and in areas transitional to the upland till soils. Also included are Adams soils with slopes greater than 15 percent and areas with a few surface stones and exposed bedrock in areas transitional to the upland till soils. Stones and rock outcrops cover less than 0.1 percent of the soil surface.

Adams soils have rapid permeability in the surface layer and upper part of the subsoil and very rapid permeability in the lower part of the subsoil and in the substratum. Croghan soils have rapid permeability or

Figure 11.—A gravel pit in an area of Adams-Colton association, steep. These soils occur as eskers and are a valued source of road construction material.

very rapid permeability. Surface runoff is slow and medium and erosion is a moderate hazard on the steeper areas of the map unit. Available water capacity is low in the Adams soils and very low in the Croghan soils. Croghan soils have a seasonal high water table at a depth of 1.5 to 2.0 feet below the surface, from November through May. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table in the Croghan soils.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Doughtiness, the seasonal high water table, and slope are the main limitations. Surface and subsurface drainage on the Croghan soil will help to remove excess water during the early part of the growing season and after heavy rains. Irrigation is needed to obtain satisfactory yields. Low natural fertility and leaching of added nutrients are also management concerns. Increasing organic matter content by adding manure and crop residue will improve soil structure and increase available water capacity and nutrient content. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface help conserve moisture, maintain tilth, and control erosion. Stripcropping, contour farming, no-till planting, and terracing help control erosion.

This map unit is poorly suited to hay and pasture. Droughtiness, the seasonal high water table, and slope are the major limitations. Using drought tolerant species, proper stocking rates, pasture rotation, deferred grazing and restricted grazing during the dry periods help keep the pasture in good condition and protect the soil from erosion. Applications of lime and fertilizer are needed to maintain production.

The potential productivity of this map unit for trees such as eastern white pine is high and very high. Droughtiness is the main limitation. Seedling mortality is moderate and severe because of the low and very low available water holding capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, red maple, and sugar maple. Trees to plant are eastern white pine, red pine, European larch, and Norway spruce.

The rapid permeability or very rapid permeability and the seasonal high water table in Croghan soils are the main limitations if these soils are used for septic tank absorption fields. If this unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. A larger septic tank absorption field and fill material to raise the level of the septic tank absorption field may be needed in areas of the Croghan soil. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field in the Adams soil. Seepage, slope, and the seasonal high water table of the Croghan soil are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Slope is a moderate limitation of the Adams soil for local roads and streets and dwellings with or without basements and a severe limitation for commercial buildings. A seasonal high water table is a moderate limitation of the Croghan soil for dwellings without basements, commercial buildings, and local roads and streets and a severe limitation for dwellings with basements. Installing drain tile around footings can reduce wetness. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction site as soon as possible helps to control erosion. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Frost action in the Croghan soil is a moderate limitation for local roads and streets. Drainage will help to overcome this limitation. These soils are a fair source of roadfill and a probable source of sand.

The Adams soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Croghan soil has moderate limitations for recreation uses. Slope on Adams soil, seasonal high water table in the Croghan soil, and droughtiness in both soils are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during droughty summer months.

The Adams soil has poor potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat. The Croghan soil has fair potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat. Droughtiness is the main limitation for both soils.

The land capability classification for Adams is 4e and 2w for Croghan. The woodland ordination symbol for Adams is 8S and 10S for Croghan.

AgA—Allagash fine sandy loam, 0 to 3 percent slopes

This map unit is very deep, nearly level, and well drained. It is on high terraces along large rivers and on

outwash plains. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 60 acres.

Typically, the surface layer is 5 inches of dark yellowish brown fine sandy loam. The subsoil, 16 inches thick, is brown fine sandy loam in the upper part and yellowish brown fine sandy loam in the middle and lower parts. The substratum is light olive brown loamy fine sand and olive fine sand to a depth of 65 inches or more. In some areas the surface layer has a slightly finer texture and in some areas there is gravelly or very gravelly strata below 40 inches.

Included in mapping are small areas of somewhat excessively drained Adams soils and moderately well drained Madawaska and Croghan soils. Adams and Croghan soils are coarser textured and are on higher positions on the landscape than the Allagash soils. Madawaska soils are in depressions. Also included are Allagash soils with slopes greater than 3 percent. Inclusions make up about 15 percent of the unit.

Allagash soils have moderate permeability in the surface and subsoil and rapid permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for cultivated crops including silage corn, potatoes, and grain corn. A few areas are used for hayland, pastureland or woodland.

This map unit is suited to cultivated crops and orchards. Good yields can be expected with proper amounts of lime and fertilizer. The soil is very easy to work because it is free of stones and has good tilth when adequate organic matter is maintained. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration. Adequate moisture is normally available for good yields, though irrigation is sometimes needed during dry periods. Drainage of depressions will improve the workability of the entire field after periods of heavy rainfall.

This map unit is suited to hay and pasture. Grasses and legumes grow well if adequate fertilizer is used. Rotational grazing during the drier months helps maintain the quality of forage.

The potential productivity of this map unit for trees such as eastern white pine and red pine is very high. Its limitations for woodlands are insignificant. Trees to favor in natural stands are eastern white pine, red pine, balsam fir, white spruce, and northern hardwoods. Trees to plant are eastern white pine, red pine, white spruce, European larch, and Scotch pine.

The rapid permeability of this map unit is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of groundwater contamination. Seepage is a severe limitation in sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements and small commercial buildings. Frost action is a moderate limitation for local roads and streets. Providing a coarser grained subgrade or base material to frost depth during road construction will help to overcome this problem. This soil is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for camp areas, picnic areas, and paths and trails. It has moderate limitations for playgrounds. Small stones within the soil are the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help to maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife and woodland wildlife habitat, and very poor potential for wetland wildlife habitat due to droughtiness.

The land capability classification is 1. The woodland ordination symbol is 10A.

AgB—Allagash fine sandy loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and well drained. It is on high terraces along large rivers and on outwash plains. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 60 acres.

Typically, the surface layer is 5 inches of dark yellowish brown fine sandy loam. The subsoil, 16 inches thick, is brown fine sandy loam in the upper part and yellowish brown fine sandy loam in the middle and lower part. The substratum is light olive brown loamy fine sand and olive fine sand to a depth of 65 inches or more. In some areas the surface layer has a slightly finer texture and in some areas there is gravelly or very gravelly strata below 40 inches.

Included in mapping are small areas of somewhat excessively drained Adams soils and moderately well drained Madawaska and Croghan soils. Adams and

Croghan soils are coarser textured and are on higher positions on the landscape than the Allagash soils. Madawaska soils are in depressions. Also included are Allagash soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 15 percent of the unit.

Allagash soils have moderate permeability in the surface and subsoil and rapid permeability in the substratum. Surface runoff is slow and erosion is a slight or moderate hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this soil are used for cultivated crops, including silage corn, potatoes, and grain corn. A few areas are used for hayland, pastureland, or woodland.

This map unit is suited to orchards and moderately suited to cultivated crops. The hazard of erosion is a major limitation. Good yields can be expected with proper amounts of lime and fertilizer. The map unit is very easy to work because it is free of stones and has good tilth when adequate organic matter is maintained. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface, help maintain or increase the organic matter content of the surface layer, improving infiltration. Adequate moisture is normally available for good yields, though irrigation is sometimes needed during dry periods. Drainage of depressions will improve the workability of the entire field after periods of heavy rainfall. Because of slope, cultivation can cause erosion. Stripcropping, contour farming, no-till planting and terracing help control erosion. When reseeding pastures and haylands, these practices are also recommended.

This map unit is suited to hayland and pastureland. Grasses and legumes grow well if adequate fertilizer is used. Rotational grazing during the drier periods helps maintain the quality of forage.

The potential productivity of this map unit is very high for trees such as eastern white pine and red pine. Its limitations for woodlands are insignificant. Trees to favor in natural stands are eastern white pine, red pine, balsam fir, white spruce, and northern hardwoods. Trees to plant are eastern white pine, red pine, white spruce, European larch, and Scotch pine.

The rapid permeability of this map unit is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of groundwater contamination. Seepage is a severe limitation in sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements and slope is a moderate limitation for small commercial buildings. Frost action is a moderate limitation for roads and streets. Providing a coarser grained subgrade or base material to frost depth will help to overcome this problem. This map unit is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for camp areas, picnic areas, and paths and trails. It has moderate limitations for playgrounds. Slope and small stones within the soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat due to droughtiness.

The land capability classification is IIe. The woodland ordination symbol is 10A.

AgC—Allagash fine sandy loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping, and well drained. It is on high terraces along large rivers and on outwash plains. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 10 acres.

Typically, the surface layer is 5 inches of dark yellowish brown fine sandy loam. The subsoil is 16 inches thick. It is brown fine sandy loam in the upper part and yellowish brown fine sandy loam in the middle and lower parts. The substratum is light olive brown loamy fine sand and olive fine sand to a depth of 65 inches or more. In some areas the surface layer has a slightly finer texture and in some areas there is gravelly or very gravelly strata below 40 inches.

Included in mapping are small areas of somewhat excessively drained Adams soils and moderately well drained Madawaska and Croghan soils. Adams and Croghan soils are coarser textured and are on higher positions on the landscape than the Allagash soils. Madawaska soils are in depressions. Also included are Allagash soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Allagash soils have moderate permeability in the surface and subsoil and rapid permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for hayland or

pastureland. A few areas are used for cultivated crops or woodland.

This map unit is suited to orchards and poorly suited to cultivated crops. The hazard of erosion and slope are the main limitations. Good yields can be expected with proper amounts of lime and fertilizer. The map unit is very easy to work because it is free of stones and has good tilth when adequate organic matter is maintained. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration. Adequate moisture is normally available for good yields, though irrigation is sometimes needed during dry periods. Drainage of depressions will improve the workability of the entire field after periods of heavy rainfall. Because of slope, cultivation can cause erosion. Stripcropping, contour farming, no-till planting, and terracing help control erosion.

This map unit is suited to hay and pasture. Grasses and legumes grow well if adequate fertilizer is used. Seedbed preparation should be on the contour or across the slope where practical. Rotational grazing during droughty periods helps maintain the quality of forage.

The potential productivity of this map unit is very high for trees such as eastern white pine and red pine. Its limitations for woodlands are insignificant. Trees to favor in natural stands are eastern white pine, red pine, balsam fir, white spruce, and northern hardwoods. Trees to plant are eastern white pine, red pine, European larch, and Scotch pine.

The rapid permeability of this map unit is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of groundwater contamination. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a moderate limitation for dwellings with or without basements and severe for commercial buildings. Slope and frost action are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during construction will help to overcome this problem. This map unit is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope is the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife and woodland wildlife habitat. This map unit has very poor potential for wetland wildlife habitat due to droughtiness and slope.

The land capability classification is 3e. The woodland ordination symbol is 10A.

BeB—Berkshire fine sandy loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and well drained. It is on the tops of glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 23 inches thick. It is dark yellowish brown fine sandy loam in the upper part and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; well drained Marlow soils; moderately well drained Dixfield soils; somewhat poorly drained Colonel soils; and occasional pockets of poorly drained Brayton soils. Lyman and Tunbridge soils are on higher landscape positions than the Berkshire soils. Marlow, Dixfield, Colonel, and Brayton soils have a dense substratum. Marlow soils are on landscape positions similar to those of the Berkshire soils. Dixfield, Colonel, and Brayton soils are on lower landscape positions. Also included are Berkshire soils with slopes greater than 8 percent. Inclusions make up about 15 percent of the unit.

Berkshire soils have moderate or moderately rapid permeability. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for hayland and pastureland or are idle fields reverting to woodland. A few areas are used for residential dwellings.

This map unit is suited to cultivated crops and orchards. Good yields can be expected with proper amounts of lime and fertilizer. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion.

This map unit is suited to hay and pasture. Grasses and legumes grow well if adequate fertilizer is used. Rotational grazing helps maintain the quality of forage.

The potential productivity of this map unit is very high for trees such as eastern white pine and white spruce. Its limitations for woodland are insignificant. Trees to favor in natural stands are eastern white pine, red pine, sugar maple, balsam fir, white spruce, and red spruce. Trees to plant are eastern white pine, balsam fir, red pine, and white spruce.

The moderate or moderately rapid permeability of this map unit is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Seepage is a severe limitation in lagoons and sanitary landfills. There are slight limitations for shallow excavations and dwellings with or without basements and moderate limitations for small commercial buildings because of slope. Frost action is a moderate limitation for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This soil is a good source of roadfill.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Small stones within the soil are the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat due to droughtiness.

The land capability classification is 2e. The woodland ordination symbol is 9A.

BeC—Berkshire fine sandy loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping, and well drained. It is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 23 inches thick. It is dark yellowish brown fine sandy loam in the upper part and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; well drained Marlow soils; moderately well drained Dixfield soils; somewhat poorly drained Colonel soils; and occasional pockets of poorly drained Brayton soils. Lyman and Tunbridge soils are on higher landscape positions than the Berkshire soils. Marlow, Dixfield, Colonel, and Brayton soils have a dense substratum. Marlow soils are on landscape positions similar to those of the Berkshire soils. Dixfield, Colonel, and Brayton soils are on lower positions on the landscape. Also included are Berkshire soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Berkshire soils have moderate or moderately rapid permeability. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit is used for hay and pasture or are idle fields reverting to woodland. A few areas are used for residential dwellings.

This map unit is suited to cultivated crops and orchards. Slope is the main limitation. Good yields can be expected with proper amounts of lime and fertilizer. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface, maintain or increase the organic matter content of the surface layer, improve infiltration and reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, no-till planting, and terracing are recommended for cultivated crops or when reseeding haylands and pasturelands.

This map unit is suited to hay and pasture. Grasses and legumes grow well if adequate fertilizer is used. Rotational grazing helps maintain the quality of forage.

The potential productivity of this map unit is very high for trees such as eastern white pine and white spruce. Its limitations for woodlands are insignificant. Trees to favor in natural stands are eastern white pine,

red pine, sugar maple, balsam fir, white spruce, and red spruce. Trees to plant are eastern white pine, balsam fir, white spruce, and red pine.

The moderate or moderately rapid permeability of this map unit and slope are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation and extensive grading may be needed when installing a septic tank absorption field. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Seepage and slope are severe limitations for sewage lagoons and seepage is a severe limitation for sanitary landfills. Slope is a moderate limitation for shallow excavations and dwellings with or without basements and severe for small commercial buildings. Frost action and slope are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during construction will help to overcome the shrink-swell problem for roads. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope and small stones within the soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poorly potential for wetland wildlife habitat due to droughtiness.

The land capability classification is 3e. The woodland ordination symbol 9A.

BkC—Berkshire fine sandy loam, 8 to l5 percent slopes, very stony

This map unit is very deep, strongly sloping, and well drained. It is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to over l00 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and needles, the surface layer is 2 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 28 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam.

Included with this soil in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, well drained Marlow soils, moderately well drained Dixfield soils, and occasional seeps of somewhat poorly drained Colonel and poorly drained Brayton soils. The Lyman and Tunbridge soils are on higher landscape positions than the Berkshire soils. The Marlow, Dixfield, Colonel, and Brayton soils have a dense substratum. Marlow soils are on landscape positions similar to those on the Berkshire soil and Dixfield, Colonel, and Brayton soils are lower on the landscape. Also included are Berkshire soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 20 percent of the unit.

Berkshire soils have moderate or moderately rapid permeability. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland or are idle fields reverting to woodland. A few areas are used for residential dwellings.

This map unit is poorly suited to cultivated crops and orchards. Surface stoniness and slope are the main limitations. If the surface stones are removed, this map unit is suited to cultivated crops and orchards. The limiting factor is slope. Good yields can be expected with proper amounts of lime and fertilizer. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, no-till planting, and terracing are recommended for cultivated crops.

This map unit is poorly suited to hay and pasture. Surface stoniness and slope are the main limitations. If the surface stones are removed, this map unit is suited to hay and pasture. Grasses and legumes grow well if adequate fertilizer is used. Proper stocking rates, pasture rotation, and restricted grazing help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is very high for trees such as eastern white pine and white spruce. Its limitations for woodlands are insignificant. Trees to favor in natural stands are eastern white pine, red pine, sugar maple, balsam fir, white spruce, and red spruce. Trees to plant are eastern white pine, balsam fir, white spruce, and red pine.

The moderate or moderately rapid permeability of this map unit, resulting in a moderate percolation rate, and slope are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation and extensive grading may be needed when installing a septic tank absorption field. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Seepage and slope are severe limitations for sewage lagoons and seepage is a severe limitation for sanitary landfills. Slope is a moderate limitation for shallow excavations and dwellings with or without basements and severe for small commercial buildings. Frost action and slope are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and may need to be removed prior to any construction. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. The large stones on the surface of the soil, the small stones within the soil, and slope are the main limitations. Surface stones need to be removed and grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has poor potential for openland wildlife habitat and good potential for woodland wildlife habitat. It has very poor potential for wetland wildlife habitat due to droughtiness.

The land capability classification is 6s. The woodland ordination symbol is 9A.

BkD—Berkshire fine sandy loam, l5 to 25 percent slopes, very stony

This map unit is very deep, moderately steep, and well drained. It is on the side slopes of glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and needles, the surface layer is 2 inches of black highly decomposed organic material, underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 28 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam.

Included with this map unit in mapping are a few small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; well drained Marlow soils; and moderately well drained Dixfield soils. Lyman and Tunbridge soils are on knolls within the landscape. The very deep Marlow and Dixfield soils have a dense substratum. Marlow soils are on landscape positions similar to those of the Berkshire soil. Dixfield soils are in depressions. Also included are Berkshire soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 20 percent of the unit.

Berkshire soils have moderate or moderately rapid permeability. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is high. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland or are idle fields reverting to woodland.

This map unit is poorly suited to cultivated crops and orchards. Surface stoniness, slope, and the hazard of erosion are the main limitations. Removal of surface stones is necessary prior to cultivation. Cultivation can cause erosion and steep slopes make equipment operation difficult. Crop residue left on or near the surface helps conserve moisture, maintains tilth, and control erosion. Erosion control practices such as contour farming and no-till planting help reduce the hazard of erosion.

This map unit is poorly suited to hay and pasture. Slope and surface stoniness are the main limitations. Surface stones need to be removed before any seeding practice can be applied. Good yields of grasses and legumes can be expected with proper applications of lime and fertilizer. When reseeding, erosion control practices such as contour farming and no-till planting should be strictly applied.

The potential productivity of this map unit is very high for trees such as eastern white pine and white spruce. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are moderate because of slope. Trees to favor in natural stands are eastern white pine, red pine, sugar maple, balsam fir, white spruce, and red spruce. Trees to plant are eastern white pine, balsam fir, white spruce, and red pine.

Slope and the moderate or moderately rapid permeability of this map unit, resulting in a moderate percolation rate, are the main limitations for septic tank absorption fields. Extensive grading is needed

when installing a septic tank absorption field and a larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Effluent from septic tank absorption fields may surface in downslope areas creating a health hazard. Seepage and slope are severe limitations for sewage lagoons and seepage is a severe limitation for sanitary landfills. Slope is a severe limitation for shallow excavations, dwellings with or without basements, and small commercial buildings. Slope and frost action are moderate limitations for local roads and streets. Roads should be constructed on the contour as much as possible. Providing a coarser grained subgrade or base materials to frost depth during construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and may need to be removed prior to any construction. This map unit is a fair source of roadfill.

This map unit has moderate limitations for paths and trails and severe limitations for picnic areas, camp areas, and playgrounds. The large stones on the surface and the small stones within the soil and slope are the main limitations.

This map unit has poor potential for openland wildlife habitat and good potential for woodland wildlife habitat. It has very poor potential for wetland wildlife habitat due to droughtiness.

The land capability classification is 6s. The woodland ordination symbol is 9R.

BoB—Boothbay silt loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping and undulating, and moderately well drained or somewhat poorly drained. It is on glaciolacustrine plains and in inland valleys. Slopes are generally smooth and convex and are commonly dissected by small drainageways. Areas are irregular in shape and range from 3 to over 50 acres.

Typically, the surface layer is 10 inches of dark brown silt loam. The subsoil is 8 inches thick. It is dark yellowish brown silt loam in the upper part and mottled, olive brown silt loam in the lower part. The substratum is firm, mottled, light olive brown silty clay loam and silt loam grading to mottled, grayish brown silty clay loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam.

Included in mapping are small areas of moderately well drained Nicholville soils and poorly drained Swanville soils. Nicholville soils are coarser textured and are generally on higher landscape positions than the Boothbay soils. Swanville soils are in depressions. Also included are areas of Boothbay soils with slopes greater than 8 percent, areas of Boothbay soils which have 0.1 to 3 percent surface stones, and shallow to bedrock areas. Inclusions make up about l5 percent of the unit.

Boothbay soils have moderate permeability in the surface layer and slow or moderately slow permeability in the subsoil and substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A seasonal high water table is at a depth of 1 to 2.0 feet below the surface, from November through May. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table.

Most areas of this map unit are used for hay and pasture. Some areas are used for woodland or are idle fields reverting to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table is the major limitation. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Drainage ditches and grassed waterways will help remove excess water. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration. Contour farming, stripcropping, no-till planting, and terracing will help control erosion.

This map unit is suited to hay and pasture. A seasonal high water table is the main limitation. Grasses and legumes grow well if adequate fertilizer is applied. Complex slopes and gullies limit the use of machinery needed for hay and forage production. The soil will become compacted unless grazing and the use of equipment is limited during wet periods.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and white spruce. Its limitations for woodlands are insignificant. The seasonal high water table may restrict rooting depth resulting in moderate windthrow hazard. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Frost heaving may destroy some new seedlings. Trees to favor in natural stands are white spruce, eastern white pine, and balsam fir. Trees to plant are eastern white pine and white spruce.

The slow or moderately slow permeability in the subsoil and substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water

table are the main limitations if this unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a severe limitation for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is apparent in the subsoil and substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for local roads and streets. Installing a drainage system and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problems for roads. This soil is a fair source of roadfill and topsoil.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. The seasonal high water table and the moderately slow or slow permeability of the subsoil and substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 8A.

BoC—Boothbay silt loam, 8 to l5 percent slopes.

This map unit is very deep, strongly sloping and rolling, and moderately well or somewhat poorly drained. It is on glaciolacustrine plains and in inland valleys. Slopes are complex and dissected by small drainageways. Areas are irregular in shape and range from 3 to over 50 acres in size.

Typically, the surface layer is 10 inches of dark brown silt loam. The subsoil, 8 inches thick, is dark yellowish brown silt loam in the upper part and mottled, olive brown silt loam in the lower part. The substratum is firm, mottled, light olive brown silty clay loam and silt loam grading to firm, mottled, grayish brown silty clay loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam.

Included with this soil in mapping are small areas of poorly drained Swanville and moderately well drained Nicholville soils. Swanville soils are in depressions. Nicholville soils are slightly coarser in texture and are generally higher on the landscape. Also included are Boothbay soils with slopes less than 8 percent or greater than 15 percent and areas of Boothbay soils adjacent to glacial till areas which have 0.1 to 3 percent surface stones. Steeper slopes occur primarily along drainageways. Inclusions make up about l5 percent of the unit.

Boothbay soils have moderate permeability in the surface layer and slow or moderately slow permeability in the subsoil and substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A seasonal high water table is at a depth of 1.0 to 2.0 feet below the surface from November to May. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for hay or pasture. Some areas are used for woodland, cultivated cropland, or are idle fields reverting to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table and slope are the major limitations. The surface soil dries slowly in the spring and after heavy rains delaying planting and hindering equipment operation. Drainage ditches and grassed waterways will help remove excess water. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface, help maintain or increase the organic matter content of the surface layer, improving infiltration. Contour farming, stripcropping, no-till planting, and terracing will help control erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table is the main limitation. Use of proper stocking rates, pasture rotation, and restricted grazing during wet periods helps keep the pasture in good condition and protect the soil from erosion. Seedbed preparation should be on the contour or across the slope where practical. Complex slopes and gullies limit the use of machinery needed for hay and forage production. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and white

spruce. Its limitations for woodlands are insignificant. The seasonal high water table may restrict rooting depth resulting in a moderate windthrow hazard. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Frost heaving may destroy some new seedlings. Trees to favor in natural stands are white spruce, eastern white pine, and balsam fir. Trees to plant are eastern white pine and white spruce.

The slow or moderately slow permeability in the subsoil and substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing septic tank absorption fields. The seasonal high water table and slope are severe limitations for sewage lagoons and small commercial buildings. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, and dwellings with or without basements. A seasonal high water table is apparent in the subsoil and substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the area on the site used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problems for roads. This map unit is a fair source of roadfill and topsoil.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. Slope, the seasonal high water table, and slow or moderately slow permeability of the subsoil and substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for openland and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 8A.

BpB—Brayton fine sandy loam, 0 to 8 percent slopes

This map unit is very deep, nearly level to gently sloping or undulating and poorly drained. It is in depressions and on the long footslopes of drumlin shaped hills and ridges where it receives runoff from higher areas. Slopes are generally smooth and concave. Areas are irregular in shape and range from 3 to over 30 acres. Stones cover up to 0.l percent of the surface.

Typically, the surface layer is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil is 8 inches thick. It is mottled dark grayish brown fine sandy loam. The substratum is very firm, mottled, olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with a silt loam texture.

Included in mapping are small areas of well drained Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, and very poorly drained Peacham soils. Marlow, Dixfield, and Colonel soils are on small convex shaped knolls. Peacham soils are in depressions. Also included are Brayton soils with slopes greater than 8 percent. Inclusions make up about 15 percent of the unit.

Brayton soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is moderate. A perched water table is present from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table and dense substratum.

Most areas of this map unit are used for hay and pasture. A few areas are cultivated and a few areas have reverted to woodland.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table and dense substratum are the main limitations. Rooting depth is limited and the soil dries slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Using cover crops, including grasses and legumes helps increase the organic matter content of the surface layer, improving infiltration and tilth.

This map unit is poorly suited to hay and pasture. The seasonal high water table and dense substratum are the major limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and white spruce. The main limitation is the seasonal high water table. Rooting depth is limited by the high water table and the dense substratum, and windthrow hazard can be severe during wet periods. Seedling mortality is moderate because of the seasonal high water table. Tree planting should be done during the drier periods when the water table is low. Equipment operation can be difficult because of wetness and harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Plant competition can inhibit seedling establishment if the competing vegetation is not controlled. Trees respond well to weeding, thinning, and pruning. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and tamarack. Trees to plant are red spruce, black spruce, and tamarack.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. This map unit has severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills. The seasonal high water table is a severe limitation for shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing a drainage system and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This map unit is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, playgrounds, picnic areas, and paths and trails. The seasonal high water table is the main limitation.

This map unit has fair potential for openland and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4w. The woodland ordination symbol is 8W.

BrB—Brayton fine sandy loam, 0 to 8 percent slopes, very stony

This map unit is very deep, nearly level to gently sloping or undulating, and poorly drained. It is in depressions and on the long footslopes of drumlin shaped ridges where it receives runoff from higher areas. Slopes are generally smooth and are slightly convex or concave. Areas are irregular in shape and range from 3 to 250 acres or more in size, but areas from 3 to 50 acres are most common. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves, needles and twigs, the surface layer is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil is 8 inches thick. It is mottled dark grayish brown fine sandy loam. The substratum is very firm, mottled olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with a silt loam texture.

Included in mapping are small areas of well drained Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, and very poorly drained Peacham soils. Marlow, Dixfield, and Colonel soils are on small convex shaped knolls. Peacham soils are in small depressions on the sides of streams and at the head of surface drains. Some soils along streams have up to 18 inches of alluvial material on the surface. Also included are Brayton soils with slopes greater than 8 percent and some concave areas on the footslopes of drumlin shaped hills and ridges with 3 to 15 percent surface stones. Inclusions make up about 15 percent of the unit.

Brayton soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is moderate. A perched water table is present from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches, but the seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland. A small portion is used for pastureland. Many areas were used for unimproved pasture, but most of these have reverted to woodland.

This map unit is poorly suited to cultivated crops or orchards. A seasonal high water table, a dense substratum, and surface stoniness are the main limitations. Rooting depth is restricted and the soil dries slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Removal of surface stones is necessary prior to cultivation. Using cover crops, including grasses and legumes helps increase the organic matter content of the surface layer, improving infiltration and tilth.

This map unit is poorly suited to hay and pasture. A seasonal high water table, a dense substratum, and surface stoniness are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The main limitation is the seasonal high water table. Equipment limitation is severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the driest months of summer. Seedling mortality is moderate because of the seasonal high water table. Tree planting should be done during the drier periods when the water table is low. The seasonal high water table and a dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, black spruce, and tamarack.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. This map unit has severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills. The seasonal high water table is a severe limitation for shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing a drainage system and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This soil is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, playgrounds, picnic areas, and paths and trails. The seasonal high water table, large surface stones, and small stones within the soil are the main limitations.

This map unit has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 7s. The woodland ordination symbol is 8W.

BrC—Brayton fine sandy loam, 8 to l5 percent slopes, very stony

This map unit is strongly sloping or rolling, very deep, and poorly drained. It is in concave and convex areas on the footslopes of drumlin shaped hills and ridges where it receives runoff from higher areas. Slopes are concave. Areas are irregular in shape and range from 3 to over l0 acres. Stones cover 0.1 percent to 3 percent of the surface.

Typically beneath a litter of leaves, needles and twigs, the surface layer is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil is 8 inches thick. It is mottled dark grayish brown fine sandy loam. The substratum is very firm mottled olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with a silt loam texture.

Included in mapping are small areas of well drained Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, and very poorly drained Peacham soils. Marlow, Dixfield, and Colonel soils are on convex shaped knolls. Peacham soils are in small depressions on the sides of streams and at the head of surface drains. Some areas along streams have up to 18 inches of alluvial material on the surface. Some concave areas on the footslopes of the drumlin shaped hills and ridges have extremely

stony surface conditions with a stone cover of 3 to 15 percent. Also included are Brayton soils with slopes less than 8 percent. Inclusions make up about l5 percent of the total acreage.

Brayton soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is medium and erosion is a moderate hazard. The available water capacity is moderate. A perched water table is present from the surface to 1.0 foot below the surface from October to June. Depth to bedrock is more than 60 inches, but the dense substratum and seasonal high water table restrict rooting depth.

Most areas of this map unit are used for woodland. A small portion is used for pastureland. A few areas were used for unimproved pasture, but most of these have reverted back to woodland.

This map unit is poorly suited to orchards or cultivated crops. The seasonal high water table, slope, dense substratum, and surface stoniness are the major limitations. Rooting depth is restricted and the soil dries slowly in the spring, delaying planting. Surface or subsurface drainage will help to reduce the delay. Tile systems are difficult to install because of the shallow depth to the dense substratum. Using cover crops, including grasses and legumes, help to increase the organic matter content of the surface layer, improving infiltration and tilth. Crop residue left on or near the surface helps to control erosion. Surface stone removal may be necessary.

This map unit is poorly suited to hay and pasture. The seasonal high water table and surface stoniness are the major limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer are practices that help to increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The seasonal high water table is the main limitation. Equipment limitation is severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the driest months of the summer. Seedling mortality is moderate because of the seasonal high water table. Tree planting should be done during the drier periods when the water table is low. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, black spruce, and tamarack.

The moderately slow or slow permeability in the substratum of this soil, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. This soil has severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills. The seasonal high water table is a severe limitation for shallow excavations and dwellings with or without basements and slope is a severe limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing a drainage system and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, playgrounds, picnic areas, and paths and trails. The seasonal high water table, slope, large surface stones, and small stones within the soil are the main limitations.

This map unit has fair potential for woodland wildlife habitat and has poor potential for openland wildlife habitat. It has very poor potential as habitat for wetland wildlife.

The land capability classification is 7s. The woodland ordination symbol is 8W.

BSB—Brayton-Colonel association, gently sloping, very stony

This map unit is very deep, gently sloping, poorly drained and somewhat poorly drained. It is on side slopes of glaciated uplands. Slopes range from 3 to 8 percent and are commonly long and smooth. Areas are irregular in shape and range from 15 to over 250 acres. Stones cover 0.1 to 3 percent of the surface.

Units of this association consist of about 50 percent

Brayton soils, 30 percent Colonel soils, and 20 percent other soils. The poorly drained Brayton soils are on lower slopes, nearly level areas, and in slight depressions. The somewhat poorly drained Colonel soils are on higher elevations.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Brayton soil is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil is 8 inches thick. It is mottled, dark grayish brown fine sandy loam. The substratum is very firm, mottled, olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with a silt loam texture.

Typically, beneath a litter of leaves and twigs, the surface layer of the Colonel soil is 4 inches of very dusky red, highly decomposed organic material underlain by a pinkish gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 14 inches thick. It is red fine sandy loam grading to yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; well drained Marlow soils, moderately well drained Dixfield soils; and very poorly drained Peacham soils. Lyman and Tunbridge soils are on higher elevations where bedrock is close to the surface. Marlow and Dixfield soils are on the tops and side slopes of higher, more sloping areas. Peacham soils are in small depressions. Also included are areas with slopes less than 3 percent or greater than 8 percent and areas with more than 3 percent surface stones.

Brayton and Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is moderate in the Brayton soils and high in the Colonel soils. Brayton soils have a perched water table from the surface to 1.0 foot below the surface from October through June and Colonel soils have a perched water table from 0.5 to 1.5 feet below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops or orchards. A seasonal high water table, dense substratum, and surface stoniness are the main limitations. Rooting depth is restricted. This map unit dries slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Removal of surface stones is necessary prior to cultivation. Using cover crops, including grasses and legumes, helps to increase the organic matter content of the surface layer, improving infiltration and tilth.

This map unit is poorly suited to hay and pasture. A seasonal high water table, dense substratum, and surface stoniness are the main limitations. The surface soil will become compacted if grazing and seedbed preparations are not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, white spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitations are moderate and severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the driest months of the summer. Seedling mortality is moderate on the Brayton soil because of the seasonal high water table. Planting should be done during the drier periods when the water table is low. The seasonal high water table and dense substratum may restrict rooting depth, resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are eastern white pine, black spruce, tamarack, and European larch.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. The Brayton and Colonel soils have severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills. A larger septic tank absorption field and fill material to raise the level of the septic tank absorption field may be needed on the Colonel soil. The seasonal high water table is a severe limitation in both soils for

shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table in the Brayton soil and frost action in the Brayton and Colonel soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses. Surface stones may need to be removed prior to any construction. Colonel soils are a fair source of roadfill and a poor source for topsoil. Brayton soils are a poor source for roadfill and topsoil.

Colonel soils have moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. Brayton soils have severe limitations for these recreational uses. The seasonal high water table, large surface stones, and small stones within the soil are the main limitations.

This map unit has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability unit for Brayton is 7s and for Colonel is 6s. The woodland ordination symbol for both soils is 8W.

BTB—Brayton-Peacham-Markey association, gently sloping, very stony

This map unit is very deep, nearly level and gently sloping, and poorly drained and very poorly drained. It is in valleys along drainageways and in depressions on glaciated uplands. Slopes range from 0 to 8 percent and are generally concave. Areas are elongated along drainageways or are irregular in shape and range from 15 to over 250 acres. Stones cover 0.1 to 3 percent of the surface of Brayton and Peacham soils.

This map unit consist of about 35 percent Brayton soils, 25 percent Peacham soils, 20 percent Markey soils, and 20 percent other soils. The poorly drained Brayton soils are on higher areas, the very poorly drained Peacham soils are on the lower areas, and the very poorly drained Markey soils are in the lowest, depression areas.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Brayton soil is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil is 8 inches thick. It is mottled, dark grayish brown fine sandy loam. The substratum is very firm, mottled, olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with a silt loam texture.

Typically, beneath a litter of leaves, ferns, needles, grasses, and sphagnum moss, the surface layer of the Peacham soil is 8 inches of black cobbly muck. The subsoil is 12 inches thick. It is mottled, dark grayish brown silt loam in the upper part and mottled, grayish brown fine sandy loam in the lower part. The substratum is firm, mottled, olive gray gravelly fine sandy loam to a depth of 65 inches or more.

Typically, the surface layer of the Markey soil is black mucky peat and grades to very dark brown muck to a depth of 37 inches. The substratum is gray gravelly loamy sand to a depth of 65 inches or more.

Included in mapping are small areas of moderately well drained Dixfield soils; somewhat poorly drained Colonel soils; moderately deep, well drained, Tunbridge soils; and shallow, somewhat excessively drained Lyman soils. Dixfield and Colonel soils are on higher, more sloping areas. Tunbridge and Lyman soils are on higher elevations where bedrock is close to the surface. Areas of very poorly drained Bucksport soils are deep organic soils in depressions. Also included are Brayton and Peacham soils with greater than 3 percent surface stones.

Brayton soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Peacham soils have moderate or moderately slow permeability in the surface, moderate permeability in the subsoil, and very slow or slow permeability in the dense substratum. Markey soils have moderately slow to moderately rapid permeability in the organic material and rapid permeability in the sandy substratum. Surface runoff is slow for Brayton soils and very slow or ponded for Peacham and Markey soils. Erosion is a slight hazard. Available water capacity is moderate for Brayton soils and high for Peacham and Markey soils. Brayton soils have a perched water table from the surface to 1.0 foot below the surface from October through June. Peacham soils have a seasonal high water table from the surface to 0.5 foot below the surface and are also poned up to 1.0 foot above the soil surface from October to June. Markey soils have a seasonal high water table from the surface to 1.0 foot below the surface and are ponded up to 1.0 foot above the soil

surface from November through June. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table and, in Brayton and Peacham soils, by the dense substratum.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops or orchards. A seasonal high water table, ponding, dense substratum, and surface stoniness are the main limitations. This map unit is generally too wet for cultivation.

This map unit is very poorly suited to hay and pasture. A seasonal high water table, dense substratum, and surface stoniness are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help to increase the quantity and quality of feed and forage.

The potential productivity of this map unit is moderate to high for trees such as eastern white pine, red spruce, white spruce, balsam fir, and red maple. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the driest months of the summer and to the winter months when the ground is frozen. Seedling mortality is moderate and severe because of the seasonal high water table. Planting should be done during the drier periods when the water table is low. The seasonal high water table and a dense substratum may restrict rooting depth, resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and black spruce. Trees to plant are red spruce, black spruce, and tamarack on the Brayton soil.

The slow or moderately slow permeability in the substratum of the Brayton and Peacham soils, resulting in a slow percolation rate; ponding on Peacham and Markey soils; and the seasonal high water table are the main limitations for most urban uses. These soils have severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills. In most cases, developing areas of Peacham and Markey soils for urban uses is costly and impractical because of the high water table and ponding. The seasonal high water table in the Brayton soil is a severe limitation for shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table, ponding, and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, large surface stones, small stones within the soil, and ponding are the main limitations that make it impractical for areas of this map unit to be developed for these recreational uses.

The Brayton soil has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat. The Peacham soil has poor potential for openland and woodland wildlife habitat. It has fair potential for wetland wildlife habitat. The Markey soil has poor potential for openland and woodland wildlife habitat and good potential for wetland wildlife habitat.

The land capability unit for Brayton is 7s, for Peacham is 5s, and for Markey is 5w. The woodland ordination symbol for Brayton is 8W, for Peacham is 7W, and for Markey is 2W.

BW—Bucksport and Markey soils

This map unit consist of very deep, nearly level, very poorly drained organic soils. It is in old glacial lakebeds, kettle holes, depressions, and along edges of lakes and ponds. Slopes range from 0 to 1 percent and are smooth and slightly concave. The areas are oval or rounded and range from 3 to over 200 acres.

Most areas of this unit consist of about 50 percent very poorly drained Bucksport soils, 30 percent very poorly drained Markey soils, and 20 percent other soils. Some areas consist mostly of Bucksport soils and some areas consist mostly of Markey soils. The Bucksport and Markey soils were mapped together because they have no major differences in use and management.

Typically, the surface layer of the Bucksport soil is black muck and grades to very dark brown muck to a depth of 65 inches or more.

Typically, the surface layer of the Markey soil is black mucky peat and grades to very dark brown muck to a depth of 37 inches. The substratum is gray gravelly loamy sand to a depth of 65 inches or more.

Included in mapping are small areas of very poorly drained Burnham, Medomak, Peacham, and Searsport soils, and poorly drained Brayton, Monarda, and Charles soils. Burnham, Peacham, and Searsport soils are in areas around the edges of the unit which are transitional to Brayton and Monarda soils on higher positions in the landscape. Medomak and Charles soils are on areas adjacent to streams and ponds where flooding is common.

Bucksport soils have moderately slow to moderately rapid permeability throughout. Markey soils have moderately slow to moderately rapid permeability in the organic material and rapid permeability in the sandy substratum. Surface runoff is very slow or the unit is ponded and erosion is a slight hazard. Available water capacity is high for both soils. Bucksport soils have a seasonal high water table from the soil surface to 0.5 foot below the surface and are ponded from September through July. Markey soils have a seasonal high water table from the soil surface to 1.0 foot below the soil surface from November to June. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are vegetated with heath plants, with a few black spruce, northern white cedar, tamarack and balsam fir; however, some areas are completely wooded.

These soils are very poorly suited to cultivated crops, orchards, hay, and pasture. A seasonal high water table is the main limitation.

The potential productivity of this map unit for trees such as black spruce and balsam fir is moderate. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table and the instability of the organic soil. Seedling mortality is severe because of the seasonal high water table which also restricts rooting depth and causes a severe windthrow hazard and plant competition. Trees to favor in natural stands are black spruce, balsam fir, and northern white cedar.

The slow percolation rate, ponding, frost action, and high amounts of organic material are the main limitations of this map unit for most urban uses. In most cases, developing areas of these soils for urban uses is too costly and impractical. This map unit has severe limitations for local roads and streets because of ponding, a high water table, and frost action. Large amounts of fill material are needed to overcome these limitations during road construction. The Markey soil is a probable source of sand.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Ponding and excess humus are the main limitations that make it impractical for areas of this map unit to be developed for these recreational uses.

This map unit has good potential for wetland wildlife habitat. The Bucksport soil has very poor potential for openland wildlife and woodland wildlife habitat and Markey soil has poor potential for openland and woodland wildlife habitat.

The land capability unit for Bucksport is 7w and for Markey is 5w. The ordination symbol for both soils is 2W.

Ca—Charles silt loam

This map unit is very deep, nearly level, and poorly drained. It is on flood plains of major rivers and streams. Slopes are smooth and range from 0 to 2 percent. Areas are elongated and range from 3 to over 50 acres.

Typically, the surface layer is 4 inches of dark brown silt loam. The substratum is mottled, dark grayish brown and olive silt loam in the upper part above 30 inches. It is mottled, dark grayish brown, olive gray and greenish gray silt loam in the middle part to depth of 58 inches. Below 58 inches the substratum is dark gray coarse sand in the lower part to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam and some areas do not have the sand textures in the lower substratum.

Included in mapping are small areas of somewhat poorly drained Cornish soils, moderately well drained Lovewell soils, and very poorly drained Medomak soils. Cornish and Lovewell soils are on slightly higher convex areas. Medomak soils are on lower areas of the landscape in depressions and narrow drainageways. Also included are small areas of coarser textured alluvial soils. Inclusions make up about 20 percent of the unit.

Charles soils have moderate permeability in the coarse-silty layers and moderate to very rapid permeability in the silt loam to fine gravel strata. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A seasonal high water table is present from the surface to 1.0 foot below the surface from November through June, unless the area is flooded. Depth to bedrock is more than 65 inches. The seasonal high water table restricts rooting depth.

Flooding occurs less frequently than once in two years during spring runoff or periods of heavy rainfall from March through October.

Most areas of this map unit are used for woodland. Some areas are used for hayland and pastureland or idle grassland.

This map unit is poorly suited to cultivated crops. The hazard of flooding and a seasonal high water table are the main limitations. Most crops can be grown if the area is protected from flooding in late spring and early summer.

This map unit is poorly suited to hay and pasture. The hazard of flooding during the growing season and a seasonal high water table are the main limitations. The soil will become compacted unless grazing and the use of equipment are restricted during wet periods. Streambanks should be protected from erosion by maintaining a vegetative cover and by fencing to restrict cattle.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and red spruce. The seasonal high water table and periodic flooding are the main limitations. Equipment limitation is severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. Seedling mortality is moderate because of the seasonal high water table and periods of flooding. Some trees may be uprooted or girdled by ice where flooding occurs during the winter. The seasonal high water table may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken to limit exposure of remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, and red spruce, and black spruce. Trees to plant are red spruce, black spruce, European larch, and tamarack.

The seasonal high water table, periodic flooding, and frost action are the main limitations of this map unit for most urban uses. In most cases, developing areas of this soil is too costly and impractical. Permanent structures are subject to damage or destruction by periodic flooding. Flood control measures are expensive and generally impractical. Roads and streets should be constructed above the expected flood level to prevent damage. This soil is a probable source of sand.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table and periodic flooding are the main limitations.

This map unit has fair potential habitat for openland wildlife, woodland wildlife, and wetland wildlife habitat.

The land capability classification is 4w. The woodland ordination symbol is 7W.

CG—Charles-Medomak-Cornish association

This map unit is very deep, nearly level, and somewhat poorly drained to very poorly drained. It is on bottomlands on the flood plains of major rivers and streams. These soils formed in very fine sandy and silty alluvium. Slopes range from 0 to 2 percent. Areas are elongated along stream channels and range from 15 to over 100 acres.

This association consist of about 30 percent Charles soils, 25 percent Medomak soils, 20 percent Cornish soils, and 25 percent other soils. The poorly drained Charles soils are on the lower areas, the very poorly drained Medomak soils are in depressions, and the somewhat poorly drained Cornish soils are on the higher areas of flood plains.

Typically, the surface layer of the Charles soil is 4 inches of dark brown silt loam. The substratum is mottled, dark grayish brown and olive silt loam in the upper part above 30 inches. It is mottled, dark grayish brown, olive gray and greenish gray silt loam in the middle part, to a depth of 58 inches. Below 58 inches, the substratum is dark gray coarse sand in the lower part to a depth of 65 inches or more. In some areas, the surface layer is very fine sandy loam and some areas do not have the sand textures in the lower substratum.

Typically, beneath a litter of grasses and roots, the surface layer of the Medomak soil is 11 inches of very dark grayish brown silt loam underlain by 3 inches of mottled, very dark grayish brown silt loam. The substratum is mottled, dark grayish brown and grayish brown silt loam above 36 inches, and mottled, dark grayish brown very fine sandy loam grading to very dark gray very fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam, mucky silt loam, or mucky very fine sandy loam.

Typically, the surface layer of the Cornish soil is 8 inches of dark brown very fine sandy loam. The subsoil is 27 inches thick. It is mottled, olive brown very fine sandy loam in the upper part and light olive brown very fine sandy loam in the lower part. The substratum is mottled, olive and olive gray silt loam grading to olive gray loamy fine sand to a depth of 65 inches or more. In some areas the surface layer is silt loam.

Included with these soils in mapping are small areas of well drained Fryeburg soils, moderately well drained Lovewell soils, somewhat excessively drained Adams soils, well drained Allagash soils, moderately

well drained Croghan and Madawaska soils, and very poorly drained Bucksport and Markey soils. Fryeburg and Lovewell soils are on the highest areas of the flood plain. The coarse textured Adams, Allagash, Croghan, and Madawaska soils are generally on outwash terraces above the flood plain. Bucksport and Markey soils are organic materials in depressions.

The Charles and Cornish soils have moderate permeability in the coarse silty layers and moderate to very rapid permeability in the silt loam to fine gravel strata. Medomak soils have moderate permeability throughout. Surface runoff is slow and areas of Medomak soils can be ponded. Erosion is a slight hazard. Available water capacity is high for all of the soils in this map unit. Charles soils have a seasonal high water table from the surface to 1.0 foot below the surface from November to June. Medomak soils have a seasonal high water table from the surface to 0.5 foot below the surface from September to June, unless flooded. Cornish soils have a seasonal high water table from 0.5 foot to 1.5 feet below the surface from November through May. Cornish soils flood less frequently than once in two years during spring runoff or periods of heavy rain from March through October. Charles and Medomak soils flood more frequently than once in two years during spring runoff or periods of heavy rain from March through October. Strata of very fine sand to gravel occur below 40 inches in some units. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for woodland. A few areas are used for unimproved pasture.

This map unit is poorly suited to cultivated crops and orchards. Hazard of flooding and a seasonal high water table are the main limitations. The Cornish soil is better suited than Charles and Medomak soils. Most crops can be grown on areas of Charles and Cornish soils if the area is protected from flooding in late spring and early summer.

This map unit is poorly suited to hay and pasture. The possibility of flooding during the growing season and a seasonal high water table are the main limitation. These soils will become compacted unless grazing and the use of equipment are restricted during wet periods. Streambanks should be protected from erosion by maintaining a vegetative cover and by fencing to restrict cattle.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and red spruce. The seasonal high water table and periodic flooding are the main limitations. Equipment limitation is moderate and severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the driest months of summer. Seedling mortality is moderate and severe on Charles and Medomak because of the seasonal high water table and periodic flooding. Some trees may be uprooted or girdled by ice where flooding occurs during the winter. The seasonal high water table may restrict rooting depth resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds.

There is moderate and severe plant competition because of the seasonal high water table. Trees to favor in natural stands are eastern white pine, balsam fir, black spruce, red spruce, and red maple. Trees to plant are red spruce, tamarack, black spruce, and European larch.

The seasonal high water table, ponding, periodic flooding, and potential frost action are the main limitations of this map unit for most urban uses. In most cases, developing areas of these soils for urban uses is too costly and impractical. Flood control measures are expensive and generally impractical. Roads and streets should be located above the expected flood level to prevent damage. The Cornish soil is a fair source of road fill, Charles and Cornish soils are both probable sources of sand and the Cornish soil is a good source of topsoil.

The Cornish soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The Charles and Medomak soils have severe limitations for these recreational uses. The seasonal high water table, ponding, and periodic flooding are the main limitations that make it impractical to develop areas of these soils for these recreational uses.

The Charles soil has fair potential for openland wildlife, woodland wildlife, and wetland wildlife habitat. The Medomak soil has fair potential as for wetland wildlife habitat and poor potential for openland wildlife and woodland wildlife habitat. The Cornish soil has good potential for woodland wildlife habitat and fair potential for openland wildlife and wetland wildlife habitat.

The land capability classification is 4w for Charles, 6w for Medomak, and 3w for Cornish. The woodland ordination symbol is 7W for Charles, 6W for Medomak, and 8W for Cornish.

ChB—Chesuncook silt loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and moderately well drained. It is near the tops or on lower slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in

shape and range from 3 to over 50 acres in size. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil, 11 inches thick, is dark yellowish brown gravelly silt loam in the upper part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the surface layer is loam or very fine sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Monson soils, moderately deep, well drained Elliottsville soils, somewhat poorly drained Telos soils, and poorly drained Monarda soils. Monson and Elliottsville soils are on higher elevations and Telos and Monarda soils are on lower positions in the landscape and in seep spots. Also included are Chesuncook soils with slopes greater than 8 percent. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hayland, pastureland or residential areas. Some areas are idle or have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table and dense substratum are the main limitations. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Surface and subsurface drainage can help to remove excess water. Stone removal may be necessary following plowing. Using cover crops including grasses and legumes in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion. Contour farming, stripcropping, no-till planting, and terracing help control erosion.

This map unit is suited to hay and pasture. A seasonal high water table and dense substratum are the main limitations. Surface and subsurface drainage will help remove excess water. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred and rotational grazing are practices that help increase production and reduce erosion.

The potential productivity of this map unit for trees such as eastern white pine is very high and high for red spruce and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth, resulting in moderate windthrow hazard. Care should be taken during harvest to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this soil, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for trench type sanitary landfills and moderate for area type sanitary landfills. The seasonal high water table is a moderate limitation for dwellings without basements. Slope and the seasonal high water table are moderate limitations for small commercial buildings. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink swell potential will minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This soil is a fair source of roadfill.

This soil has moderate limitations for paths and trails, camp areas, and picnic areas. It has severe limitations for playgrounds. The seasonal high water table and the slow permeability of the subsoil and the substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for openland

wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 9A.

ChC—Chesuncook silt loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping, and moderately well drained. It is near the tops or on lower slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 50 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil is 11 inches thick. It is dark yellowish brown gravelly silt loam in the upper part and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the surface layer is loam or very fine sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Monson soils; moderately deep, well drained Elliottsville soils; somewhat poorly drained Telos soils; and poorly drained Monarda soils. Monson and Elliottsville soils are on higher elevations and Telos and Monarda soils are on lower positions on the landscape and in seep spots. Also included are Chesuncook soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hayland, pastureland, or residential areas. Some areas are idle or have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table, dense substratum, hazard of erosion, and slope are the main limitations. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Surface and subsurface drainage will help remove excess water. Stone removal may be necessary following plowing. Using cover crops including grasses and legumes in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion. Contour farming, stripcropping, no-till planting, and terracing help control erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table, a dense substratum, wetness, and slope are the main limitations. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred and rotational grazing will help increase production and reduce erosion.

The potential productivity of this map unit is very high for eastern white pine and high for red spruce and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth, resulting in a moderate windthrow hazard. Care should be take during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table, seepage, and slope are severe limitations for sewage lagoons and trench type sanitary landfills and moderate limitations for area type sanitary landfills. The seasonal high water table is a severe limitation for trench type sanitary landfills and moderate for area type sanitary landfills. The seasonal high water table and slope are moderate limitations for dwellings without basements. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. Slope and the seasonal high water table are severe limitations for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains

around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential will minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. The seasonal high water table, slope, and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails, camp areas, and picnic areas and severe limitations for playgrounds. Slope, the seasonal high water table, and the slow permeability of the subsoil and the substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 9A.

ChD—Chesuncook silt loam, 15 to 25 percent slopes

This map unit is very deep, moderately steep, and moderately well drained. It is near the tops or on lower slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 50 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil is 11 inches thick. It is dark yellowish brown gravelly silt loam in the upper part and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the surface layer is loam or very fine sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Monson soils; moderately deep, well drained Elliottsville soils; somewhat poorly drained Telos soils; and poorly drained Monarda soils. The Monson and Elliottsville soils are on higher elevations and Telos and Monarda soils are on lower positions on the landscape and in seep spots. Also included are Chesuncook soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hayland, pastureland, or residential areas. Some areas are idle or have reverted to woodland.

This map unit is moderately suited to orchards and poorly suited to cultivated crops. A seasonal high water table, dense substratum, hazard of erosion, and slope are the main limitations. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Because of slope, cultivation can cause erosion. Using cover crops including grasses and legumes in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion. Contour farming, stripcropping, no till planting and terracing help control erosion.

This map unit is poorly suited to hay and pasture. A seasonal high water table, slope, and dense substratum are the main limitations. Seedbed preparation should be on the contour or across the slope where practical. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred and rotational grazing help increase production and reduce erosion.

The potential productivity of this map unit is very high for trees such as eastern white pine and high for red spruce and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitation is moderate because of slope. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth, resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow well if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white

spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas creating a health hazard. The seasonal high water table, seepage, and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential will minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. The seasonal high water table, slope, and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails. It has severe limitations for camp areas, picnic areas, and playgrounds. Slope, the seasonal high water table, and the slow permeability of the subsoil and the substratum are the main limitations in using this soil for these recreational activities.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4e. The woodland ordination symbol is 9R.

CkB—Chesuncook silt loam, 3 to 8 percent slopes, very stony

This map unit is very deep, gently sloping, and moderately well drained. It is near the tops or on lower slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves, twigs, needles, and mosses the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included with this soil in mapping are small areas of shallow, somewhat excessively drained Monson soils, moderately deep, well drained Elliottsville soils, somewhat poorly drained Telos soils, and poorly drained Monarda soils. Monson and Elliottsville soils are on higher elevations on the landscape and Telos and Monarda soils are on lower positions on the landscape and in seep spots. Also included are Chesuncook soils with slopes greater than 8 percent and with greater than 3 percent surface stones. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland or have been cleared of trees and are used for unimproved pasture or residential areas.

This map unit is very poorly suited to cultivated crops and orchards. Surface stoniness, dense substratum, and a seasonal high water table are the main limitations. This soil is moderately suited to cultivated crops and orchards if the surface stones are removed. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Surface and subsurface drainage will help to remove excess water. Using cover crops including grasses and legumes in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface, maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stoniness, dense substratum, and seasonal high water table are major limitations. If the surface stones are removed, this soil is moderately suited to hay and pasture. Surface and subsurface drainage will help remove excess water. The map unit will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit for trees such as eastern white pine is very high and high for red spruce and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for trench type sanitary landfills and moderate for area type sanitary landfills. The seasonal high water table is a moderate limitation for dwellings without basements. Slope and the seasonal high water table are moderate limitations for small commercial buildings. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential will minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails, camp areas, and picnic areas and severe limitations for playgrounds. The seasonal high water table, large surface stones, small stones within the soil, and the slow permeability of the subsoil and substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9A.

CkC—Chesuncook silt loam, 8 to 15 percent slopes, very stony

This map unit is very deep, strongly sloping, and moderately well drained. It is near the tops or on lower slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves, twigs, needles, and mosses, the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam or very fine sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Monson soils, moderately deep, well drained Elliottsville soils, somewhat poorly drained Telos soils, and poorly drained Monarda soils. Monson and Elliottsville soils are on higher elevations and Telos and Monarda soils are on lower positions on the landscape and in seep spots. Also included are Chesuncook soils with slopes less than 8 percent or greater than 15 percent or with greater than 3 percent surface stones. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A

perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland or have been cleared of trees and are used for unimproved pasture or residential areas.

This map unit is very poorly suited to cultivated crops and orchards. Surface stoniness, dense substratum, hazard of erosion, slope, and seasonal high water table are the main limitations. This map unit is moderately suited to cultivated crops and orchards if the surface stones are removed. The surface soil dries slowly in the spring and after heavy rains, delaying planting and hindering equipment operation. Surface and subsurface drainage will help remove excess water. Using cover crops including grasses and legumes in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the erosion hazard. Contour farming, stripcropping, no-till planting and terracing help control erosion.

This map unit is very poorly suited to hay and pasture. Surface stoniness, dense substratum, slope, and a seasonal high water table are the main limitations. If the surface stones are removed, this map unit is moderately suited to hay and pasture. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred grazing and rotational grazing help increase production and reduce erosion.

The potential productivity of this map unit is very high for trees such as eastern white pine and high for red spruce and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table, seepage, and slope are severe limitations for sewage lagoons and trench type sanitary landfills and moderate limitations for area type sanitary landfills. The seasonal high water table is a severe limitation for trench type sanitary landfills and moderate for area type sanitary landfills. The seasonal high water table and slope are moderate limitations for dwellings without basements. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. Slope and the seasonal high water table are severe limitations for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential will minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. The seasonal high water table, slope, and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails, camp areas, and picnic areas and severe limitations for playgrounds. The seasonal high water table, large surface stones, small stones within the soil, slope, and the slow permeability of the subsoil and substratum are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for woodland wildlife habitat, and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9A.

CkD—Chesuncook silt loam, 15 to 25 percent slopes, very stony

This map unit is very deep, moderately steep, and moderately well drained. It is near the tops or on lower

slopes of upland till plains, hills, and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves, twigs, needles, and mosses, the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam or very fine sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Monson soils; moderately deep, well drained Elliottsville soils; somewhat poorly drained Telos soils; and poorly drained Monarda soils. Monson and Elliottsville soils are on higher elevations and Telos and Monarda soils are on lower positions on the landscape and in seep spots. Also included are Chesuncook soils with slopes less than 15 percent or greater than 25 percent and with greater than 3 percent surface stones. Inclusions make up about 15 percent of the unit.

Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland or have been cleared of trees and are used for unimproved pasture or residential areas.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, dense substratum, hazard of erosion, slope, and seasonal high water table are the main limitations. If the surface stones are removed, this soil is moderately suited to orchards and poorly suited to cultivated crops. Cultivation can cause erosion and steep slopes make equipment operation difficult. The surface soil dries slowly in the spring and after heavy rains delaying planting and hindering equipment operation. Using cover crops including grasses and legumes in the cropping system, and a conservation tillage system that leaves some or all of the crop residue on the surface, help maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, dense substratum, slope, and a seasonal high water table are the main limitations. If the surface stones are removed, this map unit is moderately suited to hay and pasture. The soil will become compacted unless grazing and the use of equipment is restricted during wet periods. Deferred grazing and rotational grazing help increase production and reduce erosion.

The potential productivity of this map unit is very high for trees such as eastern white pine and high for red spruce, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce erosion. Equipment limitation is moderate because of slope. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, and white spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas creating a health hazard. The seasonal high water table, seepage, and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink swell potential will minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be

disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. The seasonal high water table, slope, and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The seasonal high water table, large surface stones, small stones within the soil, slope, and the slow permeability of the subsoil and substratum are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9R.

CLD—Chesuncook-Telos association, moderately steep, very stony

This map unit is very deep, moderately steep, moderately well drained and somewhat poorly drained. It is on the sides of glacial till ridges. Slopes range from 15 to 25 percent and are both convex and concave. Areas are irregular in shape and range from 15 to over 500 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Chesuncook soils, 35 percent Telos soils, and 20 percent other soils. The moderately well drained Chesuncook soils are on the upper areas and steeper slopes, and the somewhat poorly drained Telos soils are on lower slopes and less sloping areas.

Typically, beneath a litter of leaves, twigs, needles, and mosses, the surface layer of the Chesuncook soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral subsurface layer is loam or very fine sandy loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown, highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown, silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam or very fine sandy loam.

Included in mapping are small areas of poorly drained Monarda soils; moderately deep, well drained Elliottsville soils; and shallow, somewhat excessively drained Thorndike and Monson soils. Monarda soils are on lower and less sloping areas on the landscape. Elliottsville, Thorndike, and Monson soils are on higher areas on the landscape where bedrock is near the surface. Also included are areas with slopes less than 15 percent or greater than 25 percent, and with greater than 3 percent surface stones.

Chesuncook and Telos soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is high for both soils. Chesuncook soils have a perched water table from 1.5 to 2.0 feet below the surface from March through May. Telos soils have a perched water table from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, dense substratum, hazard of erosion, slope, and the seasonal high water table are the main limitations. The Chesuncook soil is moderately suited to orchards if the surface stones are removed. Both soils are poorly suited to cultivated crops even if the surface stones are removed. Cultivation can cause erosion and steep slopes make equipment operation difficult. The surface soil dries slowly in the spring and after heavy rains delaying planting and hindering equipment operation. Using cover crops including grasses and legumes in the tillage system and using a conservation cropping system that leaves some or all of the crop residue on the surface, help maintain or increase the organic matter content of the surface layer, improve infiltration, and reduce the hazard of erosion.

These soils are very poorly suited to hay and pasture. Surface stones, dense substratum, slope, and the seasonal high water table are the main

limitations. If the surface stones are removed, these soils are moderately suited to hay and pasture. Special care should be taken to avoid pasturing these soils when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production and reduce erosion.

The potential productivity of this map unit is high and very high for trees such as eastern white pine, red spruce, white spruce, and balsam fir. Slope and a seasonal high water table are the main limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate on Telos soil because of the seasonal high water table. The seasonal high water table and dense substratum limit rooting depth, resulting in moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, and black spruce.

The slow permeability of the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. The seasonal high water table, seepage, and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a hazard in areas of these soils. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth and constructing roads on the contour will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. The Chesuncook soil is a fair source of roadfill.

The Chesuncook soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Telos soil has severe limitations for these recreational uses. Slope, the seasonal high water table, large surface stones, small stones within the soil, and the slow permeability of the subsoil and the substratum are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 6s. The woodland ordination symbol for Chesuncook is 9R and for Telos is 8W.

CnB—Colonel fine sandy loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and somewhat poorly drained. It is on the tops and lower sides of drumlin shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 60 acres. Stones cover up to 0.l percent of the surface.

Typically, the surface layer is 6 inches of dark brown fine sandy loam. The subsoil is 10 inches thick. It is yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled light olive brown fine sandy loam in the lower part. The substratum is firm, mottled grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Included with this soil in mapping are small areas of poorly drained Brayton soils and moderately well drained Dixfield soils. Brayton soils are in depressions, seep areas, and on lower slopes. Dixfield soils are on higher areas on the landscape. Also included are Colonel soils

Figure 12.—A hayfield in an area of Colonel fine sandy loam, 3 to 8 percent slopes and Dixfield find sandy loam, 3 to 8 percent slopes. The Colonel soil is in the foreground and the Dixfield soil is on the knoll in the background.

with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 15 percent of the unit.

Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched high water table is present from 0.5 to 1.5 feet below the surface from October through May. Depth to bedrock is more than 60 inches, but the seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hayland or pastureland. A few areas have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table and dense substratum are the main limitations. Surface drainage and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Using cover crops and maintaining crop residue on or near the surface reduces runoff, and helps maintain soil tilth and organic matter content. Stone removal may be necessary following plowing.

This map unit is moderately suited to hay and pasture (fig. 12). A seasonal high water table is the main limitation. The surface will become compacted if grazing and the use of heavy equipment are not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitation is moderate because of

the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, and balsam fir. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a severe limitation for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This soil is a fair source for roadfill.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. The seasonal high water table is the main limitation. Drainage should be provided for any of these uses.

This map unit has good potential for openland wildlife habitat and fair potential for woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3w. The woodland ordination symbol is 8W.

CnC—Colonel fine sandy loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping, and somewhat poorly drained. It is on the sides of drumlin shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 60 acres. Stones cover up to 0.l percent of the surface.

Typically, the surface layer is 6 inches of dark brown fine sandy loam. The subsoil is 10 inches thick. It is yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of poorly drained Brayton soils and moderately well drained Dixfield soils. Brayton soils are in depressions, seep areas, and on lower slopes. Dixfield soils are on higher areas on the landscape. Also included are Colonel soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 0.5 to 1.5 feet below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict the rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hayland and pastureland. A few areas have reverted to woodland.

The map unit is poorly suited to cultivated crops and orchards. Seasonal high water table, slope, hazard of erosion, and dense substratum are the main limitations. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Erosion control measures such as contour farming, stripcropping, diversions, and cover crops can reduce the hazard of erosion. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration.

This map unit is moderately suited to hay and pasture. A seasonal high water table and dense substratum are the main limitations. The surface will become compacted if grazing and use of heavy

equipment are not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitation is moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, and balsam fir. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This map unit is a fair source for roadfill.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. Slope and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

This map unit has good potential for openland wildlife habitat, fair potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 8W.

CoB—Colonel fine sandy loam, 3 to 8 percent slopes, very stony

This map unit is very deep, gently sloping, and somewhat poorly drained. It is on the sides of drumlin shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.l to 3.0 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 4 inches of very dusky red highly decomposed organic material underlain by a pinkish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 14 inches thick, is red fine sandy loam grading to yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Included with this soil in mapping are small areas of poorly drained Brayton soils and moderately well drained Dixfield soils. Brayton soils are in depressions, seep areas, and on lower slopes. Dixfield soils are on higher areas on the landscape. Also included are Colonel soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 15 percent of the unit.

Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 0.5 to 1.5 feet below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland. A few areas are used for pastureland.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table, a dense substratum, and surface stones are the main limitations. This map unit is moderately suited to cultivated crops and orchards if the surface stones are removed. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Stone removal may be necessary following plowing.

This map unit is poorly suited to hay and pasture. A seasonal high water table, a dense substratum, and surface stones are the main limitations. Surface stones restrict the use of farm equipment. This map unit can be used for unimproved pasture if some of the stones are removed. Deferred grazing, rotational grazing, and the application of lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitation is moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, and balsam fir. Trees to plant are eastern white pine, black spruce, European larch and tamarack.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a severe limitation for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a fair source for roadfill.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. Large surface stones, small stones within the soil, and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

This map unit has fair potential for woodland wildlife habitat. It has poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol 8W.

CoC—Colonel fine sandy loam, 8 to 15 percent slopes, very stony

This map unit is very deep, strongly sloping, and somewhat poorly drained. It is on the sides of drumlin shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.l to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 4 inches of very dusky red highly decomposed organic material underlain by a pinkish gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 14 inches thick. It is red fine sandy loam grading to yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of poorly drained Brayton soils and moderately well drained Dixfield soils. Brayton soils are in depressions, seep areas, and on lower slopes. Dixfield soils are on

higher areas. Also included are Colonel soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 0.5 to 1.5 feet below the surface from October to May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict the rooting depth.

Most areas of this map unit are used for woodland. A few areas are used for pastureland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, seasonal high water table, dense substratum, hazard of erosion, and surface stones are the main limitations. This soil is moderately suited to cultivated crops if the surface stones are removed. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps to maintain or increase the organic matter content of the surface layer, improve infiltration and reduce the hazard of erosion. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Erosion control measures such as contour farming, stripcropping and no-till planting are recommended management practices.

This map unit is poorly suited to hay and pasture. A seasonal high water table, a dense substratum, slopes, and surface stones are the main limitations. Surface stones restrict the use of farm equipment. This map unit can be used for unimproved pasture if some of the stones are removed. Deferred grazing and rotational grazing and the application of lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitation is moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, and balsam fir. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of this soil, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses. Surface stones may need to be removed prior to any construction. This soil is a fair source of roadfill.

This map unit has moderate limitations for picnic areas and paths and trails. It has severe limitations for camp areas and playgrounds. Slope, large surface stones, small stones within the soil, and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

This map unit has fair potential for woodland wildlife habitat. It has poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 8W.

CPC—Colonel-Dixfield association, strongly sloping, very stony

This map unit consists of very deep, gently sloping to strongly sloping, somewhat poorly drained and moderately well drained soils. It is on areas of glaciated uplands. Slopes range from 3 to l5 percent and are commonly long and smooth. Areas are irregular in shape and range from 15 to over 250 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 40 percent Colonel soils, 35 percent Dixfield soils, and 25 percent other soils. The somewhat poorly drained Colonel soils are on the lower slopes and slight depressions. The moderately well drained Dixfield soils are on the upper slopes.

Typically, beneath a litter of leaves and twigs, the surface layer of the Colonel soil is 4 inches of very dusky red highly decomposed organic material underlain by a pinkish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 14 inches thick, is red fine sandy loam grading to yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Dixfield soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil, 21 inches thick, is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included in mapping are small areas of well drained Marlow, moderately deep, well drained Tunbridge, shallow, somewhat excessively drained Lyman, and poorly drained Brayton soils. Tunbridge and Lyman soils are located on knobby ridges and other areas where bedrock is near the surface. Marlow soils are on steeper slopes on higher areas. Brayton soils are in low-lying areas and depressions. Also included are areas with slopes greater than 15 percent, and areas with more than 3 percent surface stones.

Colonel and Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum.

Surface runoff is slow to medium and the erosion hazard is moderate. Available water capacity is high for both soils. Colonel soils have a perched water table from 0.5 to 1.5 feet below the surface from October through May and Dixfield soils have a perched water table from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit very poorly suited to cultivated crops and orchards. Slope, a seasonal high water table, a dense substratum, hazard of erosion, and surface stones are the main limitations. The Dixfield soil is moderately suited to orchards if the surface stones are removed. Both soils are moderately suited to cultivated crops if the surface stones are removed. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration and reduce the hazard of erosion. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Contour farming, stripcropping, and no-till planting help control erosion. Stone removal may be necessary after plowing.

This map unit is poorly suited to hay and pasture. Surface stones, slope, dense substratum, and a seasonal high water table are the main limitations. Surface stones restrict the use of farm equipment. These soils can be used for unimproved pasture if some of the stones are removed. Deferred grazing, rotational grazing and the application of lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit for trees such as eastern white pine, red spruce, balsam fir is high and very high. The seasonal high water table is the main limitation. Equipment limitation is moderate on the Colonel soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition because of the seasonal high water table, but seedlings survive and

grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations in the Dixfield soil for area type sanitary landfills and dwellings without basements. The seasonal high water table in the Colonel soil is a severe limitation for these uses. The seasonal high water table and slope are severe limitations of these soils for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. These soils are a fair source for roadfill.

The Colonel soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The Dixfield soil has moderate limitations for camp areas, picnic areas, and path and trails and severe limitations for playgrounds. Slope, large surface stones, small stones within the soil, and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

The Colonel soil has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat. The Dixfield soil has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification for both Colonel and Dixfield is 6s. The woodland ordination symbol for Colonel is 8W and for Dixfield is 9A.

CsB—Colton gravelly fine sandy loam, 0 to 8 percent slopes

This map unit is nearly level to gently sloping or undulating, very deep, and excessively drained. It is on outwash terraces, kames, and eskers. Slopes are smooth and convex. Areas are oval or irregular in shape and range from 3 to over 200 acres.

Typically, beneath a litter of leaves, the surface layer is 3 inches of black highly decomposed organic material underlain by a light brownish gray gravelly fine sandy loam subsurface layer 2 inches thick. The subsoil is 23 inches thick. It is dark reddish brown gravelly fine sandy loam in the upper part, reddish brown gravelly loamy sand in the middle part, and dark yellowish brown very gravelly loamy sand in the lower part. The substratum is dark brown very gravelly sand grading to yellowish brown very gravelly sand to a depth of 65 inches or more. In some areas the subsurface layer is gravelly loamy sand, gravelly loamy fine sand, or gravelly sandy loam.

Included in mapping are small areas of somewhat excessively drained Adams and Hermon soils and moderately well drained Croghan and Sheepscot soils. Adams and Croghan soils are on similar landscapes, generally lower in elevation, and are frequently intermingled with Colton soils. Hermon soils are on glacial till knobs. Sheepscot soils are at lower elevations on the landscape. Also included are Colton soils with slopes greater than 8 percent. Inclusions make up about l5 percent of the unit.

Colton soils have rapid or very rapid permeability in the solum and very rapid permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is very low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland. A few areas are used for pastureland.

This map unit is poorly suited to cultivated crops and orchards. Very low available water capacity, very

low natural fertility, very strong acidity, and rapid to very rapid permeability are the main limitations. Irrigation is needed to obtain satisfactory yields. Increasing organic matter content by the addition of manure and crop residue will improve soil structure and increase available water capacity and nutrient content.

This map unit is very poorly suited to hay and pasture. Very low available water capacity, very low natural fertility, and rapid to very rapid permeability are the main limitations. Adequate yields can be expected with proper amounts of fertilizer and lime. Deferred grazing and pasture rotation are important management practices for this soil and will improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, red pine, and white spruce. Droughtiness is the main limitation. Seedling mortality is severe because of the very low available water holding capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid and very rapid permeability of this map unit, resulting in poor filtering action, is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Seepage is a severe limitation for sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements and for local roads and streets and slope is a moderate limitation for small commercial buildings. Droughtiness and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This soil is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Small stones on the surface and within the soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has fair potential for openland wildlife habitat. It has poor potential for woodland wildlife habitat and very poorly potential for wetland wildlife habitat.

The land capability classification is 3s. The woodland ordination symbol is 7S.

CsC—Colton gravelly fine sandy loam, 8 to l5 percent slopes

This map unit is very deep, rolling and strongly sloping, and excessively drained. It is on outwash terraces, kames, and eskers. Slopes are mostly complex. Areas are irregular in shape and range from 3 to over 200 acres.

Typically, beneath a litter of leaves, the surface layer is 3 inches of black highly decomposed organic material underlain by a light brownish gray gravelly fine sandy loam subsurface layer 2 inches thick. The subsoil is 23 inches thick. It is dark reddish brown gravelly fine sandy loam in the upper part, reddish brown gravelly loamy sand in the middle part, and dark yellowish brown very gravelly loamy sand in the lower part. The substratum is dark brown very gravelly sand grading to yellowish brown very gravelly sand to a depth of 65 inches or more. In some areas the subsurface layer is gravelly loamy sand, gravelly loamy fine sand, or gravelly sandy loam.

Included in mapping are small areas of somewhat excessively drained Adams and Hermon soils and moderately well drained Croghan and Sheepscot soils. Adams and Croghan soils are on similar positions in the landscape with Colton soils, generally lower in elevation. Hermon soils are on glacial till knobs. Sheepscot soils are at lower elevations in the landscape.

Also included are Colton soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Colton soils have rapid or very rapid permeability in the solum and very rapid permeability in the substratum. Surface runoff is slow and erosion is a moderate hazard. Available water capacity is very low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland. A few areas are used for pastureland.

This map unit is poorly suited to cultivated crops and orchards. Very low available water capacity, very low natural fertility, very strong acidity, slope, and rapid to very rapid permeability are the main limitations. Irrigation is needed to obtain satisfactory yields. Increasing the organic matter content by the addition of manure and crop residue will improve soil structure and increase the available water capacity and nutrient content. Using cover crops, including grasses and legumes, in the cropping system and a conservation

tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content at the surface layer, improve infiltration, and reduce the hazard of erosion. Contour farming, stripcropping, and no-till planting help control erosion.

This map unit is very poorly suited to hay and pasture. Very low available water capacity, very low natural fertility, and rapid to very rapid permeability are the main limitations. Adequate yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and pasture rotation are important management practices for this map unit and will improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, red pine, and white spruce. Droughtiness is the main limitation. Seedling mortality is high because of the very low available holding water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid and very rapid permeability of this map unit, resulting in poor filtering action, is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the tank absorption field. Seepage and slope are severe limitations for sewage lagoons and seepage is a severe limitation for sanitary landfills. Because of the unstable substratum sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Extensive grading may be needed when installing a septic system. Slope is a moderate limitation for dwellings with or without basements and for local roads and streets and a severe limitation for small commercial buildings. Droughtiness and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope and small stones on the surface and within the soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has fair potential for openland wildlife habitat. It has poor potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 4e. The woodland ordination symbol is 7S.

CsD—Colton gravelly fine sandy loam, 15 to 45 percent slopes

This map unit is very deep, hilly and steep, and excessively drained. It is on kames and eskers and to a lesser extent on the sides of outwash terraces. Slopes are mostly complex. Areas are irregular in shape and range from 3 to over 100 acres in size.

Typically, beneath a litter of leaves, the surface layer is 3 inches of black highly decomposed organic material underlain by a light brownish gray gravelly fine sandy loam subsurface layer 2 inches thick. The subsoil is 23 inches thick. It is dark reddish brown gravelly fine sandy loam in the upper part, reddish brown gravelly loamy sand in the middle part, and dark yellowish brown very gravelly loamy sand in the lower part. The substratum is dark brown very gravelly sand grading to yellowish brown very gravelly sand to a depth of 65 inches or more. In some areas the subsurface layer is gravelly loamy sand, gravelly loamy fine sand, or gravelly sandy loam.

Included in mapping are small areas of somewhat excessively drained Adams and Hermon soils. Adams soils are on similar positions in the landscape generally lower in elevation. Hermon soils are on glacial till areas. Also included are Colton soils with slopes less than 15 percent or greater than 45 percent. Inclusions make up about 15 percent of the unit.

Colton soils have rapid or very rapid permeability in the solum and very rapid permeability in the substratum. Surface runoff is slow and erosion is a moderate hazard. Available water capacity is very low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland. A few areas are idle land reverting to woodland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, very low available water capacity, very low natural fertility, very strong acidity,

and rapid or very rapid permeability are the main limitations. Irrigation is needed to obtain satisfactory yields. Increasing the organic matter content by the addition of manure and crop residue will improve soil structure and increase the available water capacity and nutrient content. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration and reduce the hazard of erosion. Contour farming, stripcropping and no-till planting help reduce erosion.

This map unit is very poorly suited to hay and pasture. Slope, very low available water capacity, very low natural fertility, and rapid to very rapid permeability are the main limitations. Adequate yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and pasture rotation are important management practices for this map unit and will improve the quantity and quality of feed and forage. Seedbed preparation should be on the contour or across the slope where practical. Slope also limits the use of machinery needed for hay and forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, red pine, red spruce, and white spruce. Droughtiness and slope are the main limitations. Equipment limitations are moderate because of slope. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Seedling mortality is severe because of the very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid and very rapid permeability of this map unit, resulting in poor filtering action, and slope are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Slope is a severe limitation for dwellings with or without basements, small commercial buildings, and local roads and streets. Roads should be constructed on the contour to help reduce erosion. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Droughtiness, slope, and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This soil is a probable source of sand and gravel, but accessibility is limited by slope.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope and small stones on the surface and within the soil are the main limitations. Extensive grading is necessary in preparing these areas for use as playgrounds, camp areas, or picnic areas. Since this soil tends to be droughty during the summer months, irrigation may be necessary to maintain sod.

This map unit has poor potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 7e. The woodland ordination symbol is 7S.

CTC—Colton-Sheepscot association, rolling

This map unit is very deep, undulating and rolling, excessively to moderately well drained soils on terraces, deltas, kames, and eskers. Slopes range from 3 to 15 percent and are convex or concave. Areas are irregular in shape and range from 15 to over 300 acres.

Units of this association consist of about 45 percent Colton soils, 35 percent Sheepscot soils, and 20 percent other soils. The excessively drained Colton soils are on the higher, more sloping areas and the moderately well drained Sheepscot soils are on the lower, less sloping areas.

Typically, beneath a litter of leaves, the surface layer of the Colton soil is 3 inches of black highly decomposed organic material underlain by a light brownish gray gravelly fine sandy loam subsurface layer 2 inches thick. The subsoil is 23 inches thick. It is dark reddish brown gravelly fine sandy loam in the upper part, reddish brown gravelly loamy sand in the middle part, and dark yellowish brown very gravelly loamy sand in the lower part. The substratum is dark brown very gravelly sand grading to yellowish brown very gravelly sand to a depth of 65 inches or more. In

some areas the subsurface layer is gravelly loamy sand, gravelly loamy fine sand, or gravelly sandy loam.

Typically, beneath a litter of grasses and hardwood leaves, the surface layer of the Sheepscot soil is 3 inches of dark reddish brown very fine sandy loam underlain by a pinkish gray very fine sandy loam subsurface layer 1 inch thick. The subsoil is 21 inches thick. It is dark reddish brown fine sandy loam in the upper part, strong brown gravelly fine sandy loam in the middle part, and mottled, light olive brown very gravelly loamy sand in the lower part. The substratum is mottled, light olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the surface layer is sandy loam or fine sandy loam.

Included in mapping are small areas of somewhat excessively drained Adams, Hermon, and Masardis soils, well drained Allagash and Monadnock soils, moderately well drained Croghan and Madawaska soils, and poorly drained and somewhat poorly drained Naumburg soils. Croghan and Madawaska soils are on similar positions on the landscape as the Sheepscot soils, but lack the gravelly textures. Adams and Allagash soils also lack the gravelly textures and are on similar positions on the landscape as Colton soils. Masardis soils are on similar positions as Colton soils but have a thicker loamy surface layer. Naumburg soils are in depressional areas on the landscape. Hermon and Monadnock soils are small knobs of ablation till within this unit or near the edges of the unit where it abuts glacial till ridges. Also included are areas with slopes less than 3 percent or greater than 15 percent.

Colton soils have rapid or very rapid permeability in the solum and very rapid permeability in the substratum. Sheepscot soils have moderate or moderately rapid permeability in the loamy cap and rapid or very rapid permeability below. Surface runoff is slow to medium and erosion is a moderate hazard on the steeper areas of the map unit. Available water capacity is very low for the Colton soils and low for the Sheepscot soils. Sheepscot soils have a seasonal high water table at a depth of 1.5 to 2.5 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table in the Sheepscot soils restricts rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Very low available water capacity, very low natural fertility, very strong acidity, slope, and rapid to very rapid permeability are the main limitations. Irrigation is needed to obtain satisfactory yields. Increasing the organic matter content by the addition of manure and crop residue will improve soil structure, and increase the available water capacity and nutrient content. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps improve infiltration and reduce the hazard of erosion. Contour farming, stripcropping and no-till planting help reduce erosion.

This map unit is very poorly suited to hay and pasture. Very low available water capacity, very low natural fertility, and rapid to very rapid permeability are the main limitations. Adequate yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and pasture rotation are important management practices for these soils and will improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, red pine, balsam fir, red spruce, and white spruce. Droughtiness is the main limitation. Seedling mortality is moderate and severe because of the low and very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Plant competition is moderate in the Sheepscot soil because of the seasonal high water table, but seedlings will survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, white spruce, red spruce, balsam fir, and northern white cedar. Trees to plant are eastern white pine, red pine, white spruce, European larch, and tamarack.

The rapid and very rapid permeability of this map unit, resulting in poor filtering action, and the seasonal high water table are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. A larger septic tank absorption field and fill material to raise the level of the bed may be needed in areas of the Sheepscot soil. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Slope of the Colton soil, the seasonal high water table in the Sheepscot soil, and seepage in both soils are severe limitations for sewage lagoons. The seasonal high water table of the Sheepscot soil and seepage in both soils are severe limitations for sanitary landfills. Because of the unstable substratum and the seasonal high water table in the Sheepscot soil sloughing is a severe limitation in shallow excavations. Slope of the Colton soil is a moderate limitation for dwellings with or without basements and local roads and streets and a severe limitation for small commercial buildings. The

seasonal high water table in the Sheepscot soil is a moderate limitation for dwellings without basements and local roads and streets and severe for dwellings with basements. Slope and seasonal high water table in the Sheepscot soil are moderate limitations for small commercial buildings. Installing drains around footings, placing footings above the seasonal high water table and back filling around foundations in the Sheepscot soil will help prevent wet basements. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Droughtiness and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. The Colton soil is a good source of roadfill and Sheepscot is fair because of the seasonal high water table. Both soils are a probable source of sand and gravel.

The Colton soil has slight limitations for paths and trails and moderate limitations for camp areas and picnic areas. It has severe limitations for playgrounds. Slope and small stones on the surface and in the soil are the main limitations. The Sheepscot soil has moderate limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope, small stones on the surface and within the soil, and the seasonal high water table are the main limitations. Grading, seeding, and mulching are necessary when preparing areas of these soils for playgrounds and drainage should be provided in areas of the Sheepscot soil.

The Colton soil has fair potential for openland wildlife habitat, poor potential for woodland wildlife habitat, and very poor potential for wetland wildlife habitat. The Sheepscot soil has good potential for openland wildlife and fair potential as habitat for woodland wildlife. It has very poor potential as habitat for wetland wildlife.

The land capability classification is 4e for Colton and IIe for Sheepscot. The woodland ordination symbol for Colton is 7S and for Sheepscot is 8A.

CuB—Croghan loamy sand, 0 to 8 percent slopes

This map unit is very deep, nearly level to gently sloping, and moderately well drained. It is on outwash plains, deltas, and terraces. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 100 acres.

Typically, beneath a of litter of leaves, needles and twigs, the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray loamy sand subsurface layer 3 inches thick. The subsoil is 29 inches thick. It is dark reddish brown loamy sand in the upper part, yellowish red loamy sand grading to mottled, yellowish brown loamy sand in the middle part, and mottled, light olive brown loamy sand in the lower part. The substratum is mottled, olive sand grading to olive gray sand to a depth of 65 inches or more. In some areas the mineral surface layer is loamy fine sand, fine sand, or sand.

Included in mapping are small areas of somewhat excessively drained Adams soils and poorly drained and somewhat poorly drained Naumburg soils. Adams soils are on slightly higher positions on the landscape than Croghan soils. Naumburg soils are in drainageways and depressions. Inclusions make up about l5 percent of the unit.

Croghan soils have rapid permeability in the surface layer and very rapid permeability in the subsoil and substratum. Surface runoff is slow to medium and erosion is a slight hazard. Available water capacity is very low. A seasonal high water table is at a depth of 1.5 to 2.0 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for woodland. Some areas are used for pasture and cultivated crops.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table and low available water capacity are the main limitations. Surface drainage and subsurface drainage will help remove excess water during the early part of the growing season and after heavy rains. Irrigation is needed during the droughty periods to produce adequate yields. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improving this soil for cultivated crops.

This map unit is poorly suited to hay and pasture. A seasonal high water table, low natural fertility, and low available water capacity are the main limitations. The seasonal high water table is a problem in pasture management. Management needs consist primarily of timely applications of lime and fertilizer along with deferred grazing and rotational grazing.

The potential productivity of this map unit is very high for trees such as eastern white pine. Droughtiness is the main limitation. Seedling mortality is moderate because of the low available water

capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Plant competition is moderate because of the seasonal high water table, but seedlings will survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine. Trees to plant are eastern white pine, European larch, and Norway spruce.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, and the seasonal high water table are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of ground water contamination. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table and seepage are severe limitations for sewage lagoons and sanitary landfills.

Because of the seasonal high water table and unstable substratum, sloughing is a severe limitation in shallow excavations. The seasonal high water table is a moderate limitation for dwellings without basements and severe for dwellings with basements. Slope and the seasonal high water table are moderate limitations for small commercial buildings. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The seasonal high water table and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarse grained subgrade or base material to frost depth during construction will help to overcome the problem for roads. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a fair source of roadfill because of the seasonal high water table, a probable source of sand, and a fair source of topsoil because of the small stones.

This map unit has moderate limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table and slope are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has fair potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 10S.

DfB—Dixfield fine sandy loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and moderately well drained. It is on long sloping areas of upland till plains, hills and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 60 acres. Stones cover up to 0.l percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 17 inches thick. It is reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface soil is sandy loam or loam.

Included with this soil in mapping are small areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils. Colonel and Brayton soils are in seep spots or on lower footslopes. Also included are Dixfield soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about l5 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hay and pasture or for residential areas. A few areas are used for cultivated crops or have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table and dense substratum are the major limitations and cause this soil to warm slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Stone removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improving infiltration, and reducing the hazard of erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table and dense substratum are the main limitations. Good yields can be expected with proper amounts of lime and fertilizer. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a moderate limitation for area type sanitary landfills and dwellings without basements. The seasonal high water table and slope are moderate limitations for small commercial buildings. The seasonal high water table is a severe limitation for sewage lagoons, trench type sanitary landfills, shallow excavations, and dwellings with basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill with material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to over come the shrink-swell problem with roads. This soil is a fair source of roadfill.

This map unit has moderate limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table is the main limitation. The seasonal high water table, slope, and small stones within the soil are factors in developing areas of this soil for use as playgrounds. Drainage, grading, seeding, and mulching of these areas for this use is necessary.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 9A.

DfC—Dixfield fine sandy loam, 8 to l5 percent slopes

This map unit is very deep, strongly sloping, and moderately well drained. It is on long sloping areas of upland till plains, hills, and ridges. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 17 inches thick. It is reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, well drained Marlow soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils. Lyman and Tunbridge soils are in areas where bedrock is close to the surface and Marlow soils are on small knolls. Colonel and Brayton soils are in seep spots. Also included are Dixfield soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched high water table is present from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover, and are commonly used for hay and pasture or for residential areas. A few areas

are used for cultivated crops or have reverted to woodland.

This map unit is poorly suited to cultivated crops and moderately suited to orchards. Slope, hazard of erosion, seasonal high water table, and dense substratum are the main limitations. Surface and subsurface drainage will help remove excess water. Stripcropping, diversions, cover crops, and green manure crops along with a conservation tillage system also improve the soil and reduce the hazard of erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table and dense substratum are the main limitations. Good yields can be expected with proper applications of lime and fertilizer. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodland are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations for area type sanitary landfills and severe limitations for sewage lagoons and trench type sanitary landfills. The seasonal high water table and slope are moderate limitations for dwellings without basements and severe for small commercial buildings. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill with material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a hazard in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to over come the shrink-swell problem with roads. This map unit is a fair source of roadfill.

This map unit has moderate limitations for camp areas, picnic areas, and paths and trails. It has severe limitations for playgrounds. The seasonal high water table and slope are the main limitations. The seasonal high water table and slope are factors in developing areas of this map unit for use as playgrounds. Drainage, grading, seeding, and mulching of these areas is necessary.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 9A.

DfD—Dixfield fine sandy loam, 15 to 25 percent slopes

This map unit is very deep, moderately steep, and moderately well drained. It is on the steeper slopes of upland till plains, hills and ridges. Slopes are smooth and concave. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 17 inches thick. It is reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, well

drained Marlow soils, and somewhat poorly drained Colonel soils. Lyman and Tunbridge soils are in areas where bedrock is close to the surface. Marlow soils are on knolls and Colonel soils are in seep areas. Also included are Dixfield soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 15 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. The seasonal high water and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover, and are commonly used for hay and pasture or for residential areas. A few areas are used for cultivated crops or have reverted to woodland.

This map unit is poorly suited to cultivated crops and orchards. Slope, hazard of erosion, seasonal high water table, and dense substratum are the main limitations. Surface and subsurface drainage will help remove excess water. Stone removal may be necessary after plowing. Stripcropping, contour farming, diversions, cover crops, and green manure crops along with a conservation tillage system also improve the soil and reduce the hazard of erosion.

This map unit is moderately suited to hay and pasture. Slope, the seasonal high water table, and dense substratum are the main limitations. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Slope also limits the use of machinery needed for hay and forage production. Good yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and rotational grazing help increase production and maintain the quality and quantity of feed and forage. Seedbed preparation should be on the contour or across the slope where practical.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Slope is the main limitation. Equipment limitation is moderate because of slope. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Fill material may be needed to raise the level of the septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. The seasonal high water table and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill with material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a hazard during construction. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. This soil is a fair source of roadfill.

This map unit has moderate limitations for paths and trails and severe limitations for picnic areas, camp areas, and playgrounds. The seasonal high water table and slope are the main limitations. Extensive grading is necessary when developing areas of this soil for these uses.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4e. The woodland ordination symbol is 9R.

DgB—Dixfield fine sandy loam, 3 to 8 percent slopes, very stony

This map unit is very deep, gently sloping, and moderately well drained. It is on long sloping areas of upland till plains, hills and ridges. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.l to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included with this soil in mapping are small areas of somewhat poorly drained Colonel soils and poorly drained Brayton soils. Colonel and Brayton soils are in seep spots or on lower footslopes. Also included are Dixfield soils with slopes less than 3 percent or greater than 8 percent and areas with less than 0.1 percent or more than 3 percent surface stones. Inclusions make up about l5 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table and the dense substratum.

Most areas of this map unit are used for woodland. A few areas are used for pasture.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table, dense substratum, and surface stones are the main limitations. This soil is moderately suited to cultivated crops and orchards, if the surface stones are removed. Surface drainage and subsurface drainage will remove excess water. Stone removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration and reducing the hazard of erosion.

This map unit is very poorly suited to hay and pasture. A seasonal high water table, dense substratum, and surface stones are the main limitations. Surface stones limit the use of farm equipment. This map unit can be used for unimproved pasture if some of the surface stones are removed. If the surface stones are removed this map unit is moderately suited to hay and pasture. Good yields can be expected with proper amounts of lime and fertilizer. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth, resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a moderate limitation for area type sanitary landfills and dwellings without basements. The seasonal high water table and slope are moderate limitations for small commercial buildings. The seasonal high water table is a severe limitation for sewage lagoons, trench type sanitary landfills, shallow excavations, and dwellings with basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for local roads and

streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to over come the shrink-swell problem with roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a fair source of roadfill.

This map unit has moderate limitations for camp areas, picnic areas, and paths and trails. It has severe limitations for playgrounds. The seasonal high water table, slope, large surface stones, and small stones within the soil are the main limitations. The seasonal high water table, slope, large surface stones, and small stones within the soil are factors in developing areas of this soil for use as playgrounds. Drainage, grading, seeding, and mulching is necessary.

This map unit has good potential for woodland wildlife habitat. It has poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9A.

DgC—Dixfield fine sandy loam, 8 to 15 percent slopes, very stony

This map unit is very deep, strongly sloping, and moderately well drained. It is on long sloping areas of upland till plains, hills and ridges. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.l to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, well drained Marlow soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils. Lyman and Tunbridge soils are higher in the landscape where bedrock is close to the surface. Marlow soils are on small knolls. Colonel and Brayton soils are in seeps or on lower footslopes. Also included are Dixfield soils with slopes less than 8 percent or greater than 15 percent, and areas with less than 0.1 percent or more than 3 percent surface stones. Inclusions make up about l5 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is present 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland. A few areas are used for pasture.

This map unit is very poorly suited to orchards and cultivated crops. Slope, a seasonal high water table, a dense substratum, the hazard of erosion, and surface stones are the main limitations. This map unit is moderately suited to orchards and poorly suited to cultivated crops if the surface stones are removed. Surface and subsurface drainage will help remove excess water. Stripcropping, diversions, cover crops, and green manure crops along with a conservation tillage system also improve the soil and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. A seasonal high water table, a dense substratum, and surface stones are the main limitations. Surface stones limit use of farm equipment. This map unit can be used for unimproved pasture if some of the surface stones are removed. If the surface stones are removed this map unit is moderately suited to hay and pasture. Good yields can be expected with proper applications of lime and fertilizer. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodlands are insignificant. The seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce,

white spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations for area type sanitary landfills and severe limitations for sewage lagoons and trench type sanitary landfills. The seasonal high water table and slope are moderate limitations for dwellings without basements and severe for small commercial buildings. The seasonal high water table is a severe limitation for shallow excavations and dwellings with basements. A seasonal high water table is perched above the dense substratum drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill with material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a hazard in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to over come the shrink-swell problem with roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This map unit is a fair source of roadfill.

This map unit has moderate limitations for camp areas, picnic areas, and paths and trails. It has severe limitations for playgrounds. The seasonal high water table, slope, large surface stones, and small stones within the soil are the main limitations. The seasonal high water table and slope are factors in developing areas of this soil for use as playgrounds. Drainage, grading, seeding, and mulching is necessary.

This map unit has good potential for woodland wildlife habitat. It has poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9A.

DgD—Dixfield fine sandy loam, 15 to 25 percent slopes, very stony

This map unit is very deep, moderately steep, and moderately well drained. It is on steeper slopes of upland till plains, hills and ridges. Slopes are smooth and slightly concave. Areas are irregular in shape and range from 3 to over 100 acres. Stones cover from 0.l to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, well drained Marlow soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils. Lyman and Tunbridge soils are on higher elevations where bedrock is close to the surface. Marlow soils are on knolls. Colonel and Brayton soils are in seep spots or on lower footslopes. Also included are Dixfield soils with slopes less than 15 percent or greater than 25 percent and areas with less than 0.1 percent or more than 3 percent surface stones. Inclusions make up about l5 percent of the unit.

Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the dense substratum. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is more than 60 inches. The seasonal high water and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland. A few areas are used for pasture.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, the hazard of erosion, the seasonal high water table, the dense substratum, and slope are the main limitations. This map unit is moderately suited to orchards and poorly

suited to cultivated crops if the surface stones are removed. Surface and subsurface drainage will help remove excess water. Surface stone removal is necessary prior to any tillage operations. Stripcropping, contour farming, diversions, cover crops, and green manure crops along with a conservation tillage system also improve the soil and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Slope, a seasonal high water table, and dense substratum are the main limitations. Surface stones and slope restrict the use of farm equipment. This map unit can be used for unimproved pasture if some of the surface stones are removed. If the surface stones are removed this map unit is moderately suited to hay and pasture. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Good yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and rotational grazing help increase production and maintain the quality and quantity of feed and forage. Seedbed preparation should be on the contour or cross the slope where practical.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. A seasonal high water table may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, and European larch.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Fill material may be needed to raise the level of the septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. The seasonal high water table and slope are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill with material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a hazard during construction. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of this soil for some urban uses and may need to be removed prior to any construction. This map unit is a fair source of roadfill.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The seasonal high water table, slope, large surface stones, and small stones within the soil are the main limitations. Extensive grading is necessary when developing areas of this soil for these uses.

This map unit has good potential for woodland wildlife habitat. It has poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 9R.

DMC—Dixfield-Marlow association, strongly sloping, very stony

This map unit is very deep, gently sloping and strongly sloping, moderately well drained and well drained. It is on glaciated uplands. Slopes range from 3 to l5 percent and are commonly long and smooth if not broken by ridges. Areas are irregular in shape and range from 15 to over 300 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Dixfield soils, 35 percent Marlow soils, and 20 percent other soils. The moderately well drained Dixfield soils are on lower less sloping areas. The well drained Marlow soils are on the upper slopes and ridge tops.

Typically, beneath a litter of leaves and twigs, the surface layer of the Dixfield soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Marlow soil is 1 inch of very dark grayish brown highly decomposed organic material underlain by a dark brown fine sandy loam subsurface layer 5 inches thick. The subsoil is 17 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam.

Included with these soils in mapping are small areas of very shallow, excessively drained Abram soils, shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils and areas of Rock outcrop. Tunbridge and Lyman soils are on knobby ridges and other areas where bedrock is near the surface. Abram soils and Rock outcrop are on the upper slopes. Colonel and Brayton soils are on lower, less sloping areas and in depressions. Also included are areas with slopes greater than 15 percent and areas with more than 3 percent of the surface stones.

Dixfield and Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high in the Dixfield soils and moderate in the Marlow soils. Dixfield soils have a perched water table from 1.5 to 2.5 feet below the surface from November through April; Marlow soils have a perched high water table just above the dense substratum for short periods in March and April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the seasonal high water table and the dense substratum in the Dixfield soils and by the dense substratum in the Marlow soils.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table, slope, dense substratum, hazard of erosion, and surface stones are the main limitations. This map unit is moderately suited to orchards and poorly suited to cultivated crops if the surface stones are removed. Surface and subsurface drainage will help to remove excess water. Stripcropping, diversions, cover crops, and green manure crops along with a conservation tillage system also improve the soils and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, a dense substratum, and a seasonal high water table are the main limitations. Surface stones restrict the use of farm equipment. This map unit can be used for unimproved pasture if some of the surface stones are removed. If the surface stones are removed, these soils are moderately suited to hay and pasture. Good yields can be expected with proper applications of lime and fertilizer. Special precautions should be taken to avoid pasturing these soils when they are wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, balsam fir, red spruce, red pine, and white spruce. Its limitations for woodlands are insignificant. The seasonal high water table in the Dixfield soil may limit equipment use for short periods in the spring and fall. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, balsam fir, red spruce, white spruce, and northern hardwoods. Trees to plant are eastern white pine, white spruce, black spruce, red pine, and European larch.

The slow or moderately slow permeability in the substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table in the Dixfield soil are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations for area type sanitary landfills and severe

limitations for sewage lagoons. The slope, the seasonal high water table, and the dense substratum in the Marlow soil are moderate limitations for trench type sanitary landfills, shallow excavations, and dwellings with or without basements. The slope and the seasonal high water table in the Dixfield soil are moderate limitations for dwellings without basements. The seasonal high water table and slope are severe limitations for shallow excavations, dwellings with basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are moderate limitations in the Marlow soil and are severe limitations in the Dixfield soil for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to over come the shrink-swell problem with roads. Surface stones may be a problem when using areas of these soils for some urban uses and may need to be removed prior to any construction. The Dixfield soil is a fair source of roadfill and the Marlow soil is a good source of roadfill.

The Marlow soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Dixfield soil has moderate limitations for camp areas, picnic areas, and paths and trails and severe limitations for playgrounds. Slope, large surface stones, and small stones within the soil and the seasonal high water table in the Dixfield soil are the main limitations. The seasonal high water table in the Dixfield soil and slope in both soils are factors in developing areas of these soils for use as playgrounds. Drainage in the Dixfield soil, grading, seeding, and mulching is necessary.

This map unit has good potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat. The Dixfield soil has poor potential and the Marlow soil has fair potential for openland wildlife habitat.

The land capability classification for both Dixfield and Marlow is 6s. The woodland ordination symbol for Dixfield is 9A and for Marlow is 8A.

DTC—Dixfield-Colonel association, strongly sloping

This map unit consists of very deep, gently sloping to strongly sloping, moderately well drained and somewhat poorly drained soils. It is on areas of glaciated uplands. Most surface stones have been removed. This association is of limited acreage since it was mapped only along the county line of a previously published soil survey. The Dixfield soil has slopes of 3 to 15 percent, and the Colonel soil has slopes of 0 to 15 percent. The slopes are smooth and concave.

This association consists of about 60 percent Dixfield soils, 30 percent Colonel soils, and 10 percent other soils. The moderately well drained Dixfield soils are on the upper slopes. The somewhat poorly drained Colonel soils are on the lower slopes and slight depressions.

Typically, the surface layer of the Dixfield soil is 7 inches of dark brown fine sandy loam. The subsoil is 17 inches thick. It is reddish brown fine sandy loam in the upper part; dark brown fine sandy loam in the middle part; and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Typically, the surface layer of the Colonel soil is 6 inches of dark brown fine sandy loam. The subsoil is 10 inches thick. It is yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown gravelly fine sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of well drained Marlow soils; moderately deep, well drained Tunbridge soils; shallow, somewhat excessively drained Lyman soils; and poorly drained Brayton soils. Tunbridge and Lyman soils are located on knobby ridges and other areas where bedrock is near the surface. Marlow soils are on steeper slopes on higher areas. Brayton soils are in low-lying areas and depressions. Also included are areas with slopes greater than 15 percent.

Dixfield and Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is slow to medium and the erosion hazard is moderate. Available water capacity is high for both soils. Dixfield soils have a perched water table from 1.5 to 2.5 feet below the surface from November through April and

Colonel soils have a perched water table from 0.5 to 1.5 feet below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops. The Dixfield soil is moderately suited to orchards. Slope, a seasonal high water table, dense substratum, and hazard of erosion are the main limitations. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improve infiltration and reduce the hazard of erosion. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Contour farming, stripcropping, and no-till planting help control erosion. Stone removal may be necessary after plowing.

This map unit is moderately suited to hay and pasture. A seasonal high water table and dense substratum are the main limitations. Deferred grazing, rotational grazing and the applying lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high and very high for trees such as eastern white pine, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitation is moderate on the Colonel soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations in the Dixfield soil for area type sanitary landfills and dwellings without basements. The seasonal high water table in the Colonel soil is a severe limitation for these uses. The seasonal high water table and slope are severe limitations if this map unit is used for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This map unit is a fair source for roadfill.

The Dixfield soil has moderate limitations for camp areas, picnic areas, and path and trails and severe limitations for playgrounds. The Colonel soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. Slope, small stones within the soil, and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

The Dixfield soil has good potential for woodland wildlife and openland wildlife and habitat and very poor potential for wetland wildlife habitat. The Colonel soil has fair potential for woodland wildlife habitat, good potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification for Dixfield is 3e and for Colonel is 3w. The woodland ordination symbol for Dixfield is 9A and for Colonel is 8W.

DUD—Dixfield-Colonel association, moderately steep, very stony

This map unit consists of very deep, strongly sloping to steep, moderately well drained and somewhat poorly drained soils. It is on northwest side slopes of glacial till ridges. Slopes range from 8 to 35

percent. Areas are irregular in shape. This association is of limited acreage since it was mapped along the county line of a previously published soil survey. The slopes are slightly concave and convex and are smooth. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 55 percent Dixfield soils, 25 percent Colonel soils, and 20 percent other soils. The moderately well drained Dixfield soils are on the upper slopes. The somewhat poorly drained Colonel soils are on the lower slopes or along drainageways.

Typically, beneath a litter of leaves and twigs, the surface layer of the Dixfield soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Colonel soil is 4 inches of very dusky red, highly decomposed organic material underlain by a pinkish gray, fine sandy loam subsurface layer 2 inches thick. The subsoil is 14 inches thick. It is red fine sandy loam grading to yellowish red fine sandy loam in the upper part, mottled, yellowish brown fine sandy loam in the middle part, and mottled, light olive brown fine sandy loam in the lower part. The substratum is firm, mottled, grayish brown fine sandy loam grading to firm, mottled, grayish brown, gravelly fine sandy loam to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of well drained Marlow soils; moderately deep, well drained Tunbridge soils; shallow, somewhat excessively drained Lyman soils; and a few rock outcrops. Tunbridge and Lyman soils and areas of rock outcrop are located on knobby ridges and other areas where bedrock is near the surface. Marlow soils are on steeper slopes on higher areas. Also included are areas with slopes greater than 35 percent, and areas with more than 3 percent surface stones.

Dixfield and Colonel soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is medium or rapid and the erosion hazard is moderate or severe. Available water capacity is high for both soils. Dixfield soils have a perched water table from 0.5 to 1.5 feet below the surface from November through April and Colonel soils have a perched water table from 1.0 to 2.0 feet below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, a seasonal high water table, dense substratum, hazard of erosion, and surface stones are the main limitations. The Dixfield soil is moderately suited to orchards if the surface stones are removed. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Contour farming, stripcropping, and no-till planting help control erosion. Stone removal may be necessary after plowing.

This map unit is very poorly suited to hay and pasture. Slope, surface stones, dense substratum, and seasonal high water table are the main limitations. Surface stones restrict the use of farm equipment. These soils can be used for unimproved pasture if some of the stones are removed. Deferred grazing, rotational grazing and applying lime and fertilizer improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high and very high for trees such as eastern white pine, red spruce, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard of the Dixfield soil. Equipment limitation is moderate on the Dixfield soil because of slope and moderate on the Colonel soil because of slope and the seasonal high water table. Harvesting is best suited to the winter months on the Colonel soil when the ground is frozen or to the driest months of summer. The seasonal high water table and dense substratum may restrict rooting depth resulting in moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, black spruce, European larch, and tamarack.

The moderately slow or slow permeability in the substratum of these soils, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank

absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Slope and the seasonal high water table are moderate limitations in the Dixfield soil for area type sanitary landfills and dwellings without basements. The seasonal high water table in the Colonel soil is a severe limitation for these uses. The seasonal high water table and slope are severe limitations of these soils for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action is a severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. These soils are a fair source for roadfill.

The Dixfield soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Colonel soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. Slope, large surface stones, small stones within the soil, and the seasonal high water table are the main limitations. Drainage should be provided for any of these uses.

The Dixfield soil has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat. The Colonel soil has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification for both Colonel and Dixfield is 6s. The woodland ordination symbol for Dixfield is 9R and for Colonel is 8W.

ECC—Elliottsville-Chesuncook-Telos association, strongly sloping, very stony

This map unit is moderately deep and very deep, gently sloping to strongly sloping, well drained to somewhat poorly drained. It is on the sides and crests of glacial till ridges. Slopes range from 3 to 15 percent and are concave and convex. Areas are irregular in shape and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 35 percent Elliottsville soils, 25 percent Chesuncook soils, and 20 percent Telos soils. The moderately deep, well drained Elliottsville soils and very deep, moderately well drained Chesuncook soils are on higher, more sloping areas on the landscape. The very deep, somewhat poorly drained Telos soils are on lower, less sloping areas.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic material, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil is 15 inches thick. It is dusky red loam in the upper part, reddish brown and dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31 inches. In some areas the mineral surface layer is silt loam.

Typically, beneath a litter of leaves, twigs, needles, and mosses, the surface layer of the Chesuncook soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam or very fine sandy loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil is 16 inches thick. It is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive

gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included in mapping are shallow, somewhat excessively drained Thorndike and Monson soils; very deep, poorly drained Monarda soils; and areas of rock outcrop. Areas of rock outcrop and Thorndike and Monson soils are on the higher areas on the landscape where bedrock is at or near the surface. Monarda soils are in the lowest and less sloping areas on the landscape. Also included are areas with slopes less than 3 percent or greater than 15 percent, and areas with greater than 3 percent surface stones.

Elliottsville soils have moderate permeability. Chesuncook and Telos soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is slow to medium and the erosion hazard is moderate. Available water capacity is high in both soils. Chesuncook soils have a perched water table from 1.5 to 2.0 feet below the surface from March through May and Telos soils have a perched water table from 0.5 to 1.5 feet below the surface from October through June. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and more than 60 inches in Chesuncook and Telos soils. The seasonal high water table and the dense substratum in many areas of this association restrict rooting depth.

Most areas of these are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, slope, a dense substratum, depth to bedrock, and a seasonal high water table are the main limitations. Elliottsville and Chesuncook soils are moderately suited to cultivated crops and orchards if the surface stones are removed. Surface and subsurface drainage in Chesuncook and Telos soils will help to remove excess water. Using cover crops and grasses and legumes in the cropping system and using a conservation tillage system that leaves some or all of the crop residue on the surface help maintain the organic matter content of the surface layer and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, a dense substratum, and a seasonal high water table are the main limitations. If the surface stones are removed, these soils are moderately suited to hay and pasture. Special care should be taken to avoid pasturing these soils when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The seasonal high water table in the Telos soil is the main limitation. In lower, less sloping areas the seasonal high water table may cause moderate equipment limitations and restrict harvest operations to the winter months when the ground is frozen or to the driest months of summer. Seedling mortality is moderate in the Telos soil because of the seasonal high water table. The seasonal high water table and dense substratum limit rooting depth, resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, black spruce, European larch, and tamarack.

The seasonal high water table and slow permeability in the substratum of the Chesuncook and Telos soils, resulting in a slow percolation rate, and the moderate depth to bedrock in the Elliottsville soil are the main limitations of these soils for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Slope and the depth to bedrock in the Elliottsville soil are moderate limitations for dwellings without basements and severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with basements, and small commercial buildings. Slope and the seasonal high water table in the Chesuncook and Telos soils are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with basements, and small commercial buildings. They are moderate limitation for dwellings without basements in the Chesuncook soil, but are severe limitations in the Telos soil for dwellings without basements. A seasonal high water table is perched above the dense substratum in the Chesuncook and Telos soils and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around

foundations. Erosion is a hazard in areas of these soils. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, a seasonal high water table, depth to bedrock, and frost action are moderate and severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth and constructing roads on the contour will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. The Chesuncook soil is a fair source of roadfill.

The Elliottsville soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Chesuncook soil has moderate limitations for paths and trails, camp areas, and picnic areas and severe limitations for playgrounds. The Telos soil has severe limitations for all recreational uses. The seasonal high water table, slope, large surface stones, small stones within the soil, and the slow permeability in the substratum of the Telos and Chesuncook soil are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for these soils is 6s.

The woodland ordination symbol for Elliottsville is 10A, for Chesuncook is 9A, and for Telos is 8W.

EMC—Elliottsville-Monson complex, rolling, very stony

This map unit is moderately deep and shallow, undulating and rolling, well and somewhat excessively drained. It is on areas of bedrock-controlled hills and ridges. Slopes range from 3 to 15 percent and are concave and convex. Areas are irregular in shape and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 45 percent Elliottsville soils, 30 percent Monson soils, and 25 percent other soils. The moderately deep, well drained Elliottsville soils are on the side slopes and smoother areas on the landscape. The shallow, somewhat excessively drained Monson soils are on the tops and upper slopes of knolls and ridges.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic material, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil is 15 inches thick. It is dusky red loam in the upper part, reddish brown and dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31 inches. In some areas the mineral surface layer is silt loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Monson soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a brown loam subsurface layer 1 inch thick. The subsoil is 16 inches thick. It is dark reddish brown loam in the upper part, yellowish red and dark brown silt loam in the middle part, and light olive brown silt loam in the lower part. Slate bedrock is at 18 inches. In some areas the mineral surface layer is fine sandy loam, very fine sandy loam, or silt loam.

Included with these soils in mapping are small areas of shallow, somewhat excessively drained Thorndike soils, very deep, moderately well drained Chesuncook soils, somewhat poorly drained Telos soils, and poorly drained Monarda soils and areas of rock outcrop. Thorndike soils are on similar positions as the Monson soils but have greater than 35 percent rock fragments. Chesuncook soils are on similar positions on the landscape as Elliottsville soils. Telos and Monarda soils are on less sloping and low areas. Areas of rock outcrop are on the tops of knolls and ridges. Also included are areas with slopes less than 3 percent and greater than 15 percent and areas with greater than 3 percent surface stones.

These soils have moderate permeability. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high for the Elliottsville soils and moderate for the Monson soils. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and between 10 and 20 inches in Monson soils. Rooting depth and water movement is restricted by bedrock.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Depth to bedrock, slope, hazard of erosion, and surface stones are the main limitations. The Elliottsville soil is moderately suited to orchards if the surface stones are removed. Depth to bedrock is variable and equipment operation may be difficult on shallower areas or around bedrock outcroppings. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve the soil structure and

increase the available water capacity and also reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended management practices.

This map unit is very poorly suited to hay and pasture. Surface stones and depth to bedrock are the main limitations. In shallower areas the moderate available water capacity can cause droughtiness and overgrazing of these areas can result in erosion. Proper stocking rates, pasture rotation, and restricted grazing during droughty periods helps keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. Depth to bedrock is the main limitation. Seedling mortality is moderate in the Monson soil because of limited rooting depth. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvest to limit the exposure of the remaining trees to the prevailing winds. There is moderate plant competition in the Elliottsville soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and tamarack.

Depth to bedrock in this map unit is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading and filling may be needed when installing septic tank absorption fields. In some areas, the impermeability of the bedrock causes effluent from the septic tank absorption field to surface in downslope areas and thus create a health hazard either in this unit or another unit. Slope and depth to bedrock are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. These are moderate limitations for dwellings without basements in areas of the Elliottsville soils. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Frost action is a concern for foundations. Using back fill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Depth to bedrock, slope, and frost action are moderate and severe limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth and constructing roads on the contour will help to overcome the shrink-swell problem for roads. .

The Elliottsville soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Monson soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The depth to bedrock in the Monson soil, slope, large surface stones, and small stones within the soil are the main limitations.

The Elliottsville soil has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat. The Monson soil has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification is 6s for both soils. The woodland ordination symbol for Elliottsville is 10A and for Monson is 8D.

EME—Elliottsville-Monson complex, steep, very stony

This map unit is moderately deep and shallow, hilly and steep, and well and somewhat excessively drained. It is on side slopes and tops of bedrock-controlled hills and ridges. Slopes range from 15 to 30 percent and are concave and convex. Areas are irregular in shape and range from 15 to over 300 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 45 percent Elliottsville soils, 35 percent Monson soils, and 20 percent other soils. The moderately deep, well drained Elliottsville soils are on the side slopes and smoother areas. The shallow, somewhat excessively drained Monson soils are on the tops and upper slopes of knolls and ridges.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic material, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil is 15 inches thick. It is dusky red loam in the upper part, reddish brown and dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31

inches. In some areas the mineral surface layer is silt loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Monson soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a brown loam subsurface layer 1 inch thick. The subsoil is 16 inches thick. It is dark reddish brown loam in the upper part, yellowish red and dark brown silt loam in the middle part, and light olive brown silt loam in the lower part. Slate bedrock is at 18 inches. In some areas the mineral surface layer is fine sandy loam, very fine sandy loam, or silt loam.

Included in mapping are small areas of shallow, somewhat excessively drained Thorndike soils; very deep, moderately well drained Chesuncook soils; somewhat poorly drained Telos soils; and areas of rock outcrop. Thorndike soils are on similar positions as the Monson soils but have greater than 35 percent rock fragments. Chesuncook soils are on similar positions in the landscape as Elliottsville. Telos soils are on less sloping and low lying areas. Areas of rock outcrop are on the tops of knolls and ridges. Also included are areas with slopes less than 15 percent or greater than 30 percent, and areas with greater than 3 percent surface stones.

This map unit has moderate permeability. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is high for the Elliottsville soils and moderate for the Monson soils. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and between 10 and 20 inches in Monson soils. Rooting depth and water movement are restricted by the bedrock.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops, orchards, hay, and pasture. Depth to bedrock, slope, surface stones, and hazard of erosion are the main limitations. These limitations prohibit the use of these soils for these uses.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. Slope and depth to bedrock are the main limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitation is moderate because of slope. Seedling mortality is moderate in the Monson soil because of the restricted rooting depth. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit the exposure of the remaining trees to the prevailing winds. There is moderate plant competition in the Elliottsville soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and tamarack.

Depth to bedrock and slope are the main limitations of this map unit for most urban uses including septic tank absorption fields, sewage lagoons, sanitary landfills, shallow excavations, commercial building, dwellings with or without basements, and local roads and streets. In most cases developing areas of these soils for urban uses is too costly and impractical. Frost action is an additional consideration for foundations and roads and streets.

Both soils have moderate limitations for paths and trails and severe limitations for picnic areas, camp areas, and playgrounds. Slope, large surface stones, small stones within the soil and depth to bedrock in the Monson soil are the main limitations.

The Elliottsville soil has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat. The Monson soil has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 6s for both soils. The woodland ordination symbol for Elliottsville is 10R and for Monson is 8R.

EtB—Elliottsville-Thorndike complex, 3 to 8 percent slopes

This map unit is moderately deep and shallow, gently sloping, and well drained and somewhat excessively drained. It is on crests and side slopes of upland, glacial till ridges. Slopes are smooth or slightly undulating. Areas are irregular in shape and range from 3 to 100 acres.

Units of this complex consist of about 55 percent Elliottsville soils and 30 percent Thorndike soils. The moderately deep, well drained Elliottsville soils are on the side slopes and smoother areas and the shallow to bedrock, somewhat excessively drained Thorndike soils are on higher elevations in the landscape. Inclusions make up about 15 percent of the unit.

Typically, the surface layer of the Elliottsville soil is 6 inches of very dark grayish brown loam. The subsoil is 11 inches thick. It is reddish brown gravelly loam in the upper part, dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 30 inches. In some areas the surface layer is silt loam.

Typically, the surface layer of the Thorndike soil is 6

inches of channery dark brown loam. The subsoil is 5 inches thick. It is brown very channery loam. Fractured slate bedrock is at 11 inches. In some areas the surface layer is silt loam.

Included in mapping are small areas of very deep, moderately well drained Chesuncook soils and somewhat poorly drained Telos soils, and areas of rock outcrop. Areas of rock outcrop are generally higher on the landscape and Chesuncook and Telos soils are lower on the landscape. Also included are Thorndike and Elliottsville soils with slopes less than 3 percent or greater than 8 percent.

This map unit has moderate permeability. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high in Elliottsville soils and very low in Thorndike soils. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and between 10 and 20 inches in Thorndike soils.

Most areas of this map unit are used for woodland. A few areas are used for hay and pasture.

This map unit is moderately suited to cultivated crops. Elliottsville is moderately suited to orchards and Thorndike is poorly suited to orchards. Depth to bedrock and very low available water capacity in the Thorndike soils are the main limitations. Depth to bedrock is variable and equipment operation may be difficult on shallower areas or around bedrock outcroppings. In shallower areas, the very low available water capacity can cause droughtiness. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface will improve the soil structure and increase the available water capacity.

This map unit is moderately suited to hay and pasture. Depth to bedrock and very low available water capacity of the Thorndike soils are the main limitations. The very low available water capacity can cause droughtiness and overgrazing of these areas can result in erosion. Proper stocking rates, pasture rotation, and restricted grazing during droughty periods help keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, red spruce, balsam fir, white spruce, and red spruce. Depth to bedrock and very low available water capacity of the Thorndike soils are the main limitations. Seedling mortality is moderate in the Thorndike soil because of the shallow rooting depth and very low available water capacity of the Thorndike soils, but can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition in Elliottsville soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, European larch and tamarack.

Depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. In some areas, the impermeability of the bedrock causes effluent from the septic tank absorption field to seep to the surface on a lower part of the slope, either in this unit or another unit. Depth to bedrock is a moderate limitation for dwellings without basements and small commercial buildings and a severe limitation for sewage lagoons, sanitary landfills, shallow excavations, and dwellings with basements. Using back fill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action and depth to bedrock are the main limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads.

The Elliottsville soil has slight limitations for camp areas, picnic areas, and paths and trails and moderate limitations for playgrounds. The Thorndike soil has slight limitations for paths and trails and severe limitations for picnic areas, camp areas and playgrounds. The depth to bedrock, small stones within the soil, and slope are the main limitations.

The Elliottsville soil has good potential for openland wildlife and woodland wildlife habitat. The Thorndike soil has fair potential for openland wildlife habitat and poor potential for woodland wildlife habitat. Both soils have very poor potential for wetland wildlife habitat.

The land capability classification is 2e for both soils. The woodland ordination symbol for Elliottsville is 10A and for Thorndike is 8D.

EtC—Elliottsville-Thorndike complex, 8 to 15 percent slopes

This map unit is moderately deep and shallow, strongly sloping, and well drained and somewhat excessively drained. It is on crests and sides of

upland, glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to 100 acres.

Units of this complex consist of about 55 percent Elliottsville soils and 30 percent Thorndike soils, and 15 percent other soils. The moderately deep, well drained Elliottsville soils are on the side slopes and the shallow, somewhat excessively drained Thorndike soils are on the tops and upper side slopes of knolls and ridges.

Typically, the surface layer of the Elliottsville soil is 6 inches of very dark grayish brown loam. The subsoil is 11 inches thick. It is reddish brown gravelly loam in the upper part, dark brown gravelly loam in the middle part and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 30 inches. In some areas the surface layer is silt loam.

Typically, the surface layer of the Thorndike soil is 6 inches of channery dark brown loam. The subsoil is 5 inches thick. It is brown very channery loam. Fractured slate bedrock is at 11 inches. In some areas the surface layer is silt loam.

Included with these soils in mapping are small areas of very deep, moderately well drained Chesuncook soils, somewhat poorly drained Telos soils, and areas of rock outcrop. Areas of rock outcrop are generally higher on the landscape and Chesuncook and Telos soils are on lower elevations on the landscape. Also included are Thorndike and Elliottsville soils with slopes less than 8 percent or greater than 15 percent.

These soils have moderate permeability. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high in the Elliottsville soils and very low in the Thorndike soils. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and between 10 and 20 inches in Thorndike soils. Rooting depth and water movement is restricted by bedrock.

Most areas of this map unit are used for woodland. A few areas are used for hay and pasture.

This map unit is moderately suited to cultivated crops. The Elliottsville soil is moderately suited to orchards and the Thorndike soil is poorly suited to orchards. Depth to bedrock, slope, and very low available water capacity of the Thorndike soils are the main limitations. Depth to bedrock is variable and equipment operation may be difficult on shallower areas or around bedrock outcroppings. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve the soil structure and increase the available water capacity and reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended.

This map unit is moderately suited to hay and pasture. Depth to bedrock and very low available water capacity of the Thorndike soils are the main limitations. The very low available water capacity can cause droughtiness and overgrazing of these areas can result in erosion. Proper stocking rates, pasture rotation, and restricted grazing during droughty periods help keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. Depth to bedrock and very low available water capacity in the Thorndike soils are the main limitations. Seedling mortality is moderate in the Thorndike soil because of the shallow rooting depth and very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition in Elliottsville soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and tamarack.

Depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, impermeability of the bedrock causes effluent from the septic tank absorption field to seep to the surface on a lower part of the slope, either in this unit or another unit. Slope and depth to bedrock are moderate limitations for dwellings without basements and severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with basements, and small commercial buildings. Using back fill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible

helps to control soil erosion. Slope, depth to bedrock, and frost action are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction and constructing roads on the contour will help to overcome the shrink-swell problem for roads and erosion.

The Elliottsville soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Thorndike soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas and playgrounds. Slope, depth to bedrock, small stones within the soil and large surface stones are the main limitations.

The Elliottsville soil has good potential for openland wildlife habitat and woodland wildlife habitat. The Thorndike soil has fair potential for openland wildlife habitat and poor potential for woodland wildlife habitat. These soils have very poor potential for wetland wildlife habitat.

The land capability classification is 3e for both soils. The woodland ordination symbol for Elliottsville is 10A and for Thorndike is 8D.

EtD—Elliottsville-Thorndike complex, 15 to 25 percent slopes

This map unit is moderately deep and shallow, moderately steep, well drained and somewhat excessively drained. It is on crests and sides of upland, glacial till ridges. Slopes are smooth and convex. Areas are irregular in shape and range from 3 to over 100 acres.

Units of this complex consist of about 55 percent Elliottsville soils, 30 percent Thorndike soils and 15 percent other soils. The moderately deep, well drained Elliottsville soils are on the side slopes of knolls and ridges and the Thorndike soils are on the upper side slopes and tops of ridges.

Typically, the surface layer of the Elliottsville soil is 6 inches of very dark grayish brown loam. The subsoil is 11 inches thick. It is reddish brown gravelly loam in the upper part, dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 30 inches. In some areas the surface layer is silt loam.

Typically, the surface layer of the Thorndike soil is 6 inches of channery dark brown loam. The subsoil is 5 inches thick. It is brown very channery loam. Fractured slate bedrock is at 11 inches. In some areas the surface layer is silt loam.

Included in mapping are small areas of very deep, moderately well drained Chesuncook soils and areas of rock outcrop. Areas of rock outcrop are generally higher on the landscape and Chesuncook soils are lower on the landscape. Also included are Thorndike and Elliottsville soils with slopes less than 15 percent or greater than 25 percent.

This map unit has moderately permeability. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is high in Elliottsville soils and very low in Thorndike soils. Depth to bedrock is between 20 and 40 inches in Elliottsville soils and between 10 and 20 inches in Thorndike soils. Rooting depth and water movement is restricted by bedrock.

Most areas of this map unit are used for woodland. A few areas are used for hay and pasture.

This map unit is poorly suited to cultivated crops and the Elliottsville soil is moderately suited to orchards. Depth to bedrock, slope, and hazard of erosion are the main limitations. Equipment operation may be difficult on shallower areas and around bedrock outcropping. The very low available water capacity in the Thorndike soils can cause droughtiness.

Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve the soil structure and increase the available water capacity and reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended.

This map unit is moderately suited to hay and pasture. Depth to bedrock, slope, and very low available water capacity in the Thorndike soils are the major limitations. The very low available water capacity in the Thorndike soils can cause droughtiness and overgrazing of these areas can result in erosion. Planting and reseeding to establish sod is difficult because of slope. Seedbed preparation should be on the contour or across the slope where practical. Proper stocking rates, pasture rotation, and restricted grazing during droughty periods helps keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. Slope, depth to bedrock, and very low available water capacity in the Thorndike soils are the main limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitation is moderate because of slope. Seedling mortality is moderate in the Thorndike soil

because of the shallow rooting depth and very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition in Elliottsville soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and paper birch. Other trees to plant are European larch and tamarack.

Depth to bedrock and slope are the main limitations if this map unit is used for most urban uses including septic tank absorption fields, sewage lagoons, sanitary landfills, shallow excavations, commercial building, dwellings with or without basements, and local roads and streets. In most cases developing areas of these soils for urban uses is too costly and impractical. Frost action is an additional concern for foundations and roads and streets.

Both soils have moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope, depth to bedrock, small stones within the soil and large surface stones are the main limitations.

This Elliottsville soil has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. The Thorndike soil has fair potential for openland wildlife habitat and poor potential for woodland wildlife habitat. Both soils have very poor potential for wetland wildlife habitat.

The land capability classification is 4e for both soils. The woodland ordination symbol for Elliottsville soils is 10R and for Thorndike soils is 8D.

Fr—Fryeburg silt loam

This map unit is very deep, nearly level, and well drained. It is on flood plains of major rivers and streams. Slopes are smooth and slightly convex, and range from 0 to 3 percent. Areas are elongated or oval in shape and range from 3 to over 90 acres in size.

Typically, the surface layer is 10 inches of brown silt loam. The subsoil is 25 inches thick. It is yellowish brown silt loam. The substratum is yellowish brown loamy very fine sand grading to light brownish gray very fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam and some areas have stratified substrata.

Included in mapping are small areas of somewhat excessively drained Adams soils, moderately well drained Lovewell soils, and excessively drained Sunday soils. Adams soils do not flood and are coarser textured, they are on higher knolls or adjacent terraces within the unit. Lovewell soils are in slight depressions within the unit and Sunday soils are along the margin of fields next to watercourses. Also included are small areas of coarser textured alluvial soils. Inclusions make up about 20 percent of the unit.

Fryeburg soils have moderate permeability. Surface runoff is medium and erosion is a slight hazard. Available water capacity is high. This soil is subject to flooding less frequently than once in two years during spring runoff or periods of heavy rain from March through October. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for cropland, primarily silage and grain corn, dry beans, and potatoes. Considerable acreage is also used for hay and pasture.

This map unit is suited for cultivated crops. The normal period of flooding is during the peak runoff from snowmelt and heavy rainfall, before planting time, and it is unlikely that flooding will occur during the growing season. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration and protect the soil during flooding.

This map unit is suited to hay and pasture. If flooding occurs, additional alluvial deposits may result in damage to the grasses and legumes. Spring flooding sometimes damages plants and decreases yields. Streambanks should be protected from erosion by fencing out cattle and maintaining a vegetative cover.

The potential productivity of this map unit is very high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodlands are insignificant. Some trees may be uprooted or girdled by ice when flooding occurs during the winter. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are eastern white pine, red spruce, white spruce, European larch, Japanese larch, and tamarack.

Periodic flooding of this map unit is the main limitation for most urban uses. In most cases developing areas of this map unit for urban uses is too costly and impractical. Flood control measures are costly and generally impractical. Permanent structures, unless adequately protected, are subject to damage or destruction by occasional flooding. Roads and streets should be located above the expected flood level to prevent damage. This soil is a good source of roadfill and a fair source of topsoil.

This map unit has slight limitations for picnic areas, playgrounds, and paths and trails and severe limitations for camp areas because of occasional flooding.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 1. The woodland ordination symbol is 10A.

HeC—Hermon fine sandy loam, 3 to l5 percent slopes, very stony

This map unit is very deep, gently sloping and strongly sloping or rolling, and somewhat excessively drained. It is on the side slopes of till plains, hills, and ridges. Slopes are usually smooth and convex. Areas are oval or irregular in shape and range from 3 to over 80 acres in size. Stones cover from 0.1 to 3 percent of the surface.

Typically, the surface layer is 1 inch of very dark gray highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil is 17 inches thick. It is dark reddish brown fine sandy loam in the upper part, yellowish red fine sandy loam in the middle part, and yellowish red gravelly sandy loam in the lower part. The substratum is dark yellowish brown very gravelly loamy sand grading to olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam.

Included in mapping are small areas of well drained Berkshire, Marlow soils, and Monadnock soils, excessively drained Colton soils, and shallow, somewhat excessively drained Lyman soils. Berkshire and Marlow soils have finer textures in the substratum. Monadnock soils have finer textured subsoil. These soils are on similar positions on the landscape as the Hermon soil. Colton soils are stratified in the substratum and Lyman soils are shallow to bedrock. These soils are on higher positions on the landscape. Also included are Hermon soils with slopes greater than 15 percent. Inclusions make up about 15 percent of the unit.

Hermon soils have moderately rapid or rapid permeability in the solum and rapid or very rapid permeability in the substratum. Surface runoff is slow or medium and the erosion hazard is moderate. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland with a small amount used for pasture. Some small areas have been cleared and are used for low bush blueberries.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, slope, and hazard of erosion are the main limitations. The surface stones interfere with tillage operations and this soil has a potential erosion hazard because of slope. This soil is moderately suited to cultivated crops and orchards if the surface stones are removed. Irrigation is necessary during droughty periods. Crop residue left on or near the surface helps conserve moisture, maintains tilth, and control erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended management practices.

This map unit is very poorly suited to hay and pasture. Surface stones are the main limitation and this soil tends to become droughty during the summer months. This soil is suited to hay and pasture if the surface stones are removed. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during droughty periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and red pine. Droughtiness is the main limitation. Seedling mortality is moderate because of the low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, red pine, and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid or very rapid permeability in the substratum, resulting in poor filtering action, is the main limitation if this map unit is used for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of groundwater contamination. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills and there is a possibility of groundwater contamination because of the poor filtering action of the substratum. Slope and large stones are moderate limitations for dwellings with or without basements and local roads and streets. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Slope is a severe limitation for small commercial buildings. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas

around construction sites as soon as possible helps to control soil erosion. Building roads on the contour will help reduce erosion. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. Surface stones may be a problem when using this map unit for some urban uses and they may need to be removed prior to any construction. This soil is a fair source of roadfill because of the large stones and is a probable source of sand and gravel.

This map unit has moderate limitations for camp areas, picnic areas, and paths and trails and severe limitations for playgrounds. Large surface stones, small stones within the soil are the main limitations. Stone removal and grading, seeding and mulching are necessary in preparing these areas of this soil for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 7S.

HeD—Hermon fine sandy loam, l5 to 25 percent slopes, very stony

This map unit is very deep, moderately steep and hilly, and somewhat excessively drained. It is on the side slopes of upland plains, hills, and ridges. Slopes are usually smooth and convex. Areas are oval or irregular in shape and range from 3 to over l75 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, the surface layer is 1 inch of very dark gray highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil is 17 inches thick. It is dark reddish brown fine sandy loam in the upper part, and yellowish red fine sandy loam in the middle part, and yellowish red gravelly sandy loam in the lower part. The substratum is dark yellowish brown very gravelly loamy sand grading to olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam.

Included with this soil in mapping are small areas of well drained Berkshire, Marlow, and Monadnock soils, excessively drained Colton soils, and shallow, somewhat excessively drained Lyman soils. Berkshire and Marlow soils have finer textures in the substratum. Monadnock soils have a finer textured subsoil. These soils are on similar positions on the landscape as Hermon soils. Colton soils are stratified and Lyman soils are shallow to bedrock. These soils are on higher positions on the landscape. Also included are Hermon soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 15 percent of the unit.

Hermon soils have moderately rapid or rapid permeability in the solum and rapid or very rapid permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland with a small amount used for pasture.

This map unit is very poorly suited to cultivated crops and orchards. Slope, surface stones, and hazard of erosion are the main limitations. The surface stones interfere with tillage operations and this map unit has a potential hazard of erosion because of slope. This map unit is moderately suited to cultivated crops and orchards if the surface stones are removed. Irrigation is necessary during droughty periods. Crop residue left on or near the surface helps conserve moisture, maintains tilth, and control erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended management practices.

This map unit is very poorly suited to hay and pasture. Slope and surface stones are the main limitations. This map unit tends to become droughty during the summer months. This map unit is moderately suited to hay and pasture if the surface stones are removed. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during droughty periods helps to keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and red pine. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Seedling mortality is moderate because of the low available water holding capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, red pine, and sugar maple. Trees to plant are eastern white pine, red pine, and European larch.

The rapid or very rapid permeability in the substratum, resulting in poor filtering action, and slope are the main limitations if this map unit is used for septic tank absorption fields. If this soil is used for

septic tank absorption fields, there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills and there is a possibility of groundwater contamination because of the poor filtering action of the substratum. Slope and large stones are severe limitations for dwellings with or without basements, small commercial buildings, and local roads and streets. Because of the unstable substratum and slope, sloughing is a severe limitation in shallow excavations. Erosion is a concern and only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Building roads on the contour will help reduce erosion. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. Surface stones may be a problem when using this soil for some urban uses and they may need to be removed prior to any construction. This map unit is a fair source of roadfill because of the large stones and is a probable source of sand and gravel.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope, large surface stones and small stones within the soil are the main limitations. Stone removal and grading are recommended when using areas of this soil for these recreational uses.

This map unit has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat habitat.

The land capability classification is 6s. The woodland ordination symbol is 7R.

HMC—Hermon-Monadnock association, rolling, very stony

This map unit is very deep, undulating and rolling, somewhat excessively drained and well drained. It is on knobs and ridges in valleys. Slopes range from 3 to 15 percent and are generally complex. Areas are oblong or slightly elongated and range from 15 to over 200 acres. Stones and boulders cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 40 percent Hermon soils, 30 percent Monadnock soils, and 30 percent other soils. The somewhat excessively drained Hermon soils and the well drained Monadnock soils are on similar positions.

Typically, the surface layer of the Hermon soil is 1 inch of very dark gray highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil is 17 inches thick. It is dark reddish brown fine sandy loam in the upper part, yellowish red fine sandy loam in the middle part, and yellowish red gravelly sandy loam in the lower part. The substratum is dark yellowish brown very gravelly loamy sand grading to olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Typically, beneath a litter of leaves, twigs, and needles, the surface layer of the Monadnock soil is 3 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 22 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown gravelly fine sandy loam in the middle part, and dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; very deep, well drained Berkshire and Marlow soils; moderately well drained Dixfield soils; and small areas of rock outcrop. Some areas of these soils are above 2,300 feet in elevation where the soil temperatures are colder than allowed for these soils. Lyman and Tunbridge soils are on bedrock controlled knobs and ridges. Berkshire soils are on similar positions as the Hermon and Monadnock soils but lack the coarse textured substratum. Dixfield and Marlow soils lack the coarse textures and have a dense substratum and are on more level areas and in depressions. Areas of rock outcrop are randomly throughout some units. Also included are areas with slopes less than 8 percent or greater than 15 percent and a few areas with less than 0.1 percent or more than 3 percent surface stones and boulders.

Hermon soils have moderately rapid or rapid permeability in the solum and rapid or very rapid permeability in the substratum. Monadnock soils have moderate permeability in the solum and moderately rapid permeability in the substratum. Surface runoff is slow or medium and erosion is a moderate hazard.

Available water capacity is low in Hermon soils and moderate in Monadnock soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, slope, and hazard of erosion are the main limitations. The surface stones interfere with tillage operations and these soils have a potential hazard of erosion because of slope. This map unit is moderately suited to cultivated crops and orchards if the surface stones are removed. Irrigation is necessary during droughty periods. Crop residue left on or near the surface helps conserve moisture, maintains tilth, and control erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended management practices.

This map unit is very poorly suited to hay and pasture. Surface stones are the major limitation. This map unit is suited to hay and pasture if the surface stones are removed. This map unit tends to become droughty during the summer months. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods helps keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and red pine. Droughtiness is the main limitation. Seedling mortality is moderate in the Hermon soil, because of low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Plant competition is moderate in the Monadnock soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, sugar maple, and northern red oak. Trees to plant are eastern white pine, red pine, and European larch.

The rapid or very rapid permeability in the substratum of the Hermon soil, resulting in poor filtering action, and slope are the main limitations of these soils for septic tank absorption fields. If these soils are used for septic tank absorption fields there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills and there is a possibility of groundwater contamination because of the poor filtering action of the substratum in the Hermon soil. Slope and large stones are moderate limitations for dwellings with or without basements and local roads and streets. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Slope is a severe limitation for small commercial buildings and erosion is a concern. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Building roads on the contour will help reduce erosion. Droughtiness of the Hermon soil is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. Surface stones may be a problem when using this soil for some urban uses and they may need to be removed prior to any construction. Monadnock is a good source of roadfill and a probable source of sand, while Hermon is a fair source of roadfill because of the large stones and is a probable source of sand and gravel.

The Monadnock soil has slight limitations for paths and trails, moderate limitations for camp areas, picnic areas, and severe limitations for playgrounds. The Hermon soil has moderate limitations for camp areas, picnic areas, and paths and trails and severe limitations for playgrounds. Large surface stones, small stones within the soil and slope are the main limitations. Stone removal, grading, seeding and mulching are necessary when preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod on the Hermon soil during the droughty summer months.

The Hermon soil has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Monadnock soil has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. Both soils have very poor potential for wetland wildlife habitat.

The land capability classification is 6s for both soils. The woodland ordination symbol for Hermon is 7S and for Monadnock is 8A.

HME—Hermon-Monadnock association, steep, very stony

This map unit is very deep, moderately steep and steep, somewhat excessively drained to well drained. It is on steep valley sides. Slopes range from 15 to 45 percent. Areas are oblong or slightly elongated and range from 15 to over 200 acres. Stones and boulders cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 40 percent Hermon soils, 30 percent Monadnock soils, and 30

percent other soils. The somewhat excessively drained Hermon soils and the well drained Monadnock soils are on similar positions.

Typically, the surface layer of the Hermon soil is 1 inch of very dark gray highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil is 17 inches thick. It is dark reddish brown fine sandy loam in the upper part, yellowish red fine sandy loam in the middle part, and yellowish red gravelly sandy loam in the lower part. The substratum is dark yellowish brown very gravelly loamy sand grading to olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Typically, beneath a litter of leaves, twigs, and needles, the surface layer of the Monadnock soil is 3 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 22 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown gravelly fine sandy loam in the middle part, and dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils; moderately deep, well drained Tunbridge soils; very deep, well drained Berkshire and Marlow soils; and moderately well drained Dixfield soils; and areas of rock outcrop. Some areas of this map unit are above 2,300 feet in elevation where the soil temperatures are colder than allowed for these soils. Lyman and Tunbridge soils are on bedrock controlled knobs and ridges. Berkshire soils are on similar positions as Hermon and Monadnock soils but lack the coarse textured substratum. Dixfield and Marlow soils have a dense substratum and are on more level areas and in depressions. Areas of rock outcrop are randomly throughout some units. Also included are areas with slopes less than 15 percent or greater than 45 percent and areas with less than 0.1 or more than 3 percent surface stones and boulders.

Hermon soils have moderately rapid or rapid permeability in the solum and rapid or very rapid permeability in the substratum. Monadnock soils have moderate permeability in the solum and moderately rapid permeability in the substratum. Surface runoff is medium to rapid and erosion is a severe hazard. Available water capacity is low in Hermon soils and moderate in Monadnock soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops, orchards, hay, and pasture. Slope, surface stones, and hazard of erosion are the main limitations. The surface stones interfere with tillage operations and these soils have a potential hazard of erosion because of slope and tend to become droughty during the summer months. Less sloping areas of these soils are moderately suited to hay and pasture when the surface stones are removed. Crop residue left on or near the surface helps conserve moisture, maintains tilth, and control erosion. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during droughty periods helps to keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and red pine. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are moderate because of slope. Seedling mortality is moderate in the Hermon soil because of the low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Plant competition is moderate in the Monadnock soil, but seedlings will survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, sugar maple, and northern red oak. Trees to plant are eastern white pine, red pine, white spruce, and European larch.

Slope and the rapid or very rapid permeability in the substratum of the Hermon soil, resulting in poor filtering action, is the main limitation of this map unit for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Costly and extensive grading may be needed when installing a septic tank absorption field. Slope and seepage are severe limitations for sewage lagoons and sanitary landfills and there is a possibility of groundwater contamination because of the poor filtering action of the substratum in the Hermon soil. Slope and large stones are severe limitations for dwellings with or without basements, small commercial buildings, and local roads and streets. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Erosion is a concern. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion.

Building roads on the contour will help reduce erosion, but it can be costly. Droughtiness of the Hermon soil is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. Surface stones may be a problem when using this soil for some urban uses and they may need to be removed prior to any construction. Monadnock is a good source of roadfill and a probable source of sand, while Hermon is a fair source of roadfill because of the large stones and is a probable source of sand and gravel.

Both soils have severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope, large surface stones, and small stones within the soil and the main limitations.

The Hermon soil has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Monadnock soil has good potential for woodland wildlife habitat and poor potential for openland wildlife. Both soils have very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 7s. The woodland ordination symbol for Hermon is 7R and for Monadnock is 8R.

Lc—Lovewell-Cornish complex, occasionally flooded

This map unit is very deep, nearly level, moderately well and somewhat poorly drained. It is on flood plains along major rivers and streams. Slopes are smooth and range from 0 to 2 percent. Areas are irregular in shape and range from 3 to over 40 acres.

This unit consists of about 55 percent Lovewell soils, 25 percent Cornish soils and 20 percent other soils. The moderately well drained Lovewell soils are at higher elevations on flood plains than the somewhat poorly drained Cornish soils.

Typically, the surface layer of the Lovewell soil is 11 inches of dark brown very fine sandy loam. The subsoil is 12 inches thick. It is light olive brown very fine sandy loam. The substratum is mottled, light olive brown and light brownish gray very fine sandy loam grading to mottled, brown silt loam to a depth of 65 inches or more. In some areas the surface layer is silt loam.

Typically, the surface layer of the Cornish soil is 8 inches of dark brown very fine sandy loam. The subsoil is 27 inches thick. It is mottled, olive brown very fine sandy loam in the upper part and light olive brown very fine sandy loam in the lower part. The substratum is mottled, olive, and olive gray silt loam, grading to olive gray loamy fine sand to a depth of 65 inches or more. In some areas the surface layer is silt loam.

Included with these soils in mapping are small areas of well drained Fryeburg soils, poorly drained Charles soils, and very poorly drained Medomak soils. Fryeburg soils are on knolls within the unit. Charles and Medomak soils are in depressions. Also included are small areas of coarser textured alluvial soils.

Lovewell soils have moderate permeability and Cornish soils have moderate permeability in the surface, subsoil, and upper part of the substratum, and moderate to very rapid permeability in the lower part of the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. Cornish soils have a seasonal high water table at a depth of 0.5 to 1.5 feet below the surface from November through May and Lovewell soils have a seasonal high water table at a depth of 1.5 to 3.0 feet below the surface from November through May, unless flooded. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth. Flooding occurs less frequently than once in two years during spring runoff or periods of heavy rainfall from March through October.

Most areas of this map unit are used for corn silage, potatoes, and dry beans. Considerable acreage is also used for hay and pasture.

This map unit is well suited or moderately suited to cultivated crops. Flooding and a seasonal high water table are the main limitations. Flooding is a hazard during some growing seasons. The seasonal high water table causes these soils to warm slowly in the spring, delaying planting. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration and reducing the hazard of erosion.

This map unit is suited to hay and pasture. Spring flooding may damage plants and reduce yields. A seasonal high water table is the major limitation. Special precautions should be taken to avoid pasturing these soils when wet in order to avoid compaction and punching of the sod. Deferred grazing and rotation grazing help increase production.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. The seasonal high water table is the main limitation. Equipment limitation is moderate on the Cornish soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. Some trees

may be uprooted or girdled by ice where flooding occurs during the winter. The seasonal high water table may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and red maple. Trees to plant are eastern white pine, red spruce, white spruce, black spruce, European larch, and tamarack.

The seasonal high water table and periodic flooding are the main limitations for most urban uses. In most cases, developing areas of this map unit for urban uses is too costly and impractical. Flood control measures are costly and generally impractical. Permanent structures are subject to damage or destruction by occasional flooding. Roads and streets should be located above the expected flood level to prevent damage. Both soils are a fair source of roadfill. The Cornish soil is a probable source of sand and good source of topsoil while the Lovewell soil is a fair source of topsoil.

The Lovewell soil has moderate limitations for picnic areas, playgrounds, and paths and trails and severe limitations for camp areas. The Cornish soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. Periodic flooding and the seasonal high water table are the main limitations.

The Lovewell soil has good potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat. The Cornish soil has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for Lovewell is 2w and for Cornish is 3w. The woodland ordination symbol for Lovewell is 10A and for Cornish is 8W.

Ld—Lovewell-Cornish complex, frequently flooded

This map unit is very deep, nearly level, and moderately well and somewhat poorly drained. It is on the low bottoms on the floodplains of major rivers and streams. Slopes are smooth and range from 0 to 2 percent. Areas are irregular in shape and range from 3 to over 40 acres.

Units of this complex consist of about 45 percent Lovewell soils, 35 percent Cornish soils and 20 percent other soils. The moderately well drained Lovewell soils are at higher elevations in the landscape than the somewhat poorly drained Cornish soils.

Typically, the surface layer of the Lovewell soil is 11 inches of dark brown very fine sandy loam. The subsoil is 12 inches thick. It is light olive brown very fine sandy loam. The substratum is mottled, light olive brown and light brownish gray very fine sandy loam grading to mottled, brown silt loam to a depth of 65 inches or more. In some areas the surface layer is silt loam.

Typically, the surface layer of the Cornish soil is 8 inches of dark brown very fine sandy loam. The subsoil is 27 inches thick. It is mottled, olive brown very fine sandy loam in the upper part and light olive brown very fine sandy loam in the lower part. The substratum is mottled, olive and olive gray silt loam grading to olive gray loamy fine sand to a depth of 65 inches or more. In some areas the surface layer is silt loam.

Included in mapping are small areas of well drained Fryeburg soils, poorly drained Charles soils, and very poorly drained Medomak soils. Fryeburg soils are on knolls. Charles and Medomak soils are in depressions. Also included are small areas of coarser textured alluvial soils.

Lovewell soils have moderate permeability and Cornish soils have moderate permeability in the surface, subsoil and upper part of the substratum, and moderate to very rapid permeability in the lower part of the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. Cornish soils have a seasonal high water table at a depth of 0.5 to 1.5 feet below the surface from November through May and Lovewell soils have a seasonal high water table at a depth of 1.5 to 3.0 feet below the surface from November through May, unless flooded. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth. Flooding occurs more frequently than once in two years during spring runoff or periods of heavy rainfall from March through October.

Most areas of these soils are used for corn silage, potatoes, and dry beans. Considerable acreage is also used for hay and pasture.

These soils are poorly suited to cultivated crops. Flooding and a seasonal high water table are the main limitations. Flooding normally occurs before fields are planted and crops can be grown successfully in most years. Under abnormal conditions flooding can occur at other times of the year. A seasonal high water table causes these soils to warm slowly in the spring, delaying planting. Using cover crops in the cropping system and a conservation tillage system that leaves

some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration and reducing the hazard of erosion.

This map unit is suited to hay and pasture. Spring flooding may damage plants and reduce yields. A seasonal high water table restricts equipment use and grazing. Deferred grazing and rotational grazing help increase production. Streambanks should be protected from erosion by fencing out cattle and maintaining a vegetative cover.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. The seasonal high water table and periodic flooding are the main limitations. Equipment limitation is moderate on the Cornish soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or to the driest months of summer. Seedling mortality is severe because of the frequent flooding. Some trees may be uprooted or girdled by ice where flooding occurs during the winter. The seasonal high water table may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and red maple. Trees to plant are eastern white pine, red spruce, white spruce, black spruce, European larch, and tamarack.

The seasonal high water table and periodic flooding are the limitations for most urban uses. In most cases, developing areas of these soils for urban uses is too costly and impractical. Flood control measures are expensive and generally impractical. Permanent structures are subject to damage or destruction by frequent flooding. Roads and streets should be located above the expected flood level to prevent damage. Both soils are a fair source of roadfill. The Cornish soil is a probable source of sand and a good source of topsoil while the Lovewell soil is a fair source of roadfill.

The Lovewell soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The Cornish soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and play grounds. Periodic flooding and seasonal high water table are the main limitations.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. The Cornish soil has fair potential for wetland wildlife habitat and the Lovewell soil has poor potential for wetland wildlife habitat.

The land capability classification of Lovewell is 2w and for Cornish is 3w. The woodland ordination symbol for Lovewell is 10A and for Cornish is 8W.

LmE—Lyman-Rock outcrop-Tunbridge complex, 15 to 45 percent slopes, very stony

This map unit is very shallow to moderately deep, moderately steep and steep, and somewhat excessively drained and well drained. It is on the sides and tops of bedrock controlled ridges. Slopes are complex or smooth. Areas are elongated or irregular in shape and range from about 3 to 50 acres in size. Stones cover from 1.0 to 3.0 percent of the surface of the Lyman and Tunbridge soils.

Units of this complex consist of about 50 percent Lyman soils, 20 percent Rock outcrop, 10 percent Tunbridge soils and 20 percent other soils. The shallow, somewhat excessively drained Lyman soils are on the upper slopes, rock outcrop is exposed bedrock on the tops of ridges or on the steeper areas on the landscape, and the moderately deep, well drained Tunbridge soils are on the lower slopes.

Typically, beneath a litter of leaves and twigs and a 1 inch layer of moderately decomposed leaves and twigs the surface layer of the Lyman soil is 2 inches of black highly decomposed organic material underlain by a reddish gray fine sandy loam subsurface layer 1 inch thick. The subsoil is 12 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown fine sandy loam in the middle part, and strong brown fine sandy loam in the lower part. Dark gray schistose bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, rock outcrop is exposed gneiss, schist, phyllite, rhyolite, or granite bedrock with insufficient soil material to support plant growth.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Tunbridge soil is 2 inches of black highly decomposed organic material underlain by subsurface layers of very dark brown fine sandy loam 1 inch thick and gray fine sandy loam 2 inches thick. The subsoil is 13 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and dark

yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 32 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Included with these soils in mapping are small areas of somewhat excessively drained Hermon soils, well drained Marlow and Berkshire soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, poorly drained Brayton soils, and very shallow, excessively drained Abram soils. These soils are on lower slopes and in depressions between the bedrock ridges. Also included are areas with slopes less than 15 percent or greater than 45 percent and areas of Lyman and Tunbridge soils with 3 to 15 percent surface stones.

Lyman soils have moderately rapid permeability and Tunbridge soils have moderate or moderately rapid permeability. Surface runoff is rapid in Lyman and Tunbridge soils and very rapid on areas of rock outcrop. Erosion is a moderate hazard. Available water capacity is low in Lyman soils and moderate in Tunbridge soils. Depth to bedrock is between 10 and 20 inches in Lyman soils and between 20 and 40 inches in Tunbridge soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland. Some areas are used for pasture or lowbush blueberries.

These soils are very poorly suited to farming. Slope, surface stones, depth to bedrock, and droughtiness are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this complex for farming.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. Shallow and moderately deep rooting depth and slope are the major limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is moderate equipment limitations because of slope. Seedling mortality is moderate in the Lyman soil because of the shallow rooting depth and the low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit the exposure of the remaining trees to the prevailing winds. There is moderate plant competition in the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, and balsam fir.

Slope and depth to bedrock in this map unit are the main limitations for most urban uses. In most cases developing areas of this map unit for urban uses is too costly and impractical because of the extensive grading and blasting of bedrock.

This map unit has severe limitations for picnic areas, camp areas, playgrounds, and paths and trails. Slope, depth to bedrock, large surface stones, and small stones within the Lyman and Tunbridge soils are the main limitations.

The Tunbridge soil has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Lyman soil has poor potential for openland and woodland wildlife habitat. The rock outcrop has very poor potential for openland and woodland wildlife habitat and all three have very poor potential for wetland wildlife habitat.

The land capability classification is 7s for Lyman, 8s for rock outcrop, and 7s for Tunbridge. The woodland ordination symbol is 7D for Lyman, and 8R for Tunbridge.

LNC—Lyman-Tunbridge-Abram complex, rolling, very stony

This map unit is very shallow to moderately deep, undulating and rolling, excessively drained to well drained. It is on the sides of bedrock-controlled hills and ridges. Slopes range from 3 to 15 percent and are concave or convex. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 30 percent Lyman soils, 25 percent Tunbridge soils, 20 percent Abram soils, and 25 percent other soils. The shallow, somewhat excessively drained Lyman soils are on the upper slopes, the moderately deep, well drained Tunbridge soils are on the lower slopes, and the excessively drained, very shallow Abram soils are on the tops of ridges.

Typically, beneath a litter of leaves and twigs and a 1 inch layer of moderately decomposed leaves and twigs, the surface layer of the Lyman soil is 2 inches of black highly decomposed organic material underlain by a reddish gray fine sandy loam subsurface layer 1 inch thick. The subsoil is 12 inches thick, is dark reddish brown fine sandy loam in the upper part, reddish brown fine sandy loam in the middle part, and strong brown fine sandy loam in the lower part. Schistose bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Tunbridge soil is 2

inches of black highly decomposed organic material underlain by subsurface layers of very dark brown fine sandy loam 1 inch thick and gray fine sandy loam 2 inches thick. The subsoil, 13 inches thick, is dark reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 32 inches. In some areas the mineral surface is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Abram soil is 1 inch of black, highly decomposed organic material underlain by subsurface layers of very dark gray very fine sandy loam 2 inches thick and brown very fine sandy loam 1 inch thick. The subsoil is 1 inch thick. It is reddish brown fine sandy loam. Schistose bedrock is at a depth of 5 inches. In some areas the mineral surface layer is silt loam, fine sandy loam, sandy loam, or loam.

Included with these soils in mapping are small areas of very deep, well drained Marlow, moderately well drained Dixfield, somewhat poorly drained Colonel, and poorly drained Brayton soils. These soils are on slopes and depressions between the bedrock ridges. Areas of rock outcrop are on the tops of knolls and ridges. Also included are areas with slopes greater than 15 percent, and areas with less than 0.1 percent or greater than 3 percent surface stones. Moderately deep soils, which range from moderately well drained to poorly drained and are on areas where a perched water table is on top of the bedrock are also included.

Abram and Lyman soils have moderately rapid permeability and Tunbridge soils have moderate or moderately rapid permeability. Surface runoff is slow or medium and erosion is a moderate hazard. Available water capacity is very low in Abram soils, low in Lyman soils, and moderate in Tunbridge soils. Depth to bedrock is between 20 and 40 inches in Tunbridge soils, 10 and 20 inches in Lyman soils, and less than 10 inches in the Abram soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, depth to bedrock, slope and droughtiness are the main limitations. The Tunbridge soil is moderately suited to orchards if the surface stones are removed. It has usually been impractical to attempt to convert these soils to cropland.

This map unit is poorly suited to hay and pasture. Slope, surface stones, and depth to bedrock are the main limitations. Some areas of the Tunbridge and Lyman soils can be used for unimproved pasture if some of the surface stones are removed. Use of equipment is difficult because of the areas of rock outcrop.

The potential productivity of this map unit is high and moderately high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. Shallow rooting depth in the Lyman and Abram soils is the major limitation. Seedling mortality is moderate on the Lyman soil and severe on the Abram soil because of the shallow rooting depth and the low and very low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition on the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and white ash. Trees to plant are eastern white pine, white spruce, balsam fir, red pine, and jack pine.

The depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of septic tank absorption fields. Slope is a concern when installing a septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading and blasting of bedrock may be needed. In some areas, the impermeability of the bedrock can cause effluent from the septic tank absorption field to surface in downslope areas and thus create a health hazard. Slope, depth to bedrock, and seepage are severe limitations for sewage lagoons and sanitary landfills. Slope and depth to bedrock in the Tunbridge soil are moderate limitations for dwellings without basements and local roads and streets. Depth to bedrock and slope are severe limitations for shallow excavations, dwellings with basements, and small commercial buildings and for dwellings without basements and local roads and streets on the Lyman and Abram soils. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, depth to bedrock and frost action are moderate limitations on the Tunbridge soil and severe limitations on the Lyman and Abram soils for

local roads and streets. Providing a coarser grained subgrade or base materials to frost depth and constructing roads on the contour will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of these soils for most urban uses and may need to be removed prior to any construction.

This map unit has slight limitations for paths and trails. Lyman and Abram soils have severe limitations for camp areas, picnic areas, and playgrounds and Tunbridge soil has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Depth to bedrock, slope, large surface stones, and small stones within the soil are the main limitations.

The Tunbridge soil has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Lyman soil has poor potential for openland and woodland wildlife habitat. The Abram soil has very poor potential for woodland and openland wildlife habitat. All three soils have very poor potential for wetland wildlife habitat.

The land capability classification for all soils is 6s. The woodland ordination symbol for Lyman is 7D, for Tunbridge is 8A, and for Abram is 5D.

LNE—Lyman-Tunbridge-Abram complex, steep, very stony

This map unit is moderately deep to very shallow, moderately steep and steep, excessively drained to well drained. It is on the tops and side slopes of bedrock-controlled hills and ridges. Slopes range from 15 to 45 percent and are concave or convex. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 35 percent Lyman soils, 25 percent Tunbridge soils, 20 percent Abram soils, and 20 percent other soils. The shallow, somewhat excessively drained Lyman soils are on side slopes and the moderately deep, well drained Tunbridge soils are on lower slopes and pockets between bedrock ribs. The very shallow, excessively drained Abram soils are on the tops of ridges and the steeper side slopes.

Typically, beneath a litter of leaves and twigs and a 1 inch layer of moderately decomposed leaves and twigs, the surface layer of the Lyman soil is 2 inches of black highly decomposed organic material underlain by a reddish gray fine sandy loam subsurface layer 1 inch thick. The subsoil is 12 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown fine sandy loam in the middle part, and strong brown fine sandy loam in the lower part. Schistose bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of Tunbridge soil is 2 inches of black, highly decomposed organic material underlain by subsurface layers of very dark brown fine sandy loam 1 inch thick and gray fine sandy loam 2 inches thick. The subsoil is 13 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 32 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Abram soil is 1 inch of black, highly decomposed organic material underlain by surface layers of very dark gray very fine sandy loam 2 inches thick and brown very fine sandy loam 1 inch thick. The subsoil is 1 inch thick. It is reddish brown fine sandy loam. Schistose bedrock is at 5 inches. In some areas, the mineral surface layer is silt loam, fine sandy loam, sandy loam, or loam.

Included with these soils in mapping are small areas of very deep, well drained Berkshire and Marlow soils and areas of rock outcrop. Marlow soils have a dense substratum and are on smooth slopes, usually on lower positions on the landscape. Berkshire soils have a friable or very friable substratum and are along lower borders of some units along with rubble land, which are accumulations of fragmental material that have fallen from higher elevations. Areas of rock outcrop are on the tops of knolls and ridges. Also included are areas with slopes less than 15 percent or greater than 45 percent and areas with more than 3 percent surface stones. Also included are moderately deep soils, which are moderately well drained to poorly drained and are on level areas between bedrock ribs.

Abram and Lyman soils have moderately rapid permeability and Tunbridge soils have moderate or moderately rapid permeability. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is very low in Abram soils, low in Lyman soils, and moderate in Tunbridge soils. Depth to bedrock is between 10 and 20 inches in Lyman soils, between 20 and 40 inches in Tunbridge soils, and less than 10 inches in Abram soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to farming. Depth to bedrock, slope, surface stones, and droughtiness are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of these soils for farming.

The potential productivity of these soils for trees such as eastern white pine, white spruce, balsam fir, and red spruce is high and moderately high. Shallow and moderately deep rooting depth and slope are the major limitations. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is moderate equipment limitations because of slope. Seedling mortality is moderate on the Lyman soil and severe on the Abram soil because of the shallow rooting depth and the low and very low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to prevent exposure of the remaining trees to the prevailing winds. There is moderate plant competition in the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and white ash. Trees to plant are eastern white pine, white spruce, balsam fir, red pine, and jack pine.

Depth to bedrock and slope are the main limitations if this map unit is used for most urban uses including septic tank absorption fields, sewage lagoons, sanitary landfills, shallow excavations, commercial building, dwellings with or without basements, and local roads and streets. In most cases, developing areas of these soils for urban uses is too costly and impractical. Frost action is an additional consideration for foundations, roads and streets.

This map unit has severe limitations for picnic areas, camp areas, playgrounds, and paths and trails. Depth to bedrock, slope, large surface stones and small stones within the soil are the main limitations.

The Tunbridge soil has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. Lyman soil has poor potential for woodland and openland wildlife habitat. The Abram soil has very poor potential for woodland and openland wildlife habitat. All three soils have very poor potential for wetland wildlife habitat.

The land capability classification for all soils is 7s. The woodland ordination symbol for Lyman is 7D, for Tunbridge is 8R, and for Abram is 5D.

LyC—Lyman-Tunbridge-Rock outcrop complex, 3 to 15 percent slopes, very stony

This map unit is shallow and moderately deep, strongly sloping and rolling, and well drained and somewhat excessively drained. It is on the sides and tops of bedrock controlled ridges and till plains. Slopes are complex or smooth. Areas are oblong or rounded and range from about 3 to 100 acres. Stones cover from 1.0 to 3.0 percent of the surface of the Lyman and Tunbridge soils.

Units of this complex consist of about 50 percent Lyman soils, 20 percent Tunbridge soils, and 10 percent rock outcrop. The moderately deep, somewhat excessively drained Lyman soils are on the upper side slopes, the moderately deep, well drained Tunbridge soils are on the lower side slopes, and rock outcrop is generally at the tops of ridges but often is throughout the unit.

Typically, beneath a litter of leaves and twigs and a 1 inch layer of moderately decomposed leaves and twigs, the surface layer of the Lyman soil is 2 inches of black highly decomposed organic material underlain by a reddish gray fine sandy loam subsurface layer 1 inch thick. The subsoil is 12 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown fine sandy loam in the middle part, and strong brown fine sandy loam in the lower part. Schistose bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves, needles, and twigs the surface layer of the Tunbridge soil is 2 inches of black, highly decomposed organic material underlain by surface layers of very dark brown fine sandy loam 1 inch thick and gray fine sandy loam 2 inches thick. The subsoil is 13 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 32 inches. In some areas, the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, rock outcrop is exposed gneiss, schist, phyllite, rhyolite, or granite bedrock with insufficient soil material to support plant growth.

Included in mapping are small areas of somewhat excessively drained Hermon soils, well drained Marlow and Berkshire soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils,

poorly drained Brayton soils, and very shallow, excessively drained Abram soils. The very deep Hermon, Marlow, Berkshire, Dixfield, Colonel, and Brayton soils are on lower elevations on the landscape. Abram soils are near the tops of ridges. Also included are areas of Lyman and Tunbridge soils and rock outcrop with slopes greater than 15 percent and areas of Lyman and Tunbridge soils with 3 to 15 percent surface stones. Inclusions make up about 20 percent of the total acreage.

Lyman soils have moderately rapid permeability and Tunbridge soils have moderate or moderately rapid permeability. Surface runoff is slow or medium on Lyman and Tunbridge soils and very rapid on areas of rock outcrop. Erosion is a moderate hazard. Available water capacity is low in Lyman soils and moderate in Tunbridge soils. Depth to bedrock is between 10 and 20 inches in Lyman soils and between 20 and 40 inches in Tunbridge soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland. Some areas are used for pasture, lowbush blueberries, or residential development.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, depth to bedrock, slope, and droughtiness are the major limitations. The Tunbridge soil is moderately suited to orchards if the surface stones are removed. It has usually been impractical to convert areas of this unit to cropland.

This map unit is poorly suited to hay and pasture. Surface stones and depth to bedrock are the main limitations. Some areas of the Tunbridge and Lyman soils can be used for unimproved pasture if some of the surface stones are removed. Areas of rock outcrop restrict use of equipment.

The potential productivity of this map unit for trees such as eastern white pine, white spruce, balsam fir, and red spruce is high. Shallow and moderately deep rooting depth is the major limitation. Seedling mortality is moderate in the Lyman soil because of the shallow rooting depth and the low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvest to prevent exposure of the remaining trees to the prevailing winds. There is moderate plant competition in the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, balsam fir, and red pine.

Depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, the impermeability of the bedrock causes effluent from the septic tank absorption field to seep to the surface on a lower part of the slope, either in this unit or another unit, and thus create a health hazard. Slope, seepage, and depth to bedrock are severe limitations for sewage lagoons and sanitary landfills. Slope and depth to bedrock are moderate limitations for dwellings without basements in the Tunbridge soil and severe limitations in the Lyman soil. Depth to bedrock and slope are severe limitations for shallow excavations, dwellings with basements, and small commercial buildings. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, depth to bedrock, and frost action are moderate limitations in the Tunbridge soil and severe limitations on the Lyman soil and rock outcrop for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction and constructing roads on the contour will help to overcome the shrink-swell problem for roads and erosion. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction.

This map unit has slight limitations for paths and trails. Lyman and rock outcrop have severe limitations for camp areas, picnic area, and playgrounds. Tunbridge soil has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope, depth to bedrock, and large surface stones and small stones within the soil in Lyman and Tunbridge soils are the main limitations.

The Tunbridge soil has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Lyman soil has poor potential for openland and woodland wildlife habitat. Rock outcrop has very poor potential for openland and woodland wildlife habitat. All three have very poor potential for wetland wildlife habitat.

The land capability classification is 6s for Lyman

and Tunbridge soils and 8s for rock outcrop. The woodland ordination symbol for Lyman is 7D and for Tunbridge is 8A.

MaB—Madawaska fine sandy loam, 0 to 8 percent slopes

This map unit is very deep, nearly level and gently sloping, and moderately well drained and somewhat poorly drained. It is in depressions on outwash plains and high stream terraces. Slopes are generally smooth and slightly concave. Areas are irregular in shape and range from 3 to 50 acres in size.

Typically, the surface layer is 8 inches of dark brown fine sandy loam. The subsoil is 16 inches thick, is dark brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and mottled, yellowish brown fine sandy loam in the lower part. The substratum is mottled, light brownish gray fine sand to a depth of 65 inches or more.

Included in mapping are small areas of excessively drained Colton, excessively drained Adams soils, well drained Allagash soils, somewhat poorly drained or poorly drained Naumburg soils, and very poorly drained Searsport soils. Adams, Allagash, and Colton soils are on higher positions on the landscape. Naumburg and Searsport soils are lower on the landscape. Also included are Madawaska soils with slopes greater than 8 percent. Inclusions make up about 15 percent of the unit.

Madawaska soils have moderate permeability in the surface layer and subsoil and rapid permeability in the substratum. Surface runoff is slow and medium and erosion is a slight hazard. Available water capacity is high. A seasonal high water table is at a depth of 1.5 to 3.0 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for hay and pasture, grain, silage corn, or woodland. Some small areas are used for potatoes and small vegetable crops.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table is the main limitation. Surface and subsurface drainage help to remove excess water. Green manure crops increase the organic matter content in the soil and improve tilth. Using a conservation tillage system that leaves all or part of the crop residue on the surface helps to increase the organic matter content of the surface layer and reduce erosion.

This map unit is moderately suited to hay and pasture. Droughtiness during the peak growing season and seasonal high water table early in the growing season are the main limitations. Restricted grazing or deferred grazing during wet periods or during droughty periods are desirable management practices.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Its limitations for woodland are insignificant. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, sugar maple, and paper birch. Trees to plant are eastern white pine, white spruce, balsam fir, and European larch.

The rapid permeability in the substratum of this map unit, resulting in poor filtering action, and the seasonal high water table are the main limitations of this map unit for septic tank absorption fields. If it is used for septic tank absorption fields there is a possibility of ground water contamination. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table and seepage are severe limitations for sewage lagoons and sanitary landfills. Because of the seasonal high water table and unstable substratum, sloughing is a severe limitation in shallow excavations. The seasonal high water table is a moderate limitation for dwellings without basements and severe for dwellings with basements. Slope and the seasonal high water table are severe limitations for small commercial buildings. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The seasonal high water table and frost action are moderate limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base material to frost depth during construction will help to overcome the problem for roads. The seasonal high water table and droughtiness are moderate limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. In summer, irrigation is needed to establish lawn grasses and other small seeded plants. This map unit is a fair source of roadfill because of the seasonal high water table, a probable source of sand, and a fair source of topsoil because of the small stones.

This map unit has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The seasonal high water table is the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime and fertilizer will help maintain the sod during the droughty summer months.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 8A.

MDB—Madawaska-Allagash association, gently sloping

This map unit is very deep, nearly level to gently sloping, well drained to somewhat poorly drained. It is on glacial outwash terraces and plains. Slopes range from 0 to 8 percent and are concave or convex. Areas are irregular in shape and range from 15 to over 300 acres.

Units of this association consist of about 45 percent Madawaska soils, 40 percent Allagash soils, and 15 percent other soils. The moderately well drained and somewhat poorly drained Madawaska soils are on lower positions where a seasonal high water table is near the surface. The well drained Allagash soils are on the higher positions.

Typically, the surface layer of the Madawaska soil is 8 inches of dark brown fine sandy loam. The subsoil is 16 inches thick. It is dark brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and mottled, yellowish brown fine sandy loam in the lower part. The substratum is mottled, light brownish gray fine sand to a depth of 65 inches or more.

Typically, the surface layer of the Allagash soil is 5 inches of dark yellowish brown fine sandy loam. The subsoil is 16 inches thick. It is brown fine sandy loam in the upper part and yellowish brown fine sandy loam in the middle and lower parts. The substratum is light olive brown loamy fine sand and olive fine sand to a depth of 65 inches or more. In some areas the surface layer has slightly finer texture and in some areas there is gravelly or very gravelly strata below 40 inches.

Included in mapping are small areas of excessively drained Colton soils, somewhat excessively drained Adams soils, moderately well drained Croghan soils, and poorly drained and somewhat poorly drained Naumburg soils. Adams and Colton soils generally are on higher positions on the landscape than Madawaska or Allagash soils and are coarser textured. Croghan soils are on similar positions on the landscape as the Madawaska soils, but are coarser textured. Naumburg soils are in depressions. Also included are areas with slopes greater than 8 percent, areas with more than 0.1 percent surface stones, and areas of Allagash and Madawaska with gravelly or very gravelly strata below 40 inches.

Madawaska and Allagash soils have moderate permeability in the solum and rapid permeability in the substratum. Surface runoff is slow to medium and erosion is a slight hazard. Available water capacity is high. Madawaska soils have a seasonal high water table at a depth of 1.5 to 3.0 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table in the Madawaska soils restricts rooting depth.

Most areas of this map unit are used for woodland.

This map unit is moderately suited and suited to cultivated crops and orchards. A seasonal high water table is the main limitation. Surface and subsurface drainage in the Madawaska soil will help remove excess water during the early part of the growing season and after heavy rains. Green manure crops increase the organic matter content in the soil and improve tilth. Using a conservation tillage system that leaves all or part of the crop residue on the surface helps increase the organic matter content of the surface layer and reduce the hazard of erosion.

This map unit is moderately suited and suited to hay and pasture. Droughtiness during the peak growing season and seasonal high water table early in the growing season are the main limitations. Restricted grazing or deferred grazing during wet periods or during droughty periods are desirable management practices.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, balsam fir, red spruce, and red pine. Their limitations for woodland are insignificant. There is moderate plant competition on the Madawaska soil because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, white spruce, red spruce, balsam fir, and sugar maple. Trees to plant are eastern white pine, white spruce, red pine, European larch, and Scotch pine.

The rapid permeability in the substratum of this map unit, resulting in poor filtering action, and the seasonal high water table in the Madawaska soil are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields there is a possibility of ground water contamination. A larger septic tank absorption field may be needed to

overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table in the Madawaska soil and seepage in both soils are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum of this map unit, sloughing and the seasonal high water table in the Madawaska soil are severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements in the Allagash soil. Slope is a moderate limitation for small commercial buildings. The seasonal high water table in Madawaska soil is a severe limitation for dwellings with or without basements and small commercial buildings. Slope and the seasonal high water table in the Madawaska soil are severe limitations for small commercial buildings. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Frost action and the seasonal high water table in the Madawaska soil are moderate limitations for local roads and streets. Installing drainage and providing a coarse grained subgrade or base material to frost depth during construction will help to overcome the shrink-swell problem for roads. Droughtiness in both soils and the seasonal high water table in the Madawaska soil are moderate limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. In summer, irrigation is needed to establish lawn grasses and other small seeded plants. Allagash is a good source for roadfill and Madawaska is a fair source of roadfill because of the seasonal high water table. Both soils are probable sources of sand. Allagash is a probable source of gravel. Madawaska is a fair source of topsoil because of the small stones.

The Allagash soil has slight limitations for camp areas, picnic areas, and paths and trails, and moderate limitations for playgrounds. The Madawaska soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The seasonal high water table in Madawaska soils and slope on Allagash soils are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification for Madawaska is 2w and for Allagash is 2e. The woodland ordination symbol for Madawaska is 8A and for Allagash is 10A.

MeB—Marlow fine sandy loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and well drained. It is on the tops of the drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are elongated or oval and range from 3 to 50 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 15 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils. Dixfield, Colonel, and Brayton soils are on lower slopes and in slight depressions. In some units small knolls of moderately deep well drained Tunbridge soils are included. Also included are Marlow soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 15 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is moderate. A perched water table is just above the dense substratum for short periods in March and April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit have been cleared of their original stone cover and are used for hay and pasture, orchards, and cropland. Some areas have reverted to woodland. An increasing amount of acreage is being used for homesites.

This map unit is suited to cultivated crops and orchards. The dense substratum is the main limitation. Some erosion can occur if the soil is left without vegetative cover. Winter cover crops and conservation tillage help reduce erosion and increase organic matter content. It may be necessary to remove a few stones after plowing.

This map unit is suited to hay and pasture. The dense substratum is the main limitation. Some

compaction of the surface soil can occur if the soil is grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing help increase forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam, red spruce, red pine, and white spruce. Its limitations for woodlands are insignificant. The dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The moderately slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. This map unit has slight limitations for sanitary landfills. Seepage and slope are moderate limitations for sewage lagoons. The dense substratum is a moderate limitation for shallow excavations. This soil has slight limitations for dwellings without basements and moderate limitations for dwellings with basements because of the seasonal perched water table. Slope is a moderate limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Frost action is a moderate limitation for local roads and street. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails and moderate limitations for camp areas, picnic areas, and playgrounds. The moderately slow or slow permeability in the substratum, slope, and small stones within the soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for openland wildlife habitat and for woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2e. The woodland ordination symbol is 8A.

MeC—Marlow fine sandy loam, 8 to 15 percent slopes

This map unit is very deep, gently sloping, and well drained. It is near the tops and on the side slopes of the drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are generally oval and range from 5 to 100 acres, though areas of 5 to 50 acres are most common. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 15 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield soils. Dixfield soils are on lower slopes and in slight depressions. In some units small knolls of moderately deep, well drained Tunbridge soils are included. Also included are Marlow soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 15 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow and moderately slow permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is moderate. A perched water table is just above the dense substratum for short periods in March and April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit have been cleared of their original stone cover and are used for hay and pasture, orchards, and cropland. Some areas have reverted to woodland.

This map unit is suited to orchards and poorly suited to cultivated crops. Slope, a dense substratum, and hazard of erosion are the main limitations. Winter cover crops, planting on the contour, and stripcropping help reduce erosion and increase organic matter content. It may be necessary to remove a few stones after plowing.

This map unit is suited to hay and pasture. The dense substratum is the main limitation. Some compaction of the surface soil can occur if areas are grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing help increase forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, white spruce, and red pine. Its limitations for woodlands are insignificant. The dense substratum may restrict rooting depth, resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir, and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are moderate limitations for sanitary landfills and severe limitations for sewage lagoons. The dense substratum and slope are moderate limitations for shallow excavations. This map unit has moderate limitations for dwellings with or without basements because of the seasonal perched water table and slope. Slope is a severe limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Frost action is a moderate limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails. It has moderate limitations for picnic areas and camp areas and severe limitations for playgrounds. Slope, small stones within the soil, and the moderately slow or slow permeability in the substratum are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for playgrounds.

This map unit has good potential for woodland wildlife habitat and openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 8A.

MeD—Marlow fine sandy loam, 15 to 25 percent slopes

This map unit is very deep, moderately steep, and well drained. It is on the side slopes of drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are oval or elongated and range from 3 to 60 acres. Some units are dissected by drainageways. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown fine sandy loam. The subsoil is 15 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield, moderately deep, well drained Tunbridge, and shallow, somewhat excessively drained Lyman soils. Dixfield soils are on lower slopes and in slight depressions. Tunbridge and Lyman soils are on knolls on the landscape. Also included are Marlow soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 10 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability within the substratum. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is moderate. A perched water table is just above the dense substratum for short periods in

March and April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit have been cleared of their original stone cover and are used for orchards and hay. Some areas have reverted to woodland.

This map unit is moderately suited to orchards and very poorly suited to cultivated crops. Slope, a dense substratum, and a hazard of erosion are the main limitations. Extensive erosion control practices such as terraces and contour farming are needed on this map unit but are difficult to install and maintain. Winter cover crops, conservation tillage, planting on the contour, and stripcropping help reduce erosion and increase organic matter content. It may be necessary to remove a few stones after plowing.

This map unit is poorly suited to hay and pasture. Slope and a dense substratum are the main limitations. Some compaction can occur if the soil is grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing help increase forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, white spruce, and red pine. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is a moderate equipment limitation because of slope. The dense substratum may restrict rooting depth resulting in moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and slope are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sanitary landfills and sewage lagoons. The dense substratum and slope are severe limitations for shallow excavations. This soil has severe limitations for dwellings with or without basements because of the seasonal perched water table and slope. Slope is a severe limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations and placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Erosion is a problem in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion.

Slope and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. This map unit is a fair source of roadfill, but accessibility is limited by slope.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope and the moderately slow or slow permeability in the substratum are the major limitations. Extensive grading, seeding and mulching are necessary when developing areas of this map unit for these uses.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4e. The woodland ordination symbol is 8R.

MfB—Marlow fine sandy loam, 3 to 8 percent slopes, very stony

This map unit is very deep, gently sloping, and well drained. It is on the top of the drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are elongated or oval and range from 3 to 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of very dark grayish brown highly decomposed organic material underlain by a dark brown fine sandy loam subsurface layer 5 inches

thick. The subsoil is 17 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, poorly drained Brayton soils, moderately deep, well drained Tunbridge soils, and shallow, somewhat excessively drained Lyman soils. Dixfield soils are on lower slopes and in slight depressions. Colonel and Brayton soils are in depressions and along drainageways. Lyman and Tunbridge soils are on crests and other areas where bedrock is near the surface. Also included are Marlow soils with slopes greater than 8 percent. Inclusions make up about 15 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. A perched water table is just above the dense substratum for short periods in March and April. Available water capacity is moderate. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit are used for woodland, although a small amount is used for pastureland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones and a dense substratum are the main limitations. This map unit is suited to cultivated crops and orchards if the surface stones are removed. Some erosion can occur if the soil is left without vegetative cover. Winter cover crops and conservation tillage help reduce erosion and increase organic matter content.

This map unit is very poorly suited to hay and pasture. Surface stones and a dense substratum are the main limitations. This map unit is suited to hay and pasture if the surface stones are removed. Some compaction can occur if the soil is grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing help increase forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, red pine, and white spruce. Its limitations for woodlands are insignificant. The dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. This map unit has slight limitations for sanitary landfills. Seepage and slope are moderate limitations for sewage lagoons. The dense substratum is a moderate limitation for shallow excavations. This map unit has slight limitations for dwellings without basements and moderate limitations for dwellings with basements because of the seasonal perched water table. Slope is a moderate limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Frost action is a moderate limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails and moderate limitations for camp areas, picnic areas, and playgrounds. The slow or moderately slow permeability in the substratum, slope, small stones within the soil, and large surface stones are the main limitations. Stone removal, grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 8A.

MfC—Marlow fine sandy loam, 8 to 15 percent slopes, very stony

This map unit is very deep, strongly sloping, and well drained. It is near the top of the drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are oval and range from 3 to 60 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of very dark grayish brown highly decomposed organic material underlain by a dark brown fine sandy loam subsurface layer 5 inches thick. The subsoil is 17 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield, moderately deep, well drained Tunbridge and shallow, somewhat excessively drained Lyman soils. Dixfield soils are on the lower slopes and in slight depressions. Lyman and Tunbridge soils are on knolls and other areas where bedrock is near the surface. Also included are Marlow soils

with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 10 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. A perched water table is just above the dense substratum for short periods in March and April. Available water capacity is moderate. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit are used for woodland, although a small amount is used for pastureland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, slope, a dense substratum, and hazard of erosion are the main limitations. This map unit is suited to orchards and poorly suited to cultivated crops if the surface stones are removed. Winter cover crops and conservation tillage help reduce erosion, maintain tilth, and increase organic matter content. It may be necessary to remove a few stones after plowing. Planting on the contour and stripcropping help reduce erosion.

This map unit is very poorly suited to hay and pasture. Surface stones and a dense substratum are the main limitations. Some compaction can occur if the soil is grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing help increase forage production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red pine, and red spruce. Its limitations for woodlands are insignificant. The dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are moderate limitations for sanitary landfills and severe limitations for sewage lagoons. The dense substratum and slope are moderate limitations for shallow excavations. This soil has moderate limitations for dwellings with or without basements because of the seasonal perched water table and slope. Slope is a severe limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Frost action is a moderate limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads.

Surface stones may be a problem when using areas of this soil for some urban uses and may need to be removed prior to any construction. This map unit is a good source of roadfill.

This map unit has slight limitations for paths and trails. It has moderate limitations for picnic areas and camp areas and severe limitations for playgrounds. Slope, the moderately slow or slow permeability in the substratum, small stones within the soil, and large surface stones are the main limitations. Removing stones, grading, seeding and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 8A

MfD—Marlow fine sandy loam, l5 to 25 percent slopes, very stony

This map unit is very deep, strongly sloping, and well drained. It is on the side slopes of the drumlin-shaped, glacial till ridges that are generally oriented in a northwest to southeast direction. Slopes are smooth and convex. Areas are irregular in shape and range from 5 to 80 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of very dark grayish brown highly decomposed organic material underlain by a dark brown fine sandy loam subsurface layer 5 inches thick. The subsoil is 17 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam.

Included in mapping are small areas of moderately well drained Dixfield soils, moderately deep, well drained Tunbridge soils, and shallow, somewhat excessively drained Lyman soils. Dixfield soils are on lower slopes and in slight depressions. Lyman and Tunbridge soils are on crests and other areas where bedrock is near the surface. Also included are Marlow soils with slopes less than 15 percent or greater than 25 percent. Inclusions make up about 10 percent of the unit.

Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is moderate. A perched water table is just above the dense substratum for short periods in March and April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, slope, dense substratum, and hazard of erosion are the main limitations. This map unit is moderately suited to orchards if the surface stones are removed. Extensive erosion control practices such as stripcropping, terraces, and contour farming are needed on this soil but are difficult to install and maintain. Winter cover crops and conservation tillage help reduce erosion and increase organic matter content. It may be necessary to remove a few stones after plowing.

This map unit is very poorly suited to hay and pasture. Surface stones, slope, and a dense substratum are the main limitations. Some compaction can occur if the soil is grazed when wet and overgrazing can lead to erosion. Rotational grazing and deferred grazing are practices that help increase forage production.

The potential productivity of this map unit for is high trees such as eastern white pine, white spruce, red pine, red spruce, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is a moderate equipment limitation because of slope. The dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, and red pine.

The slow or moderately slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and slope are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption

fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sanitary landfills and sewage lagoons. The dense substratum and slope are severe limitations for shallow excavations. This map unit has severe limitations for dwellings with or without basements because of the seasonal perched water table and slope. Slope is a severe limitation for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations and placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Erosion is a problem in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope and frost action are severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of this map unit for some urban uses and may need to be removed prior to any construction. This map unit is a fair source of roadfill, but accessibility is limited by slope.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope, large surface stones, the moderately slow or slow permeability in the substratum, and small stones within the soil are the main limitations. Extensive grading, seeding and mulching are necessary when developing areas of this map unit for these uses.

This map unit has good potential for openland wildlife habitat and fair potential for woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 6s. The woodland ordination symbol is 8R.

MGD—Marlow-Dixfield association, moderately steep, very stony

This map unit is very deep, moderately steep and hilly, well drained and moderately well drained. It is on glaciated uplands. Slopes range from 15 to 25 percent and are commonly long and smooth if not broken by ridges. Areas are irregular in shape and range from 15 to over 300 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Marlow soils, 35 percent Dixfield soils, and 20 percent other soils. The well drained Marlow soils are on upper slopes and ridge tops. The moderately well drained Dixfield soils are on lower, less sloping areas.

Typically, beneath a litter of leaves and twigs, the surface layer of the Marlow soil is 1 inch of very dark grayish brown highly decomposed organic material underlain by a dark brown fine sandy loam subsurface layer 5 inches thick. The subsoil is 17 inches thick. It is dark brown gravelly fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and olive gravelly fine sandy loam in the lower part. The substratum is firm and very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Dixfield soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled, olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included in mapping are moderately deep, well drained Tunbridge soils; shallow, somewhat excessively drained Lyman soils; very shallow, excessively drained Abram soils; somewhat poorly drained Colonel soils; and poorly drained Brayton soils. Tunbridge and Lyman soils are on knobby ridges and other areas where bedrock is near the surface. Scattered areas of Abram soils and rock outcrop are on the upper slopes. Colonel and Brayton soils are on lower, less sloping areas and in depressions. Also included are areas with slopes less than 15 percent and greater than 25 percent and Dixfield and Marlow soils with greater than 3 percent surface stones.

Dixfield and Marlow soils have moderate permeability above the dense substratum and slow or moderately slow permeability in the substratum. Surface runoff is rapid and erosion is a moderate hazard. Available water capacity is moderate in the Marlow soils and high in the Dixfield soils. Marlow soils have a perched water table just above the dense substratum for short periods in March and April and Dixfield soils have a perched water table from 1.5 to 2.5 feet below the surface from November through

April. Depth to bedrock is more than 60 inches. Rooting depth is restricted by the dense substratum and by the seasonal high water table in the Dixfield soils.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Surface stones, hazard of erosion, a seasonal high water table, a dense substratum, and slope are the main limitations. This map unit is moderately suited to orchards if the surface stones are removed. Surface and subsurface drainage in the Dixfield soil will help remove excess water. Stripcropping, contour farming, diversions, and growing cover crops and green manure crops, along with a conservation tillage system also improve the soil and reduce the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, hazard of erosion, a seasonal high water table, a dense substratum, and slope are the main limitations. The stone cover and slope restrict the use of farm equipment. This map unit can be used for unimproved pasture if some of the surface stones are removed. If the surface stones are removed this map unit is moderately suited to hay and pasture. Special precautions should be taken to avoid pasturing these areas when it is wet in order to avoid compaction and punching of the sod. Good yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and rotational grazing help increase production and maintain the quality and quantity of feed and forage. Seedbed preparation should be on the contour or across the slope where practical.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, red pine, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is a moderate equipment limitation because of slope. The dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, red spruce, white spruce, balsam fir and many northern hardwoods such as white ash, yellow birch, sugar maple, American beech, and northern red oak. Trees to plant are eastern white pine, white spruce, European larch, and black spruce.

The moderately slow and slow permeability in the substratum of this map unit, resulting in a slow percolation rate, slope, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage, slope, and the seasonal high water table are severe limitations for sanitary landfills and sewage lagoons. The dense substratum, slope, and the seasonal high water table in the Dixfield soil are severe limitations for shallow excavations. This map unit has severe limitations for dwellings with or without basements because of the seasonal perched water table and slope. Slope and the seasonal high water table are severe limitations for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations and placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has a low shrink-swell potential. Erosion is a problem in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of this map unit for some urban uses and may need to be removed prior to any construction. This map unit is a fair source of roadfill, but accessibility is limited by slope.

This map unit has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope, large surface stones, small stones within the soil, and the moderately slow or slow permeability in substratum are the main limitations.

The Marlow soil has fair potential and the Dixfield soil has poor potential for openland wildlife habitat. Both soils have good potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 6s. The woodland ordination symbol for Marlow is 8R and for Dixfield is 9R.

MhB—Masardis fine sandy loam, 0 to 8 percent slopes

This map unit is very deep, nearly level to gently sloping, and somewhat excessively drained. It is on outwash terraces, kames, and eskers. Slopes are smooth, and convex. Areas are oval or irregular in shape and range from 5 to 200 acres.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 2 inches thick. The subsoil is 25 inches thick. It is dark reddish brown gravelly fine sandy loam grading to dark brown and brown gravelly fine sandy loam in the upper part, yellowish brown very gravelly sandy loam in the middle part and olive brown very gravelly loamy sand in the lower part. The substratum is loose, olive very gravelly coarse sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Included in mapping are small areas of excessively drained Colton soils, somewhat excessively drained Adams and Hermon soils, and moderately well drained Croghan and Sheepscot soils. Adams and Croghan soils are on similar positions, generally lower in elevation, and are frequently intermingled with the Masardis soils. Colton soils are on similar landscapes and have a thinner surface cap and a higher granite and sandstone content. Hermon soils are on glacial till knobs. Sheepscot soils are at lower elevations on the landscape. Also included are Masardis soils with slopes greater than 8 percent. Inclusions make up about l5 percent of the unit.

Masardis soils have moderately rapid permeability in the loamy cap and rapid or very rapid permeability below. Surface runoff is slow and erosion is a slight hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland. A few areas are used for hay or pasture.

This map unit is poorly suited to cultivated crops and orchards. Droughtiness is the main limitation. Low natural fertility and leaching of added nutrients are also management concerns. Increasing the organic matter content with the addition of manure and crop residue will improve soil structure and increase the available water capacity. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will help conserve moisture. With proper management, including increasing organic matter content, applying adequate lime and fertilizer, and irrigating, this map unit is suited to early season truck crops.

This map unit is poorly suited to hay and pasture. Droughtiness due to the sandy texture, very rapid and rapid permeability, and low available water capacity, are the main limitations. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods helps keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, balsam fir, red pine, and northern whitecedar. Droughtiness is the main limitation. Seedling mortality is moderate because of low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, white spruce, red pine, northern white cedar, red spruce, balsam fir, and paper birch. Trees to plant are eastern white pine, white spruce, and red pine.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Seepage is a severe limitation for sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. There are slight limitations for dwellings with or without basements and for local roads and streets. Slope is a moderate limitation for small commercial buildings. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for camp areas, picnic areas, and paths and trails. It has moderate limitations for playgrounds. Slope and small stones within the soil are the main limitations. Grading, seeding and mulching are necessary in preparing these areas for use as playgrounds. Irrigation, lime, and fertilizer will help maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification 3s. The woodland ordination symbol is 7S.

MhC—Masardis fine sandy loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping and rolling, and somewhat excessively drained. It is on outwash terraces, kames and eskers. Slopes are smooth, and convex. Areas are oval or irregular in shape and range from 5 to over 200 acres.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 2 inches thick. The subsoil is 25 inches thick. It is dark reddish brown gravelly fine sandy loam grading to dark brown gravely fine sandy loam in the upper part, yellowish brown very gravelly sandy loam in the middle part, and olive brown very gravelly loamy sand in the lower part. The substratum is olive very gravelly coarse sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Included in mapping are small areas of excessively drained Colton soils, somewhat excessively drained Adams and Hermon soils, and moderately well drained Croghan and Sheepscot soils. Adams and Croghan soils are on similar positions, generally lower in elevation, and are frequently intermingled with Masardis soils. Colton soils are on similar landscapes and have a thinner surface cap and a higher granite and sandstone content. Hermon soils are on glacial till knobs. Sheepscot soils are at lower elevations. Also included are Masardis soils with slopes less than 8 percent and greater than 15 percent. Inclusions make up about l5 percent of the unit.

Masardis soils have moderately rapid permeability in the loamy cap and rapid or very rapid permeability below. Surface runoff is slow or medium and erosion is a moderate hazard. Available water capacity is low. Depth to bedrock is greater than 60 inches.

Most areas of this map unit are used for woodland. A few areas are used for pastureland and hayland.

This map unit is poorly suited to cultivated crops and orchards. Droughtiness due to the low available water capacity, slope, and hazard of erosion are the main limitations. Other management concerns are the low natural fertility and leaching of added nutrients. Increasing the organic matter content with the addition of manure and crop residue will improve soil structure and increase available water capacity. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will help conserve moisture and overcome the hazard of erosion. With proper management, including increasing organic matter content, applying adequate lime and fertilizer, and irrigating, this soil is suited to early season truck crops. Because of slope, cultivation can cause erosion. Practices such as stripcropping, contour farming, no-till planting, and terracing can help reduce the hazard of erosion.

This map unit is poorly suited to hay and pasture. Droughtiness due to the low available water capacity is the main limitation. Other management concerns are the low natural fertility and leaching of added nutrients. Good yields can be expected with proper amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, balsam fir, red pine, and northern whitecedar. Droughtiness is the main limitation. Seedling mortality is moderate because of low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, white spruce, red pine, northern whitecedar, red spruce, balsam fir, and paper birch. Trees to plant are eastern white pine, white spruce, and red pine.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, is the main limitation for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons and seepage is a severe limitation for sanitary landfills. Because of the unstable substratum sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a moderate limitation for dwellings with or without basements and for local roads and streets and a severe limitation for small commercial buildings.

Droughtiness and small stones are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a good source of roadfill and a probable source of sand and gravel.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and

picnic areas and severe limitations for playgrounds. Slope and small stones within the map unit are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigating and applying lime and fertilizer will help maintain sod during the droughty summer months.

This map unit has good potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4s. The woodland ordination symbol is 7S.

MhD—Masardis fine sandy loam, 15 to 45 percent slopes

This map unit is very deep, moderately steep and steep, and somewhat excessively drained. It is on outwash terraces, kames and eskers. Slopes are smooth, and convex. Areas are oval or irregular in shape and range from 5 to over 200 acres.

Typically, beneath a litter of leaves and twigs, the surface layer is 1 inch of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 2 inches thick. The subsoil is 25 inches thick. It is dark reddish brown gravelly fine sandy loam grading to dark brown gravelly fine sandy loam in the upper part, yellowish brown very gravelly sandy loam in the middle part, and olive brown gravelly loamy sand in the lower part. The substratum is olive very gravelly coarse sand to a depth of 65 inches or more. In some areas, the subsurface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Included in mapping are small areas of excessively drained Colton soils, somewhat excessively drained Adams and Hermon soils, moderately well drained Croghan soils, and moderately well drained Sheepscot soils. Adams and Croghan soils are on similar landscapes, are generally lower in elevation, and are frequently intermingled with Masardis soils. Colton soils are on similar landscapes and have a thinner surface cap and a higher granite and sandstone content. Hermon soils are on glacial till knobs. Sheepscot soils are at lower elevations. Also included are Masardis soils with slopes less than 15 percent or greater than 45 percent. Inclusions make up about l5 percent of the unit.

Masardis soils have moderately rapid permeability in the loamy cap and rapid or very rapid permeability below. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is low. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland. A few areas are idleland reverting to woodland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, hazard of erosion, and droughtiness due to low available water capacity are the main limitations. Other management concerns are low natural fertility and leaching of added nutrients. Increasing the organic matter content by the addition of manure and crop residue will improve soil structure and increase the available water capacity. Planting drought tolerant species and using a conservation tillage system that leaves crop residue on the soil surface will help conserve moisture. Erosion control practices such as stripcropping, contour planting, terracing, and no-till planting control erosion. With proper management, including increasing organic matter content, applying adequate lime and fertilizer, and irrigating, this map unit is suited to early season truck crops.

This map unit is very poorly suited to hay and pasture. Slope, hazard of erosion, and droughtiness due to the low available water capacity are the main limitations. Other management concerns are low natural fertility and leaching of added nutrients. Good yields can be expected with adequate amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods help keep the pasture in good condition and protect the soil from erosion. The few areas that are used for permanent pasture have low yield because of the very low fertility and leaching of added nutrients.

This potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, balsam fir, red pine, and northern whitecedar. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is a moderate equipment limitation because of slope. Seedling mortality is moderate because of the low available water holding capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, red pine, red spruce, balsam fir, northern white cedar, white spruce, sugar maple, and paper birch. Trees to plant are eastern white pine, white spruce, and red pine.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, and slope are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour.

Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum, sloughing is a severe limitation in shallow excavations. Slope is a severe limitation for dwellings with or without basements, small commercial buildings, and local roads and streets. Roads should be constructed on the contour to help reduce erosion. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Droughtiness and slope are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. This map unit is a probable source of sand and gravel, but accessibility is limited by slope.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope and small stones within the soil are the main limitations. Extensive grading and preparation is necessary when using areas of this soil for these uses.

This map unit has good potential for woodland wildlife habitat and fair potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 7s. The woodland ordination symbol is 7R.

MKE—Masardis-Adams association, steep

This map unit is very deep, steep, and somewhat excessively drained. It is on terraces and eskers in large river valleys and along small streams. Slopes range from 25 to 45 percent and are mostly convex. Areas are elongated or are irregular in shape. They range from 15 to over 100 acres.

Units of this association consist of about 60 percent Masardis soils, 25 percent Adams soils and 15 percent other soils. The excessively drained to somewhat excessively drained Adams soils and the somewhat excessively drained Masardis soils are on similar positions.

Typically, beneath a litter of leaves and twigs, the surface layer of the Masardis soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 2 inches thick. The subsoil is 25 inches thick. It is dark reddish brown gravelly fine sandy loam grading to dark brown gravelly fine sandy loam in the upper part, yellowish brown very gravelly sandy loam in the middle part, and olive brown very gravelly loamy sand in the lower part. The substratum is olive very gravelly coarse sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Typically, beneath a litter of leaves, needles and twigs, the surface layer of the Adams soil is 2 inches of black loamy sand underlain by a light brownish gray loamy sand subsurface layer 2 inches thick. The subsoil is 24 inches thick. It is dark reddish brown loamy sand grading to dark brown loamy sand in the upper part, dark yellowish brown loamy sand in the middle part, and olive brown sand in the lower part. The substratum is olive sand grading to olive gray and light olive gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy fine sand or fine sand.

Included with these soils in mapping are somewhat excessively drained Hermon, excessively drained Colton, well drained Allagash, and moderately well drained Croghan soils. Hermon soils are coarse textured soils formed in ablation till that are on areas adjacent to glacial till ridges. Colton soils are on similar positions in the landscape as Masardis soils, but have a thinner surface cap and a higher content of granite and sandstone rock fragments. Allagash and Croghan soils are on terraces. Also included are areas with slopes less than 25 percent or greater than 45 percent and areas with a few surface stones and rock outcrop. Inclusions make up about 15 percent of the unit.

The permeability of these soils is moderately rapid or rapid in the surface and subsoil and rapid or very rapid in the substratum. Surface runoff is medium and erosion is a severe hazard. Available water capacity is low in Masardis and Adams soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Slope, droughtiness due to the low available water capacity, and hazard of erosion are the main limitations. Other management concerns are low natural fertility and leaching of added nutrients. Increasing the organic matter content by the addition of manure and crop residue will improve soil structure and increase the available water capacity. Planting of drought tolerant species and the use of a conservation tillage system that leaves crop residue on the soil surface will also help conserve moisture. Erosion control practices such as stripcropping, contour planting, terracing, and no-till planting control erosion.

This map unit is very poorly suited to hay and pasture. Slope and droughtiness due to the low available water capacities are the main limitations. Other management concerns are low natural fertility and leaching of added nutrients. Good yields can be yields can be expected with adequate amounts of lime and fertilizer. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, balsam fir, red pine, and northern whitecedar. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are severe because of slope. Seedling mortality is moderate and severe because of the low available water capacity, but can be reduced by planting in the spring when the soil moisture levels are highest. Trees to favor in natural stands are eastern white pine, balsam fir, white spruce, red spruce, red pine, northern whitecedar, paper birch, and sugar maple. Trees to plant are eastern white pine, red pine, white spruce, and European larch.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, and slope are the main limitations for septic tank absorption fields. If these soils are used for septic tank absorption fields, there is a possibility of groundwater contamination. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from the septic tank absorption field can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations in sewage lagoons and sanitary landfills. Because of the unstable substratum and slope, sloughing is a severe limitation in shallow excavations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control erosion. Slope is a severe limitation for dwellings with or without basements, small commercial buildings, and for local roads and streets. Roads should be constructed on the contour to help reduce erosion. Droughtiness and slope are severe limitations for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. These soils are a probable source of sand and Masardis is a probable source of gravel.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope and small stones within the soil are the main limitations. Extensive grading and preparation are necessary when using these soils for these uses.

The Masardis soil has good potential as habitat for woodland wildlife and the Adams soil has poor potential as habitat for woodland wildlife. Both soils have poor potential as habitat for openland wildlife and very poor potential as habitat for wetland wildlife habitat.

The land capability classification for Masardis is 7s and for Adams is 7e. The woodland ordination symbol for Masardis is 7R and for Adams is 8R.

MLC—Masardis-Sheepscot association, strongly sloping

This map unit is very deep, nearly level to strongly sloping, somewhat excessively to moderately well drained. It is on terraces, deltas, kames and eskers. Slopes range from 0 to 15 percent and are convex or concave. Areas are irregular in shape and range from 15 to over 300 acres.

Units of this association consist of about 45 percent Masardis soils, 35 percent Sheepscot soils, and 20 percent other soils. The somewhat excessively drained Masardis soils are on the higher, more sloping areas and the moderately well drained Sheepscot soils are on lower, less sloping areas.

Typically, beneath a litter of leaves and twigs, the surface layer of the Masardis soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 2 inches thick. The subsoil is 25 inches thick. It is dark reddish brown gravelly fine sandy loam grading to dark brown gravelly fine sandy loam in the upper part, yellowish brown very gravelly sandy loam in the middle part, and olive brown very gravelly loamy sand in the lower part. The substratum is olive very gravelly coarse sand to a depth of 65 inches or more. In some areas the subsurface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Typically, beneath a litter of grasses and hardwood leaves, the surface layer of the Sheepscot soil is 3 inches of dark reddish brown very fine sandy loam underlain by a pinkish gray very fine sandy loam subsurface layer 1 inch thick. The subsoil is 21 inches thick. It is dark reddish brown fine sandy loam in the upper part, strong brown gravelly fine sandy loam in the middle part, and mottled light olive brown very gravelly loamy sand in the lower part. The substratum is mottled, light olive brown very gravelly loamy sand

to a depth of 65 inches or more. In some areas the surface layer is sandy loam or fine sandy loam.

Included in mapping are small areas of excessively drained Colton soils, somewhat excessively drained Adams and Hermon soils, well drained Allagash and Monadnock soils, moderately well drained Croghan and Madawaska soils, and poorly drained and somewhat poorly drained Naumburg soils. Croghan and Madawaska soils are on similar positions on the landscape as the Sheepscot soils, but lack the gravelly textures. Adams and Allagash soils also lack the gravelly textures and are on similar positions on the landscape as the Masardis soils. Colton soils are also on similar positions on the landscape as Masardis soils, but have a thinner surface cap and higher content of granite and sandstone rock fragments. Hermon and Monadnock soils are small knobs of ablation till within this unit or near the edges of the unit where it joins glacial till ridges. Naumburg soils are in depressional areas. Also included are areas with slopes less than 3 percent or greater than 15 percent, and areas above 2,300 feet in elevation where the soil temperatures are colder than allowed for these soils.

Masardis and Sheepscot soils have moderately rapid permeability in the loamy cap and rapid permeability in the coarse textured substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is low. Sheepscot soils have a seasonal high water table at a depth of 1.5 feet to 2.5 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table in the Sheepscot soils restricts rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Droughtiness due to the low available water capacity, the hazard of erosion, slope, and a seasonal high water table in the Sheepscot soils are the main limitations. Other management concerns are low natural fertility and leaching of added nutrients. Irrigation is needed to obtain satisfactory yields. Increasing the organic matter content with the addition of manure or green manure crops will improve soil structure and increase the available water capacity. Planting drought tolerant species, using cover crops, including grasses and legumes, in the cropping system, and applying a conservation tillage system that leaves some or all of the crop residue on the surface helps to control erosion. Erosion control practices such as contour farming, stripcropping and no-till planting are good management practices.

This map unit is very poorly suited to hay and pasture. Droughtiness, due to the low available water capacity, and a seasonal high water table in the Sheepscot soil are the main limitations. Other management concerns are very low natural fertility and leaching of added nutrients. Adequate yields can be expected with proper amounts of lime and fertilizer. Deferred grazing and rotational grazing are important management practices for this map unit and will improve the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, balsam fir, red pine, and northern whitecedar. Droughtiness of the Masardis soil is the main limitation. Seedling mortality is moderate because of the low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. There is moderate plant competition on Sheepscot soil because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red pine, white spruce, red spruce, balsam fir, and northern whitecedar. Trees to plant are eastern white pine, white spruce, red pine, European larch, and tamarack.

The rapid or very rapid permeability of this map unit, resulting in poor filtering action, and the seasonal high water table in the Sheepscot soil are the main limitations for septic tank absorption fields. If this map unit is used for septic tank absorption fields, there is a possibility of groundwater contamination. A larger septic tank absorption field and fill material to raise the level of the septic tank absorption field may be needed in areas of the Sheepscot soil. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field in the Masardis soil. Seepage and slope on both soils and the seasonal high water table in the Sheepscot soil are severe limitations for sewage lagoons. Seepage in both soils and the seasonal high water table in the Sheepscot soil are severe limitations for sanitary landfills. There are slight limitations for the Masardis soil for dwellings with or without basements and local roads and streets and slope is a moderate limitation for small commercial buildings. Because of the unstable substratum and the seasonal high water table in the Sheepscot soil, sloughing is a severe limitation in shallow excavations. A seasonal high water table is a moderate limitation of the Sheepscot soil for dwellings without basements, commercial buildings, and local roads and streets and a severe limitation for dwellings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations in the Sheepscot soil will help to prevent wet basements. Only the part

of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction site as soon as possible helps to control erosion. Droughtiness is a severe limitation for lawns and landscaping. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Mulch, fertilizer, and irrigation are needed to establish lawn grasses and other small seeded plants. Masardis is a good source of roadfill and Sheepscot is a fair source because of the seasonal high water table. Both soils are probable sources of sand and gravel.

The Masardis soil has slight limitations for camp areas, picnic areas, and paths and trails and severe limitations for playgrounds. The Sheepscot soil has moderate limitations for camp areas, picnic areas, and paths and trails and severe limitations for playgrounds. Slope on the Masardis soil and the seasonal high water table in the Sheepscot soil are the main limitations. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds. Irrigating and applying lime and fertilizer will help maintain sod during the droughty summer months.

The Masardis soil has good potential for woodland wildlife habitat and the Sheepscot soil has fair potential for woodland wildlife habitat. Both soils have good potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for Masardis is 3s and for Sheepscot is 2e. The woodland ordination symbol for Masardis is 7S and for Sheepscot is 8A.

Mm—Medomak silt loam

This map unit is very deep, nearly level, and very poorly drained. It is on floodplains along rivers, streams, and bogs. Slopes are concave and range from 0 to 2 percent. Areas are irregular in shape and range from 3 to over 40 acres.

Typically, beneath a litter of grasses and roots, the surface layer is 11 inches of very dark grayish brown silt loam, underlain by 3 inches of mottled, very dark grayish brown silt loam. The substratum is mottled, dark grayish brown and grayish brown silt loam above 36 inches, and mottled, dark grayish brown very fine sandy loam grading to very dark gray very fine sandy loam to a depth of 65 inches or more. In some area the surface layer is very fine sandy loam, mucky silt loam, or mucky very fine sandy loam.

Included in mapping are small areas of poorly drained Charles soils. Charles soils are on slightly higher positions on the landscape than the Medomak soils. Also included are areas of Bucksport and Markey soils, which are organic soils. In some units, coarser textured alluvial soils similar to Medomak soils are included. Inclusions make up about 20 percent of the unit.

Medomak soils have moderate permeability. Surface runoff is slow to ponded and erosion is a slight hazard. Available water capacity is high. A seasonal high water table is present from the surface to 0.5 foot below the surface from September through June, unless the area is flooded or ponded. Depth to bedrock is more than 60 inches. Flooding occurs more often than once in two years during spring runoff, or periods of heavy rainfall. Water stands on the surface in places from late fall through early spring.

Most areas of this map unit are used for woodland or are marshland and being used as wildlife habitat. A few areas have been drained and are being used for hay or are idle.

This map unit is very poorly suited to cultivated crops, orchards, hay and pasture. Frequent flooding and a seasonal high water table are the main limitations in using this map unit for cultivated crops, orchards, hay, or pasture.

The potential productivity of this map unit is high for trees such as eastern white pine. The seasonal high water table and periodic flooding are the main limitations. Equipment limitations and seedling mortality are severe because of the seasonal high water table, slow surface runoff, ponding, and frequent flooding. Harvesting is best suited to the winter months when the ground is frozen, or to the driest months of summer. The seasonal high water table may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of remaining trees to the prevailing winds. Some trees may be uprooted or girdled by ice where flooding occurs during the winter. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine and red maple. Trees to plant are black spruce.

Periodic flooding and ponding are the main limitations for most urban uses. In most cases, developing areas of this map unit for urban uses is too costly and impractical.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Periodic flooding and ponding are the main limitations and make areas of this map unit impractical for these recreational uses.

This map unit has fair potential for wetland wildlife habitat and poor potential for both openland wildlife and woodland wildlife habitat.

The land capability classification is 6w. The woodland ordination symbol is 6W.

MNC—Monadnock-Berkshire complex, rolling, very stony

This map unit is very deep, undulating and rolling, and well drained. It is on knobs and ridges in valleys. Slopes range from 3 to 15 percent and are mostly convex. Areas are oblong or slightly elongated and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 40 percent Monadnock soils, 30 percent Berkshire soils, and 30 percent other soils. The well drained Monadnock soils and well drained Berkshire soils are in an intricate pattern on similar positions on the landscape.

Typically, beneath a litter of leaves, twigs, and needles, the surface layer of the Monadnock soil is 3 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 22 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown gravelly fine sandy loam in the middle part, and dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Typically, beneath a litter of leaves and needles, the surface layer of the Berkshire soil is 2 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 28 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas, the mineral surface layer is sandy loam.

Included with these soils in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, somewhat excessively drained Hermon soils, well drained Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, and poorly drained Brayton soils and rock outcrop. Hermon soils are coarse textured soils on similar positions as the Monadnock and Berkshire soils. Lyman and Tunbridge soils and areas of rock outcrop are on knobs and higher elevations. Marlow and Dixfield soils have a dense substratum and are on the adjoining hills and ridges. Brayton and Colonel soils also have a dense substratum and are along drainageways and on the lowest elevations. Also included are areas with slopes less than 8 percent or greater than 15 percent and areas with more than 3 percent surface stones and boulders.

Monadnock soils have moderate permeability in the surface layer and subsoil and moderately rapid permeability in the substratum. Berkshire soils have moderate or moderately rapid permeability throughout. Surface runoff is slow to rapid and erosion is a moderate hazard. Available water capacity is moderate in Monadnock soils and high in Berkshire soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Surface stones, hazard of erosion, and slope are the main limitations. This map unit is suited to cultivated crops and orchards if the surface stones are removed. Good yields can be expected with proper amounts of lime and fertilizer. Using cover crops, including grasses and legumes, in the cropping system, and applying a conservation tillage system that leaves some or all of the crop residue on the surface, help maintain or increase the organic matter content of the surface layer, improving infiltration. Erosion control practices such as contour farming, stripcropping, no-till planting, and terracing are recommended for cultivated crops.

This map unit is poorly suited to hay and pasture. Surface stones are the main limitation. This map unit is suited to these uses if the surface stones are removed. Grasses and legumes grow well if adequate lime and fertilizer is used. Proper stocking rates, rotational grazing, and restricted grazing help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, balsam fir, and red pine. Its limitations for woodland are insignificant. There is moderate plant competition on the Monadnock soil, but seedlings will survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are white spruce, eastern white pine, red pine, balsam fir, red spruce, and northern hardwoods. Trees to plant are eastern white pine, red pine, white spruce, and balsam fir.

Slope and the moderately rapid permeability in the Berkshire soil, resulting in a moderate percolation rate, are the main limitations for septic tank absorption

fields. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Seepage and slope are severe limitations for sewage lagoons and sanitary landfills. Slope is a moderate limitation for shallow excavations in the Berkshire soil. Because of the unstable substratum in the Monadnock soil, sloughing is a severe limitation for shallow excavations. In both soils, slope is a moderate limitation for dwellings with or without basements and a severe limitation for small commercial buildings. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action in the Berkshire soil and slope on both soils are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth will help to overcome the shrink-swell problem. Roads should be constructed on the contour. Surface stones may be a problem when using areas of this map unit for urban uses and they may need to be removed prior to any construction. This map unit is a good source of roadfill and Monadnock soil is a probable source of sand.

Monadnock and Berkshire soils have slight limitations for paths and trails. They have moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope, large surface stones and boulders, and small stones within the soil are the main limitations. Stone removal, grading, seeding, and mulching are necessary when preparing these areas for use as playgrounds.

This map unit has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. They have very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 6s. The woodland ordination symbol for Monadnock is 8A and for Berkshire is 9A.

MNE—Monadnock-Berkshire complex, steep, very stony

This map unit is very deep, moderately steep and steep, and well drained. It is on sides of valleys. Slopes range from 15 to 45 percent and are mostly convex. Areas are oblong or slightly elongated and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 45 percent Monadnock soils, 30 percent Berkshire soils, and 25 percent other soils. The well drained Monadnock soils and well drained Berkshire soils are in an intricate pattern and on similar positions on the landscape.

Typically, beneath a litter of leaves, twigs, and needles, the surface layer of the Monadnock soil is 3 inches of black highly decomposed organic material, underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 22 inches thick. It is dark reddish brown fine sandy loam in the upper part, reddish brown gravelly fine sandy loam in the middle part and dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is olive brown very gravelly loamy sand to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Typically, beneath a litter of leaves and needles, the surface layer of the Berkshire soil is 2 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil is 28 inches thick. It is dark reddish brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Included in mapping are small areas of shallow, somewhat excessively drained Lyman soils, moderately deep, well drained Tunbridge soils, somewhat excessively drained Hermon soils, well drained Marlow soils, and moderately well drained Dixfield soils and areas of rock outcrop. Hermon soils are coarse textured soils on similar positions on the landscape as the Monadnock and Berkshire soils. Lyman and Tunbridge soils and areas of rock outcrop are on knobs and higher elevations. Marlow and Dixfield soils have a dense substratum and are on adjoining hills and ridges. Also included are areas with slopes less than 15 percent or greater than 45 percent and areas with more than 3 percent surface stones.

Monadnock soils have moderate permeability in the surface layer and subsoil and moderately rapid permeability in the substratum. Berkshire soils have moderate or moderately rapid permeability throughout. Surface runoff is rapid and the erosion is a moderate hazard. Available water capacity is moderate in the Monadnock soils and high in the Berkshire soils. Depth to bedrock is more than 60 inches.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops, orchards, hay, and pasture. Surface stones, slope, and hazard of erosion are the main limitations. Removal of surface stones is necessary prior to tillage. Tillage can cause erosion and steep slopes make equipment operation difficult. Crop residue left on or near the surface helps conserve moisture, maintain tilth, and control erosion. Erosion control practices such as contour farming and no-till planting help reduce the erosion hazard. Good yields of grasses and legumes can be expected with proper applications of lime and fertilizer. When reseeding, erosion control practices such as contour farming and no-till planting should be strictly applied.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, balsam fir, and red pine. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are moderate because of slope. There is moderate plant competition on the Monadnock soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red pine, red spruce, balsam fir, and northern hardwoods. Trees to plant are eastern white pine, red pine, white spruce, and balsam fir.

Slope is the major limitation if this map unit is used for urban uses. In most cases, developing areas of this map unit for urban uses is too costly and impractical. Extensive reshaping and grading is needed to prevent seepage from septic sewage disposal fields, sewage lagoons, and sanitary landfills. This map unit has severe limitations for dwellings with or without basements and for small commercial buildings because of the steep slopes. Special designs and extensive grading is necessary to overcome this limitation. Surface stones may be a problem when using areas of this map unit for urban uses and may need to be removed prior to any construction. Frost action and slope limit their suitability for roads and streets. Providing coarser grained subgrade or base materials to frost depth will help to alleviate the problem of frost action. Roads should be constructed on the contour as much as possible. Monadnock is a probable source of sand.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope, large surface stones and boulders, and small stones within the soil are the main limitations.

This map unit has good potential for woodland wildlife habitat, and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 7s. The woodland ordination symbol for Monadnock is 8R and for Berkshire is 9R.

MrB—Monarda silt loam, 0 to 8 percent slopes

This map unit is very deep, nearly level to gently sloping, and poorly drained. It is in depressions and at the foot of slopes of glaciated uplands where it receives runoff from higher areas. Slopes are concave in depressions and slightly convex at the foot of slopes. Areas are elongated along drainageways or irregular in shape and range from 3 to 30 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil is 8 inches thick. It is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam or loam.

Included in mapping are small areas of moderately well drained Chesuncook soils, somewhat poorly drained Telos soils, and very poorly drained Burnham soils. Chesuncook and Telos soils are at higher elevations and Burnham soils are on low areas and in depressions. Also included are areas of Monarda soils that have not been cleared of surface stones. Inclusions make up about 15 percent of the unit.

Monarda soils have moderate or moderately rapid permeability in the surface, very slow to moderate permeability in the subsoil and very slow or slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for pasture or are idle land consisting of shrubs and brush.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table and a dense substratum are the main limitations. This soil dries slowly in the spring delaying planting. Surface and subsurface drainage will help remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Using cover crops, including grasses and legumes helps increase the organic matter content of the surface layer, improving infiltration and tilth.

This map unit is poorly suited to hay and pasture. A seasonal high water table and a dense substratum are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Proper stocking rates, deferred grazing, rotational grazing, and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months in summer. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and paper birch.

Trees to plant are eastern white pine, balsam fir, white spruce, red pine, black spruce, and tamarack.

The very slow or slow permeability of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. This map unit has severe limitations for septic tank absorption fields because of the seasonal high water table and very slow and slow permeability. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. This map unit is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table and the slow or very slow permeability in the substratum are the main limitations.

This map unit has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 4w. The woodland ordination symbol is 8W.

MsB—Monarda extremely flaggy silt loam, 0 to 8 percent slopes, very stony

This map unit is very deep, nearly level to gently sloping, and poorly drained. It is in depressions and at the foot of slopes of glaciated ridges where it receives runoff from higher areas. Slopes are concave in depressions and slightly convex at the foot of slopes. Areas are elongated along drainageways or irregular in shape and range from 3 to 30 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of needles, leaves and twigs the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a light gray extremely flaggy silt loam subsurface layer 4 inches thick. The subsoil is 11 inches thick. It is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is extremely flaggy very fine sandy loam or extremely flaggy loam.

Included in mapping are small areas of moderately well drained Chesuncook soils, somewhat poorly drained Telos soils, very poorly drained Burnham soils, and an occasional area of very poorly drained Bucksport and Markey soils. Chesuncook and Telos soils are at higher elevations and Burnham, Bucksport, and Markey soils are on low areas and in depressions. Also included are areas of Monarda soils that have been cleared of surface stones and areas with greater than 3.0 percent surface stones. Inclusions make up about l5 percent of the unit.

Monarda soils have moderate or moderately rapid permeability in the surface layer, very slow to moderate permeability in the subsoil and very slow or slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland. A few are idle land consisting of shrubs and brush.

This map unit is poorly suited to cultivated crops or orchards. A seasonal high water table, dense substratum, and surface stones are the main limitations. This map unit dries slowly in the spring delaying planting. Surface or subsurface drainage will help to remove excess water. Tile systems are difficult to install because of the shallow depth to the dense substratum. Surface stone removal is necessary following plowing. Using cover crops, including grasses and legumes helps increase the organic matter content of the surface layer, improving infiltration and tilth.

This map unit is poorly suited to hay and pasture. A seasonal high water table, dense substratum, and surface stones are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months in summer. Seedling mortality is severe because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and paper birch. Trees to plant are eastern white pine, balsam fir, white spruce, red pine, black spruce, and tamarack.

The very slow or slow permeability of this map unit, resulting in a slow percolation rate, the seasonal high water table, and surface stones are the main limitations for most urban uses. This map unit has severe limitations for septic tank absorption fields because of the seasonal high water table and slow permeability. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. This soil is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, large surface stones, small stones within the soil, and the slow or very slow permeability of the substratum are the main limitations.

This soil has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 7s. The woodland ordination symbol is 8W.

MTB—Monarda-Burnham-Bucksport association, gently sloping, very stony

This map unit is very deep, nearly level to gently sloping, and poorly drained to very poorly drained. It is in valleys along drainageways and in depressions on glaciated uplands. Slopes range from 0 to 8 percent and are generally concave. Areas are elongated along drainageways or are irregular in shape and range from 15 to over 250 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 35 percent Monarda, 30 percent Burnham, 20 percent Bucksport soils, and 15 percent other soils. The poorly drained Monarda soils are on higher areas, the very poorly drained Burnham soils are on the lower areas, and the very poorly drained Bucksport soils are in the lowest depressional areas.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Monarda soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a light gray extremely flaggy silt loam subsurface layer 4 inches thick. The subsoil, 11 inches thick, is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of

65 inches or more. In some areas the mineral surface layer is extremely flaggy very fine sandy loam or extremely flaggy loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Burnham soil is 6 inches of dark reddish brown mucky peat underlain by 2 inches of black muck. The subsoil, 8 inches thick, is mottled, olive gray gravelly silt loam. The substratum is firm, mottled, olive and olive gray gravelly silt loam to a depth of 65 inches or more.

Typically, the surface layer of the Bucksport soil is black muck and grades to very dark brown muck to a depth of 65 inches or more.

Included in mapping are moderately well drained Chesuncook soils; somewhat poorly drained Telos soils; moderately deep, well drained Elliottsville soils; and shallow, somewhat excessively drained Monson soils. Chesuncook and Telos soils are on higher, more sloping areas. Elliottsville and Monson soils are on higher areas where bedrock is near the surface. Also included are areas with slopes greater than 8 percent slopes and areas with greater than 3 percent surface stones.

Monarda soils have moderate or moderately rapid permeability in the surface, very slow to moderate permeability in the subsoil, and very slow or slow permeability in substratum. Burnham soils have moderately slow to moderately rapid permeability in the surface organic layer and moderately slow permeability in the subsoil and very slow or slow permeability in the substratum. Bucksport soils have moderately slow to moderately rapid permeability throughout. Surface runoff is slow in Monarda and Burnham soils and very slow to ponded in Bucksport soils. The erosion hazard is slight. Available water capacity is high for these soils. Monarda soils have a perched water table from the surface to 1.0 foot below the surface from October through June. Burnham soils have a seasonal high water table from the soil surface to 0.5 foot below the surface and are ponded up to 1.0 foot above the surface from October through July. Bucksport soils have a seasonal high water table from the soil surface to 0.5 foot below the surface and are ponded up to one foot above the surface from September through July. Depth to bedrock is more than 60 inches. Rooting depth is restricted in these soils by the seasonal high water table and in Monarda and Burnham soils by the dense substratum.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops, orchards, hay and pasture. A seasonal high water table, dense substratum, and surface stones are the main limitations. This map unit dries slowly in the spring delaying planting. Surface stone removal is necessary prior to cultivation. Because of the organic matter content and wetness of the Bucksport soil, they are unsuitable for farming.

The potential productivity of this map unit is high and moderate for trees such as eastern white pine, white spruce, balsam fir, and red spruce. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is severe because of the seasonal high water table. The seasonal high water table and dense substratum limit rooting depth, causing a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is severe, but seedlings survive and grow on the Monarda soil if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, black spruce, balsam fir, and paper birch. Trees to plant are eastern white pine, white spruce, balsam fir, black spruce, and tamarack.

The very slow or slow permeability of the Monarda and Burnham soils, resulting in a slow percolation rate, ponding on the Burnham and Bucksport soils, and the seasonal high water table are the main limitations for most urban uses. In most cases developing areas of these soils for urban uses is too costly and impractical. This map unit has severe limitations for septic tank absorption fields because of the seasonal high water table, ponding, and slow permeability. Seepage and slope are moderate limitations for sewage lagoons in Monarda soil. The seasonal high water table and ponding are severe limitation for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum in the Monarda soil and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action in the Monarda and Burnham soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed

prior to any construction. This map unit is a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, ponding, large surface stones, small stones within the soil, and excess humus make areas of this map unit impractical for these recreational uses.

The Monarda soil has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat. The Burnham soil has poor potential for openland and woodland wildlife habitat and poor potential for wetland wildlife habitat. The Bucksport soil has very poor potential for openland and woodland wildlife habitat and good potential for wetland wildlife habitat.

The land capability classification for Monarda and Burnham soils is 7s and for Bucksport is 7w. The woodland ordination symbol for Monarda soil is 8W, for Burnham soils is 4W, and for Bucksport soils is 2W.

MUB—Monarda-Telos association, gently sloping, very stony

This map unit is very deep, nearly level and gently sloping, and poorly drained and somewhat poorly drained. It is on glacial till plains and lower footslopes of glacial till ridges. Slopes range from 0 to 8 percent and are mostly concave. Areas are irregular in shape and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Monarda soils, 35 percent Telos soils, and 20 percent other soils. The poorly drained Monarda soils are on the lower positions and in depressions and the Telos soils are on the higher positions in the landscape.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Monarda soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a light gray extremely flaggy silt loam subsurface layer 4 inches thick. The subsoil, 11 inches thick, is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is extremely flaggy very fine sandy loam, extremely flaggy loam, very fine sandy loam, or silt loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part, mottled dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included with these soils in mapping are moderately well drained Chesuncook soils, and very poorly drained Burnham soils, Bucksport soils, and Markey soils. Chesuncook soils are on higher slopes and knolls. Burnham soils are in depressional areas. Bucksport and Markey soils are organic soils in the lowest depressional areas. Also included are areas with slopes greater than 8 percent and areas with greater than 3 percent surface stones.

Monarda soils have moderately rapid or rapid permeability in the surface layer, very slow to moderate permeability in the subsoil, and very slow or slow permeability in the substratum. Telos soils have moderate permeability in the solum and slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. Monarda soils have a perched water table from the surface to 1.0 foot below the surface from October through June and Telos soils have a perched water table from 0.5 to 1.5 foot below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Dense substratum, surface stones, and seasonal high water table are the main limitations. The Telos soil is moderately suited to cultivated crops if the surface stones are removed. These soils warm slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Stone removal is also necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration, and controlling erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, dense substratum, and the seasonal high water table are the main limitations. These soils are moderately suited to hay and pasture if the surface stones are removed. Special precautions should be taken to avoid pasturing these soils when wet in order to avoid compaction and punching of the sod. Proper stocking rates, deferred grazing when the

soils are wet and rotational grazing are practices that help increase production. Applications of lime and fertilizer help improve the quality and quantity of yields.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitations are moderate and severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate and severe because of the seasonal high water table. The seasonal high water table and dense substratum limit rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings will survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and paper birch. Trees to plant are eastern white pine, white spruce, balsam fir, red spruce, black spruce, and tamarack.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. Seepage and slope are moderate limitations for sewage lagoons and a seasonal high water table and slow or very slow permeability are severe limitations for septic tank absorption fields and sanitary landfills. A larger septic absorption field and fill material to raise the level of the septic tank absorption field may be needed on the Telos soil. The seasonal high water table is a severe limitation in both soils for shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action in both soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and they may need to be removed prior to any construction. These soils are poor sources of roadfill, topsoil, sand, and gravel.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, slow permeability in the substratum, large surface stones, and small stones within the soil are the main limitations.

The Telos soil has good potential for woodland wildlife habitat and the Monarda soil has fair potential for woodland wildlife habitat. Both soils have poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for Monarda is 7s and for Telos is 6s. The woodland ordination symbol for both soils is 8W.

MVC—Monson-Elliottsville-Telos complex, rolling, very stony

This map unit is shallow to very deep, undulating and rolling, and somewhat poorly drained to somewhat excessively drained. It is on the crests, sides, and bases of upland till plains, hills and ridges. Slopes are mostly concave and range from 3 to 15 percent. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 35 percent Monson soils, 25 percent Elliottsville soils, 20 percent Telos soils, and 20 percent other soils. The somewhat excessively drained, shallow Monson soils are on the crests and shoulders of upland hills and ridges. The well drained, moderately deep Elliottsville soils are on side slopes. The somewhat poorly drained, very deep Telos soils are on the lower, more level areas.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Monson soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a brown loam subsurface layer 1 inch thick. The subsoil, 16 inches thick, is dark reddish brown loam in the upper part, yellowish red and dark brown silt loam in the middle part, and light olive brown silt loam in the lower part. Slate bedrock is at 18 inches. In some areas the mineral surface layer is very fine sandy loam or silt loam.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic material, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil, 15 inches thick, is dusky red loam in the upper part, reddish brown and

dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31 inches. In some areas the mineral surface layer is silt loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included in mapping are small areas of moderately deep, somewhat excessively drained Thorndike soils, moderately well drained Chesuncook soils, poorly drained Monarda soils, and very poorly drained Bucksport and Burnham soils. Thorndike soils are on similar positions as Monson soils but have greater than 35 percent rock fragments. Chesuncook soils are on sloping areas higher in elevation than Telos soils. Monarda and Burnham soils are on nearly level areas lower in elevation than the Telos soils and in depressions. Bucksport soils are organic soils located in the lowest depressional areas. Also included are areas with slopes less than 3 percent and greater than 15 percent and areas with greater than 3 percent surface stones.

The permeability of this map unit is moderate with the exception of the dense substratum of the Telos soils which has slow permeability. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is moderate in the Monson soils and high in the Elliottsville and Telos soils. Telos soils have a perched water table from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is between 10 and 20 inches in Monson soils, between 20 and 40 inches in Elliottsville soils and more than 60 inches in the Telos soils. Rooting depth is restricted by the seasonal high water table and the dense substratum in the Telos soils and by depth to bedrock in Monson soils.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Depth to bedrock, a dense substratum, and a seasonal high water table in the Telos soil, slope, and surface stones are the main limitations. The Elliottsville soil is moderately suited to orchards if the surface stones are removed. Depth to bedrock is variable and equipment operation may be difficult on shallower areas or around bedrock outcroppings. In shallower areas, low available water capacity can cause droughtiness. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve the soil structure and increase the available water capacity and also reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended.

This map unit is poorly suited to hay and pasture. Surface stones, dense substratum, and the seasonal high water table in the Telos soil, and depth to bedrock are the main limitations. In shallower areas the available water capacity can cause droughtiness, and overgrazing of these areas can result in erosion. Proper stocking rates, pasture rotation, and restricted grazing during droughty periods helps keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. Seasonal high water table and shallow rooting depth are the main limitations. Equipment limitations are moderate on the Telos soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate on the Monson soil because of the moderate water holding capacity and moderate on the Telos soil because of the seasonal high water table. The windthrow hazard is moderate and severe on the Elliottsville and Monson soils where rooting depth is restricted by bedrock and the seasonal high water table and dense substratum in the Telos soil may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to protect the remaining trees from exposure to the prevailing winds. There is moderate and severe plant competition, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and northern hardwoods. Trees to plant are eastern white pine, red spruce, white spruce, European larch, tamarack, and black spruce.

The seasonal high water table and the slow permeability in the substratum of the Telos soil, resulting in a slow percolation rate, and the depth to bedrock in the Monson and Elliottsville soils are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to

overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, the impermeability of the bedrock can cause effluent from the septic tank absorption field to surface in downslope areas and thus create a health hazard. Slope and depth to bedrock in the Monson and Elliottsville soils and the seasonal high water table in Telos are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with basements, and small commercial buildings. Slope and depth to bedrock are moderate limitations for dwellings without basements on the Elliottsville soil and severe on the Monson soil. The seasonal high water table in the Telos soils is a severe limitation for dwellings without basements. The bedrock is rippable with large machinery. A seasonal high water table is perched above the dense substratum in the Telos soil and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help to prevent wet basements. Frost action is an additional consideration for foundations. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, depth to bedrock, and frost action are moderate limitations on the Elliottsville soil for local roads and streets and severe on Monson soils. The seasonal high water table and frost action of the Telos soils are severe limitations for local roads and streets. Bedrock will generally be encountered during grading and land shaping. Providing drainage in the wet areas along with a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Building roads on the contour helps to overcome the slope. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source of roadfill, topsoil, sand, and gravel.

The Monson soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Elliottsville soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Telos soil has severe limitations for all recreational uses. The seasonal high water table, depth to bedrock, slope, large surface stones, slow permeability in the dense substratum of the Telos soil, and small stones within the soil are the main limitations.

The Elliottsville soil and the Telos soil have good potential for woodland wildlife habitat and Monson soil has fair potential for woodland wildlife habitat. All three soils have poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for all the soils is 6s. The woodland ordination symbol for Monson is 8D, for Elliottsville is 10A, and for Telos is 8W.

Nb—Naumburg loamy sand

This map unit is very deep, nearly level, and somewhat poorly drained. It is in deposits of water-laid sands in depressions on glacial outwash plains, deltas and terraces often near streams, lakes, and bogs. The surface is characterized by micro-relief of depressions and mounds. Slopes are smooth and generally range from 0 to 3 percent. Areas are irregular in shape and range from 5 to 60 acres, but areas from 5 to 15 acres are most common.

Typically, beneath a litter of leaves, twigs, and moss, the surface layer is 3 inches of black highly decomposed organic material underlain by a pinkish gray loamy sand surface layer 4 inches thick. The subsoil, 18 inches thick, is mottled, dark reddish brown loamy sand in the upper part, mottled, dark brown loamy sand in the middle part, and mottled, dark brown sand in the lower part. The substratum is mottled, grayish brown sand to a depth of 65 inches or more. In some areas the mineral surface layer is sand, loamy fine sand, sandy loam, or fine sandy loam. Some areas have soils that are similar to the Naumburg soils but have continuously cemented subsoil.

Included with this soil in mapping are small areas of very poorly drained Searsport soils, well drained Adams soils and moderately well drained Croghan soils. Searsport soils are in deeper depressions. Adams and Croghan soils are on slightly higher positions. Also included are Naumburg soils with slopes greater than 3 percent. Inclusions make up about 15 percent of the unit.

Naumburg soils have moderately rapid permeability in the surface and rapid permeability in the subsoil and substratum. Surface runoff is very slow and erosion is a slight hazard. Available water capacity is low. A seasonal high water table is present at a depth of 0.5 foot to 1.5 feet below the surface from December through May. Depth to bedrock is more than 60

inches. The fluctuating water table and the weakly cemented areas in the subsoil restrict rooting depth.

Most areas of this map unit are used for woodland. A smaller portion is used for pasture or is idle.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table and a low available water capacity are the main limitations. Surface and subsurface drainage will help remove excess water. A conservation tillage system that returns crop residue to the soil will improve fertility and tilth and retain moisture during the dry periods.

This map unit is poorly suited to hay and pasture. A seasonal high water table and low available water capacity are the main limitations. Applications of lime and fertilizer will help improve yields. Use of proper stocking rates, pasture rotation, and restricted grazing during wet periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine and white spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate because of the seasonal high water table. Harvesting is best suited during the winter when the ground is frozen or to the drier months of summer. Seedling mortality is severe because of the seasonal high water table. The seasonal high water table may restrict rooting depth resulting in a moderate windthrow hazard. Trees to favor in natural stands are eastern white pine, white spruce, and red maple. Trees to plant are eastern white pine, white spruce, and Norway spruce.

The rapid permeability of this map unit resulting in poor filtering action and the seasonal high water table are the main limitations for septic tank absorption fields. If it is used for septic tank absorption fields there is a possibility of ground water contamination. A larger absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Seepage and the seasonal high water table are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum and the seasonal high water table, sloughing is a severe limitation for shallow excavations. The seasonal high water table is a severe limitation for dwellings with or without basements, small commercial buildings, and local roads and streets. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. This map unit is a probable source of sand.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table and sandy textures are the main limitations.

This map unit has fair potential as habitat for openland wildlife and woodland wildlife. It has good potential for wetland wildlife habitat.

The land capability classification is 4w. The woodland ordination symbol is 7W.

NS—Naumburg-Searsport association

This map unit is very deep, nearly level, somewhat poorly drained to very poorly drained. It is on outwash plains. Slopes range from 0 to 3 percent and are mostly concave. Areas are oval or irregular in shape and range from 15 to over 100 acres.

Units of this association consist of about 50 percent Naumburg soils, 25 percent Searsport soils and 25 percent other soils. The somewhat poorly drained and poorly drained Naumburg soils are on the higher, dryer areas and the very poorly drained Searsport soils are in depressions.

Typically beneath a litter of leaves, twigs, and moss, the surface layer of the Naumburg soil is 3 inches of black highly decomposed organic material underlain by a pinkish gray loamy and surface layer 4 inches thick. The subsoil, 18 inches thick, is mottled, dark reddish brown loamy sand in the upper part, mottled, dark brown loamy sand in the middle part, and mottled, dark brown sand in the lower part. The substratum is mottled, grayish brown sand to a depth of 65 inches or more. In some areas the mineral surface layer is sand, loamy fine sand, sandy loam, or fine sandy loam. Some areas have soils that are similar to the Naumburg soils but have continuously cemented subsoil.

Typically, beneath a litter of leaves, twigs, needles, and grasses, the surface layer of the Searsport soil is 10 inches of black mucky peat over 4 inches of very dark grayish brown loamy fine sand underlain by a gray loamy fine sand subsurface layer 2 inches thick. The substratum is mottled, grayish brown loamy sand grading to mottled, gray sand to a depth of 65 inches or more. In some areas the mineral surface layer is sand, loamy sand, sandy loam, or fine sandy loam.

Included in mapping are the excessively drained Colton soils, somewhat excessively drained Adams soils, moderately well drained Croghan soils, and very poorly drained Bucksport and Markey soils. Colton, Adams, and Croghan soils are on higher positions. Colton soils are also coarser textured. Bucksport and Markey soils are organic soils in depressions. Also

included are areas with slopes greater than 3 percent and areas with more than 0.1 percent surface stones.

Naumberg soils have moderately rapid permeability in the surface layer and rapid permeability in the subsoil and substratum and Searsport soils have moderately slow to moderately rapid permeability in the organic surface layer and rapid or very rapid permeability in the subsurface soil, subsoil, and substratum. Surface runoff is very slow or ponded and the erosion hazard is none to slight. Naumburg soils have a seasonal high water table at a depth of 0.5 foot to 1.5 feet below the surface from December through May and Searsport soils have a seasonal high water table from the soil surface to 1.0 foot below the surface and are ponded to 1.0 foot above the surface from September through July. Available water capacity is low in Naumburg soils and moderate in Searsport soils. Depth to bedrock is more than 60 inches. The fluctuating water table and the weakly cemented areas in the subsoil restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table and low available water capacity are the main limitations. Surface and subsurface drainage will help remove excess water. A conservation tillage system that returns crop residue to the soil will improve fertility and tilth and retain moisture during the dry periods.

This map unit is very poorly suited to hay and pasture. A seasonal high water table and low available water capacity are the main limitations. Applications of lime and fertilizer will help improve yields. Proper stocking rates, pasture rotation, and restricted grazing during wet periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, and balsam fir. The seasonal high water table is the main limitation. Equipment limitations are moderate on the Naumburg soils and severe on the Searsport soils because of the seasonal high water table. Harvesting is best suited during the winter when the ground is frozen or to the drier months of summer. Seedling mortality is severe because of the seasonal high water table. The seasonal high water table may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit the exposure of the remaining trees to the prevailing winds. There is severe plant competition on these soils, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, northern white cedar, and red maple. Trees to plant are eastern white pine, Norway spruce, European larch, and northern hardwoods.

The rapid or very rapid permeability of these soils resulting in poor filtering action, the seasonal high water table, and ponding on the Searsport soil are the main limitations for most urban uses. In most cases, developing areas of the Searsport soil for urban uses is too costly and impractical. If the Naumburg soils are used for septic tank absorption fields there is a possibility of ground water contamination. A larger absorption field and fill material to raise the level of the septic tank absorption field may be needed in the Naumburg soil. Seepage and the seasonal high water table in the Naumburg soil are severe limitations for sewage lagoons and sanitary landfills. Because of the unstable substratum and the seasonal high water table in the Naumburg soil, sloughing is a severe limitation for shallow excavations. The seasonal high water table in these soils and ponding on the Sheepscot soil are severe limitations for dwellings with or without basements, small commercial buildings, and local roads and streets. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Installing drainage during road construction will lower the water table and help to overcome the problem of wetness. Both soils are probable sources of sand.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, ponding, sandy texture, and excess humus in the Searsport soil are the main limitations.

The Naumburg soil has fair potential for openland wildlife habitat and woodland wildlife and good potential for wetland wildlife habitat. The Searsport soil has fair potential for wetland wildlife habitat and poor potential for woodland wildlife and openland wildlife habitat.

The land capability classification for Naumburg is 4w and for Searsport is 5w. The woodland ordination symbol for both soils is 7W.

NvB—Nicholville silt loam, 3 to 8 percent slopes

This map unit is very deep, gently sloping, and moderately well drained. It is on lacustrine plains. Slopes are smooth and slightly concave. Areas are oval and range from 5 to 60 acres.

Typically, the surface layer is 10 inches of dark brown silt loam. The subsoil, 11 inches thick, is brown silt loam in the upper part, dark yellowish brown silt loam in the middle part, and mottled, dark yellowish brown silt loam in the lower part. The substratum is mottled, olive silt loam to a depth of 65 inches or more. Varves of loamy very fine sand are in the lower part of the substratum. In some areas the surface layer is very fine sandy loam.

Included in mapping are small areas of poorly drained Swanville soils and moderately well drained and somewhat poorly drained Boothbay soils. Swanville soils are in small nearly level depressions or in the middle of some concave slopes. Boothbay soils are finer textured and are on similar positions as Nicholville soils. Isolated till knobs of well drained Marlow soils and moderately well drained Dixfield soils are also in some map units. Also included are Nicholville soils with slopes greater than 8 percent. Inclusions make up about 20 percent of the unit.

Nicholville soils have moderate permeability. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is at a depth of 1.5 to 2.0 feet below the surface from November through May, where the soil has not been drained. Depth to bedrock is more than 60 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for hay and pasture. Some areas are used for woodland or cultivated crops.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table is the main limitation. Excess water from spring rain hinders the operation of farm machinery and delays planting on this map unit. Surface and subsurface drainage will help to remove excess water. Contour farming, stripcropping, and crop rotation with green manure crops to improve and increase organic matter content will help control erosion.

This map unit is suited to hay and pasture. A seasonal high water table is the main limitation. If the pasture is grazed when the soil is wet, the surface layer will become compacted resulting in poor tilth and increasing the possibilities of surface erosion. Surface and subsurface drainage will help remove excess water. Pasture rotation and restricted grazing during wet periods are management needs.

The potential productivity of this map unit is very high for trees such as eastern white pine. Its limitations for woodland are insignificant. There is moderate plant competition on this soil because of the seasonal high water table, but seedlings will survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, northern red oak, and sugar maple. Trees to plant are eastern white pine, Norway spruce, European larch, and white spruce.

The seasonal high water table in this map unit is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a severe limitation for sewage lagoons and trench type sanitary landfills and a moderate limitation for area type sanitary landfills. The seasonal high water table is a severe limitation for shallow excavations, dwellings with basements, and small commercial buildings. A seasonal perched water table is present in the subsoil and substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for dwellings without basements, for small commercial buildings, and local roads and streets. Installing drainage around foundations and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem. This map unit is a good source of topsoil.

This map unit has slight limitations for camp areas, picnic areas, and paths and trails. It has moderate limitations for playgrounds. Slope is the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for use as playgrounds.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 2w. The woodland ordination symbol is 12A.

NvC—Nicholville silt loam, 8 to 15 percent slopes

This map unit is very deep, strongly sloping, and moderately well drained. It is on lacustrine plains. Slopes are smooth and slightly convex. Areas are oval and range from 5 to 60 acres.

Typically, the surface layer is 10 inches of dark brown silt loam. The subsoil, 11 inches thick, is brown silt loam in the upper part, dark yellowish brown silt loam in the middle part and mottled dark yellowish brown silt loam in the lower part. The substratum is

mottled olive silt loam to a depth of 65 inches or more. Varves of loamy very fine sand are in the lower part of the substratum. In some areas the surface layer is very fine sandy loam.

Included in mapping are small areas of poorly drained Swanville soils and moderately well drained Boothbay soils. Swanville soils are in concave areas. Boothbay soils are finer textured on similar positions as Nicholville soils. Also included are Nicholville soils with slopes less than 8 percent. Inclusions make up about 20 percent of the unit.

Nicholville soils have moderate permeability. Surface runoff is medium and erosion is a severe hazard. Available water capacity is high. A perched water table is at a depth of 1.5 to 2.0 feet below the surface from November through May, where the soil has not been drained. Depth to bedrock is more than 65 inches. The seasonal high water table restricts rooting depth.

Most areas of this map unit are used for hay and pasture. Some areas are used for woodland or are idle fields reverting to woodland.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table and hazard of erosion are the main limitations. Excess water from spring rain hinders the operation of farm machinery and delays planting. Surface and subsurface drainage will help remove excess water. Erosion control measures such as contour farming, stripcropping, and crop rotation are necessary to prevent erosion.

This map unit is well suited to hay and pasture. A seasonal high water table is the main limitation. If the pasture is grazed when this soil is wet, the surface layer will become compacted. Surface and subsurface drainage will help remove excess water. Applications of lime and fertilizer will help improve the quality and quantity of yields. Use of proper stocking rates, pasture rotation, and restricted grazing during wet periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is very high for trees such as eastern white pine. Its limitations for woodland are insignificant. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. There is moderate plant competition on this map unit because of the seasonal high water table, but plants survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, northern red oak, and sugar maple. Trees to plant are eastern white pine, European larch, Norway spruce, and white spruce.

The seasonal high water table in this map unit is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are severe limitations for sewage lagoons and sanitary landfills. The seasonal high water table is a severe limitation for shallow excavations and for dwellings with basements. A seasonal perched water table is present in the subsoil and substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action is a severe limitation for dwellings without basements, for small commercial buildings, and local roads and streets. Installing drainage around foundations and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem. Erosion is a concern in steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible will help to control erosion. This map unit is a good source of topsoil.

This map unit has slight limitations for paths and trails. It has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. Slope is the main limitation. Grading, seeding, and mulching are necessary in preparing these areas for playgrounds.

This map unit has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 12R.

PeB—Peacham-Brayton complex, 0 to 8 percent slopes, very stony

This map unit is very deep, nearly level or gently sloping, very poorly drained and poorly drained. It is on the long concave lower slopes of drumlin shaped ridges and on flat valleys between ridges where it

receives runoff from higher areas. Slopes are generally smooth and slightly concave. Areas are irregular in shape and range from 5 to 250 acres. Surface stones cover from 0.1 percent to 3 percent of the surface.

Units of this complex consist of about 45 percent Peacham soils, 35 percent Brayton soils and 20 percent other soils. The very poorly drained Peacham soils are in depressions lower in the landscape than the poorly drained Brayton soils.

Typically, beneath a litter of leaves, ferns, needles, grasses, and sphagnum moss, the surface layer of the Peacham soil is 8 inches of black cobbly muck. The subsoil, 12 inches thick, is mottled dark grayish brown silt loam in the upper part and mottled grayish brown fine sandy loam in the lower part. The substratum is firm, mottled olive gray gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is muck, mucky peat, or cobbly mucky peat.

Typically, beneath a litter of leaves, needles and twigs the surface layer of the Brayton soil is 6 inches of mottled, very dark grayish brown fine sandy loam. The subsoil, 8 inches thick, is mottled, dark grayish brown fine sandy loam. The substratum is very firm, mottled, olive fine sandy loam grading to gravelly fine sandy loam to a depth of 65 inches or more. In some areas the surface layer is sandy loam, very fine sandy loam, loam, or silt loam. Some areas have a dense substratum with silt loam texture.

Included in mapping are small areas of moderately well drained Dixfield soils and very poorly drained Bucksport and Markey soils. Dixfield soils are on small convex shaped knolls. Bucksport and Markey soils are organic soils in isolated pockets and on lower slopes. Also included are Brayton soils with slopes greater than 8 percent.

The Peacham soils have moderately slow permeability in the surface layer and moderate permeability in the subsoil and very slow or slow permeability in the substratum. Brayton soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is slow or very slow and erosion is a slight hazard. Peacham soils have a seasonal high water table from the soil surface to 0.5 foot below the surface and are ponded up to 1.0 foot above the surface from October through June and Brayton soils have a perched water table from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited for cultivated crops, orchards, hay, and pasture. A seasonal high water table, surface stoniness, and dense substratum are the main limitations. These limitations are too costly to overcome and it is impractical to use these soils for farming.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, white spruce, and balsam fir, especially on the Brayton soils. The main limitation is the seasonal high water table. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or during the drier summer months. Seedling mortality is moderate and severe because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to protect the remaining trees from the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, and tamarack. Trees to plant are red spruce, black spruce, and tamarack.

The very slow or slow permeability in the substratum of this map unit, resulting in a slow percolation rate, the seasonal high water table, and ponding on the Peacham soil are the main limitations for most urban uses. In most cases developing areas of Peacham soil for urban uses is too costly and impractical. These soils have severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills because of the seasonal high water table, ponding, and slow permeability. The seasonal high water table and ponding are severe limitation for shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum in these soils and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table, ponding, and frost action in the Peacham and Brayton soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they

may need to be removed prior to any construction. These soils are a poor source for roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, ponding, the very slow or slow permeability in the substratum, large surface stones, and small stones within the soil are the major limitations.

The Brayton soil has fair potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat. The Peacham soil has fair potential for wetland wildlife habitat and poor potential for woodland wildlife habitat. Both soils have poor potential for openland wildlife habitat.

The land capability classification is 5s for Peacham and is 6s for Brayton. The woodland ordination symbol for Peacham is 7W and for Brayton is 8W

Pr—Pits, quarry

This unit is nearly level to very steep open excavations that have been mined mainly for granite bedrock. The areas are surrounded by bedrock spoil or excavated soil material. The areas are irregular in shape and range from 3 to over 75 acres. The thickness of the soil material over undisturbed bedrock is as much as 65 inches but is generally less than 10 inches. In some areas the bedrock is schist or slate.

Included in mapping are shallow, somewhat excessively drained Lyman soils, and moderately deep, well drained Tunbridge soils and areas of Rock outcrop. Inclusions make up about 15 percent of the unit.

The permeability of this unit is variable depending upon the material. Surface runoff is very rapid to very slow. Available water capacity is very low. Some excavated areas are permanently ponded. Rooting depth is restricted by the depth to bedrock, fluctuating water table, mineral accumulation, and extreme acidity.

Most areas of this unit have been abandoned as quarries and are unsuitable for most uses other than as wildlife habitat. Determination of the suitability of the unit for reclamation generally requires onsite investigation.

The land capability classification is 8s.

Ps—Pits, sand and gravel

This unit is open excavations from which soil and underlying material have been removed. Areas of excavated soil material surround this map unit. The areas are generally round or oval and range from 3 to over 100 acres. They are generally near Colton, Adams, Masardis, Sheepscot, and Hermon soils, but some are near Marlow and Chesuncook soils.

The permeability of this unit is variable depending upon the material. Surface runoff is very rapid to very slow. Available water capacity is very low. Some areas are ponded intermittently and some have been excavated to bedrock.

Areas of this unit that are not actively being mined are unsuitable for most uses other than wildlife habitat. These areas should have the banks graded and stabilized with vegetation to prevent them from caving in and eroding. Determination of the suitability of the unit for reclamation generally requires onsite investigation.

Some areas of this unit are too small to be shown on the soil map and are indicated by a special symbol.

The land capability classification is 8s.

RRE—Ricker-Rock outcrop complex, very steep

This map unit is very shallow to moderately deep, moderately steep to very steep, excessively drained to well drained soils and exposed bedrock. It is on mountainous areas above an elevation of 2300 feet. Slopes range from 15 to 80 percent and are primarily convex. Areas are irregular in shape and range from 15 to over 200 acres.

Units of this complex consist of about 45 percent Ricker soils, 35 percent Rock outcrop, and 20 percent other soils. The very shallow to moderately deep, excessively drained to well drained Ricker soils are dominantly downslope from areas of Rock outcrop, but Rock outcrop occurs randomly throughout the Ricker soils.

Typically, the surface layer of the Ricker soil is 2 inches of dark reddish brown peat underlain by subsurface layers of black muck 3 inches thick and gray gravelly silt loam 2 inches thick. Weathered granitic bedrock is at 7 inches.

Typically, Rock outcrop is exposed gneiss, schist, slate, or granite bedrock with insufficient soil material to support plant growth.

Included in mapping are small areas of shallow, well drained Saddleback soils and very deep, somewhat excessively drained, fragmental Mahoosuc soils and bedrock escarpments. Saddleback soils are on similar positions on the landscape as Ricker soils. Mahoosuc soils are in areas where fragmental materials have fallen from higher slopes and accumulated. Also included are areas with slopes less than 15 percent or greater than 60 percent.

Ricker soils have moderately rapid permeability in the organic layers and moderate or moderately rapid

permeability in the mineral layer. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is low. Depth to bedrock is less than 26 inches in the Ricker soils. Rooting depth is restricted by bedrock. When Ricker soils are saturated during periods of rainfall or snowmelt, water moves laterally across the bedrock and does not become stagnant.

Most areas of this map unit are used for woodland. Some areas lack trees and have a ground cover of mosses, grasses, and shrubs.

These areas are very poorly suited to farming. Slope, depth to bedrock, or lack of soil cover over bedrock are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this complex for farming.

The potential productivity of the Ricker soils is moderately high for trees such as balsam fir. Slope is the main limitation. Shallow soil depth, cold air, and soil temperature limit growth. Erosion hazard, equipment limitations, seedling mortality, and windthrow hazard are all severe. Trees to favor in natural stands are red spruce and balsam fir.

Depth to bedrock and slope are the main limitations of this complex for most urban uses. In most cases developing areas of this unit for urban use is too costly and impractical.

These areas have severe limitations for picnic areas, camp areas, playgrounds, and paths and trails. Slope, depth to bedrock, and excess humus in the Ricker soil are the main limitations.

The Ricker soil has poor potential for woodland wildlife habitat and very poor potential for openland wildlife and wetland wildlife habitat. Rock outcrop has very poor potential as habitat for openland wildlife, woodland wildlife, and wetland wildlife.

The land capability classification for Ricker is 7s and for Rock outcrop is 8s. The woodland ordination symbol for Ricker is 4R.

RSE—Ricker-Saddleback association, very steep

This map unit is very shallow to moderately deep, moderately steep to very steep, and well drained to excessively drained. It is on mountainous areas above an elevation of 2300 feet. Slopes range from 15 to 80 percent and are primarily convex. Areas are irregular in shape and range from 15 to over 300 acres.

Units of this association consist of about 45 percent Ricker soils, 35 percent Saddleback soils, and 20 percent other soils. The very shallow, well drained to excessively drained Ricker soils are on mountaintops and the shallow, well drained Saddleback soils are on the side slopes.

Typically, the surface layer of the Ricker soil is 2 inches of dark reddish brown peat underlain by subsurface layers of black muck 3 inches thick and gray gravelly silt loam 2 inches thick. Weathered granitic bedrock is at 7 inches.

Typically, beneath a litter of needles and leaves, the surface layer of the Saddleback soil is 4 inches of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 10 inches thick, is very dusky red fine sandy loam in the upper part, dark reddish brown fine sandy loam in the middle part, and reddish brown fine sandy loam in the lower part. Granitic bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Included in mapping are small areas of fragmental, somewhat excessively drained Mahoosuc soils; rock outcrop; and bedrock escarpments. Mahoosuc soils are in areas where fragmental materials have fallen from higher slopes and accumulated. Also included are areas with slopes less than 15 percent or greater than 60 percent and areas with greater than 3 percent surface stones.

The Ricker soils have moderately rapid permeability in the organic horizons and moderate or moderately rapid permeability in the mineral horizon. The Saddleback soils have moderate permeability throughout. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is low. Depth to bedrock is less than 26 inches in Ricker soils and between 10 and 20 inches in Saddleback soils. Rooting depth and water movement are restricted by bedrock.

Most areas of these soils are used for woodland. Some areas lack trees and have a ground cover of mosses, grasses and shrubs.

This map unit is very poorly suited to farming. Slope, depth to bedrock, surface stones, and inaccessibility are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as eastern white pine and balsam fir. Slope is the main limitation. Shallow soil depth and cold air and soil temperature limit growth. Erosion hazard, equipment limitations, and windthrow hazard are all severe. Seedling mortality is moderate on the Saddleback soils and severe on the Ricker soils. Plant competition is slight on the Ricker soils and moderate on the Saddleback soils. Trees to favor in natural stands are red spruce, balsam fir, and paper birch. Trees to plant are red spruce and white spruce.

Depth to bedrock and slope are the main limitations of these soils for most urban uses. In most cases, developing areas of these soils for urban uses is too costly and impractical.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope, depth to bedrock, excess humus in the Ricker soil, large surface stones, and small stones within the Saddleback soil are the main limitations.

The Saddleback soil has fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Ricker soil has poor potential for woodland wildlife habitat and very poor potential for openland wildlife habitat. Both soils have very poor potential for wetland wildlife habitat.

The land capability classification is 7s for both soils. The woodland ordination symbol for both soils is 4R.

RYE—Rock outcrop-Abram-Lyman complex, very steep, very stony

This map unit consist of very shallow and shallow, moderately steep to very steep, and excessively drained and somewhat excessively drained soils and exposed bedrock. It is on glaciated, bedrock-controlled mountains, hillsides, and ridges. Slopes range from 15 to 60 percent and are often smooth and convex. Areas are generally oval or elongated in shape and range from 15 to over 400 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 30 percent Rock outcrop, 25 percent Abram soils, 20 percent Lyman soils, and 25 percent other soils. Rock outcrop is on the higher positions on ridges, knolls, and mountaintops. The very shallow, excessively drained Abram soils and shallow, somewhat excessively drained Lyman soils are on the lower positions.

Typically, Rock outcrop is exposed gneiss, schist, or granite bedrock with insufficient soil material to support plant growth.

Typically, beneath a litter of leaves, needles and twigs, the surface layer of the Abram soil is 1 inch of black, highly decomposed organic material underlain by subsurface layers of very dark gray very fine sandy loam 2 inches thick and brown very fine sandy loam 1 inch thick. The subsoil, 1 inch thick, is reddish brown fine sandy loam. Schistose bedrock is at 5 inches. In some areas the mineral surface layer is silt loam, loam, fine sandy loam, or sandy loam.

Typically, beneath a litter of leaves and twigs and a 1 inch layer of moderately decomposed leaves and twigs, the surface layer of the Lyman soil is 2 inches of black highly decomposed organic material underlain by a reddish gray fine sandy loam subsurface layer 1 inch thick. The subsoil, 12 inches thick, is dark reddish brown fine sandy loam in the upper part, reddish brown fine sandy loam in the middle part, and strong brown fine sandy loam in the lower part. Schistose bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are somewhat excessively drained Hermon soils; moderately deep, well drained Tunbridge soils; well drained Marlow soils; and moderately well drained Dixfield soils. Hermon, Tunbridge, Marlow, and Dixfield soils are in pockets and on knolls on the upper side slopes. Also included are somewhat poorly drained or poorly drained, shallow or very shallow soils in depressions within the areas of Lyman and Tunbridge soils. On very steep slopes boulders and stones resulting from rockslides may pave small areas. Also included are areas with slopes less than 15 percent or greater than 80 percent.

Lyman soils have moderately rapid permeability. Abram soils have moderately rapid permeability. Surface runoff is rapid for Lyman and Abram soils and very rapid on areas of Rock outcrop. Available water capacity is very low in Abram soils and low in Lyman soils. Depth to bedrock is less than 10 inches in Abram soils and between 10 and 20 inches in Lyman soils. Rooting depth and water movement is restricted by bedrock.

Most areas of this map unit are openland. Upper areas are bare bedrock. Many areas lack trees and have a ground cover of mosses, grasses, and shrubs. Lower slopes are used for woodland.

This map unit is very poorly suited to farming. Depth to bedrock, slope, and surface stones are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this complex for farming.

The potential productivity of the Abram and Lyman soils is high and moderately high for trees such as eastern white pine, white spruce, balsam fir, and red spruce. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the severe erosion hazard. Equipment limitations are severe because of slope and rock outcrops. Seedling mortality is moderate and severe because of the very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to protect the remaining trees from the prevailing winds. There is

moderate plant competition on the Lyman soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, and balsam fir. Trees to plant are white spruce, balsam fir, eastern white pine, red pine, and jack pine.

Depth to bedrock and slope are the main limitations for most urban uses. In most cases, developing areas of these soils for urban use is too costly and impractical.

This map unit has severe limitations for camp areas, picnic areas, camp areas, playgrounds, and paths and trails. Slope, depth to bedrock, large surface stones, small stones within the soil are the main limitations.

The Lyman soil has poor potential for both openland and woodland wildlife habitat and very poor potential for wetland wildlife habitat. Both Rock outcrop and Abram soil have very poor potential for openland wildlife, woodland wildlife, and wetland wildlife habitat.

The land capability classification for Rock outcrop is 8s and for both Abram and Lyman is 7s. The woodland ordination symbol for Abram is 5R and for Lyman is 7R.

SAE—Saddleback-Mahoosuc-Sisk association, very steep, very stony

This map unit is shallow to very deep, moderately steep to very steep, somewhat excessively drained and well drained. It is on mountainous areas above an elevation of 2300 feet. Slopes range from 15 to 80 percent and are primarily convex. Areas are irregular in shape and range from 15 to over 300 acres in size.

Units of this association consist of about 35 percent Saddleback soils, 25 percent Mahoosuc soils, 20 percent Sisk soils, and 20 percent other soils. The shallow, well drained Saddleback soils are on the higher slopes and mountain tops. The deep, somewhat excessively drained Mahoosuc soils and the well drained Sisk soils are on the lower areas. Mahoosuc soils are in areas where fragmental material has fallen from higher slopes and accumulated.

Typically, beneath a litter of needles and leaves, the surface layer of the Saddleback soil is 4 inches of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 10 inches thick, is very dusky red fine sandy loam in the upper part, dark reddish brown fine sandy loam in the middle part, and reddish brown fine sandy loam in the lower part. Granitic bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Typically, the surface layer of the Mahoosuc soil is 2 inches of dark reddish brown peat underlain by 3 inches of black mucky peat. The substratum is made up of fragmental materials consisting of gravel, cobbles, stones, and boulders with a little organic material in the upper 10 inches and cobbles, stones and boulders to a depth of 65 inches or more.

Typically, beneath a litter of needles, leaves and twigs, the surface layer of the Sisk soil is 3 inches of dark reddish brown highly decomposed organic material underlain by a brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 20 inches thick, is dusky red and dark reddish brown, stony, fine sandy loam in the upper part, yellowish brown cobbly fine sandy loam in the middle part, and olive brown gravelly fine sandy loam in the lower part. The substratum is very firm olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam.

Included in mapping are small areas of the very deep, somewhat poorly drained or moderately well drained Surplus soils, and very shallow to moderately deep, well drained to excessively drained Ricker soils, and areas of rock outcrop. Ricker soils are on the highest areas of the units and generally surround rock outcrops. Surplus soils are in the lowest depressional areas. Also included are areas with slopes less than 15 percent or greater than 60 percent.

Permeability is very rapid in the Mahoosuc soils and moderate in the Saddleback soils. In the Sisk soils permeability is moderate in the surface and subsoil and very slow to moderately slow in the dense substratum. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is very low in the Mahoosuc soils, low in the Saddleback soils, and high in the Sisk soils. Depth to bedrock is between 10 and 20 inches in Saddleback soils, more than 40 inches in the Mahoosuc soils, and more than 60 inches in Sisk soils. Rooting depth is restricted by the dense substratum of the Sisk soils, the lack of soil material in the Mahoosuc soils, and depth to bedrock in the Saddleback soils.

Most areas of this map unit are used for woodland. Some areas lack trees and have a ground cover of grasses, mosses, and shrubs.

This map unit is very poorly suited to farming. Slope, surface stones, depth to bedrock, and accessibility are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as balsam fir and red

spruce. Slope is the main limitation. Erosion hazard is moderate and severe and these soils are unsuitable for logging roads and skid trails because of slope, shallow to bedrock conditions, stones, and boulders. Seedling mortality is moderate and severe on Saddleback and Mahoosuc soils because of the low and very low available water capacity. Windthrow hazard is severe on Saddleback and Mahoosuc soils where bedrock and boulders restrict rooting depth. The dense substratum in the Sisk soil may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to protect the remaining trees from the prevailing winds. Shallow soil depth, cooler air and soil temperature limit growth. There is moderate plant competition on the Saddleback soils, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are balsam fir and red spruce. Trees to plant are red spruce and white spruce.

Slope, the very slow permeability in the substratum of the Sisk soil, resulting in a slow percolation rate, depth to bedrock in the Saddleback soil, and poor filtering in the Mahoosuc soil are the main limitations of these soils for urban uses. In most cases developing areas of these soils for urban use is too costly and impractical.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Slope, excess humus, depth to bedrock, large surface stones, small stones within the soil, and the very slow to moderately slow permeability in the substratum of the Sisk soil are the main limitations.

The Saddleback and Sisk soils have fair potential for woodland wildlife habitat and poor potential for openland wildlife habitat. The Mahoosuc soil has poor potential for woodland wildlife habitat and very poor potential for openland wildlife habitat. All three soils have very poor potential for wetland wildlife habitat.

The land capability classification for Saddleback and Sisk is 7s, and for Mahoosuc is 8s. The woodland ordination symbol for all three soils is 4R.

SKD—Sisk-Surplus association, moderately steep, very stony

This map unit is very deep, moderately steep, and well drained to somewhat poorly drained. It is on mountainsides above an elevation of 2300 feet. Slopes range from 15 to 25 percent and are commonly long and smooth. Areas are irregular in shape and range from 50 to over 300 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 40 percent Sisk soils, 30 percent Surplus soils, and 30 percent other soils. The well drained Sisk soils are on the upper slopes and the moderately well drained and somewhat poorly drained Surplus soils are on the lower slopes.

Typically, beneath a litter of needles, leaves and twigs, the surface layer of the Sisk soil is 3 inches of dark reddish brown highly decomposed organic material underlain by a brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 20 inches thick, is dusky red and dark reddish brown, stony fine sandy loam in the upper part, yellowish brown cobbly fine sandy loam in the middle part, and olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Surplus soil is 5 inches of dark reddish brown highly decomposed organic material underlain by a light brownish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 19 inches thick, is dark reddish brown fine sandy loam in the upper part, brown fine sandy loam in the middle part, and mottled, dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is firm, olive gravelly fine sandy loam with sandy loam lenses to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included in mapping are small areas of very shallow to moderately deep, well drained to excessively drained Ricker soils; somewhat excessively drained Mahoosuc soils; shallow, well drained Saddleback soils; and poorly drained Bemis soils and areas of rock outcrop. Ricker and Saddleback soils are located on knobby ridges and other areas where bedrock is near the surface. Mahoosuc soils are at the bases of steep areas where rock fragments have accumulated. Bemis soils are in depressions and along drainageways. Also included are areas with slopes less than 15 percent or greater than 25 percent and areas of Sisk and Surplus soils with more than 3 percent surface stones.

Sisk and Surplus soils have moderate permeability in the surface layer and subsoil and very slow to moderately slow permeability in the substratum. Surface runoff is rapid, and the erosion hazard is moderate. Available water capacity is high. Sisk soils have a perched water table at a depth of 2.5 to 3.5 feet below the surface from March through May and Surplus soils have a perched water table at a depth of 1.0 to 2.0 feet below the surface from October through May. Depth to bedrock is more then 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to farming. Slope, surface stones, and accessibility are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as balsam fir and red spruce. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are moderate because of slope. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit the exposure of the remaining trees to the prevailing winds. There is severe plant competition on the Surplus soil, but seedlings survive and grow if the competing vegetation is controlled. Cooler air and soil temperature limit growth. Trees to favor in natural stands are balsam fir and red spruce. Trees to plant are red spruce.

The very slow to moderately slow permeability in the substratum of these soils, slope, and the seasonal high water table are the main limitations if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Effluent from septic tank absorption fields can surface in downslope areas and thus create a health hazard. Slope and the seasonal high water table are severe limitations if this map unit is used for sanitary landfills, sewage lagoons, shallow excavations, dwellings with or without basements, or small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations and placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. Erosion is a problem in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are severe limitation for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of these soils for some urban uses and may need to be removed prior to any construction. These soils are a fair source of roadfill, but accessibility is limited by slope.

These soils have moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The seasonal high water table, slope, large surface stones, small stones within the soil, and the very slow to moderately slow permeability in the substratum are the main limitations.

The Surplus soil has fair potential for openland wildlife habitat and the Sisk soil has poor potential. Both soils have fair potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 7s for both soils. The woodland ordination symbol for both soils is 4R.

Sn—Sunday loamy fine sand

This map unit is nearly level, very deep, and excessively drained. It is on floodplains along major rivers and streams. Slopes range from 0 to 3 percent and are slightly convex. Areas are usually long and narrow and range from 3 to over 40 acres.

Typically, the surface layer is 9 inches of dark brown loamy fine sand. The substratum is light yellowish brown loamy sand grading to light brownish gray sand to a depth of 65 inches or more. In some areas the surface layer is loamy sand, fine sand, or sand.

Included in mapping are small areas of somewhat excessively drained Adams soils, well drained Allagash and Fryeburg soils, and moderately well drained Lovewell soils. Adams and Allagash soils are on higher areas that do not flood. Fryeburg and Lovewell soils have finer textures than Sunday soils and are in low-lying areas and in depressions. Included areas make up about 15 percent of the unit.

Sunday soils have rapid or very rapid permeability. Surface runoff is slow and erosion is a slight hazard. Available water capacity is low. Depth to bedrock is more than 65 inches. This soil commonly floods less frequently than once in two years during spring runoff or periods of heavy rainfall from March through October.

Most areas of this map unit are used for corn silage, hay and pasture, or dry beans. Some areas are used for woodland.

This map unit is poorly suited to cultivated crops. Hazard of flooding and droughtiness are the main

limitations. This map unit can be used successfully for cultivated crops in most years because the normal period of flooding ends in April after the peak runoff from snowmelt and heavy rainfall and before planting time. Flooding is unlikely to occur during the growing season. Using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, reducing the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Potential flooding and droughtiness are the main limitations. Streambanks should be protected from erosion by fencing out livestock and maintaining a vegetative cover. Use of proper stocking rates, pasture rotation, and restricted grazing during dry periods help to keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is high for trees such as eastern white pine. Droughtiness is the main limitation. Seedling mortality is severe because of the low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Some trees are uprooted or girdled by ice when flooding occurs during the winter. Trees to favor in natural stands are eastern white pine. Trees to plant are eastern white pine, red pine, and European larch.

Periodic flooding and the very rapid permeability of this soil, resulting in poor filtering action, are the main limitations for most urban uses. In most cases developing areas of this map unit for urban uses is too costly and impractical. Flood control measures are expensive and generally impractical. This map unit has severe limitations for septic tank absorption fields, sewage lagoons, and sanitary landfills because of the poor filtering action of the subsoil and there is a possibility of groundwater contamination. Permanent structures are subject to damage by periodic flooding. Roads and streets should be located above the expected flood level to prevent damage. This map unit is a good source of roadfill and a probable source of sand.

This map unit has moderate limitations for picnic areas, playgrounds, and paths and trails and severe limitations for camp areas. Periodic flooding and the sandy texture are the main limitations.

This map unit has poor potential for openland wildlife and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification is 3s. The woodland ordination symbol is 6S.

SRC—Surplus-Bemis association, strongly sloping, very stony

This map unit is very deep, nearly level to strongly sloping, and moderately well drained to poorly drained. It is in glaciated mountain valleys and on adjacent mountainsides above an elevation of 2300 feet. Slopes range from 0 to 15 percent and are commonly long and smooth. Areas are irregular in shape and range from 15 to over 150 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Surplus soils, 35 percent Bemis soils, and 20 percent other soils. The moderately well drained and somewhat poorly drained Surplus soils are on the upper slopes. The poorly drained Bemis soils are on the lower slopes and gently sloping areas.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Surplus soil is 5 inches of dark reddish brown highly decomposed organic material underlain by a light brownish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 19 inches thick, is dark reddish brown fine sandy loam in the upper part, brown fine sandy loam in the middle part, and mottled, dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is firm, olive gravelly fine sandy loam with sandy loam lenses to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of leaves, twigs, and needles, the surface layer of the Bemis soil is 5 inches of dark reddish brown muck. The subsoil, 8 inches thick, is mottled, dark grayish brown gravelly fine sandy loam. The substratum is very firm, mottled, olive gravelly loam grading to very firm, mottled, olive brown gravelly loam to a depth of 65 inches or more.

Included in mapping are small areas of very shallow to moderately deep, excessively drained to well drained Ricker soils; somewhat excessively drained Mahoosuc soils; shallow, well drained Saddleback soils; well drained Sisk soils; and very poorly drained Bucksport and Markey soils. Ricker and Saddleback soils are on knobby ridges and other areas where bedrock is near the surface. Sisk soils are on mountainsides. Mahoosuc soils are at the bases of steep areas and Bucksport and Markey soils are in slight depressions. Also included are areas with slopes greater than 15 percent.

Surplus soils have moderate permeability in the surface layer and subsoil and very slow to moderately slow permeability in the substratum. Bemis soils have moderate permeability in the solum and very slow or

slow permeability in the substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high in Surplus soils and moderate in Bemis soils. Surplus soils have a perched water table at a depth of 1.0 foot to 2.0 feet below the surface from October through May and Bemis soils have a perched water table from the surface to 1.0 foot below the surface from September through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to farming. Slope, surface stones, seasonal high water table, and accessibility are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as balsam fir and red spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate and severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate on the Bemis soil because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition, but seedlings will survive and grow if the competing vegetation is controlled. Cooler air and soil temperature limit growth. Trees to favor in natural stands are balsam fir and red spruce. Trees to plant are red spruce.

The very slow to moderately slow permeability in the substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. The Bemis soil has severe limitations for all sanitary facilities. A larger septic absorption field and fill material to raise the level of the septic tank absorption field may be needed on the Surplus soil. The seasonal high water table and slope of the Surplus soil are severe limitations for sewage lagoons and small commercial buildings. The seasonal high water table in both soils is a severe limitation for shallow excavations, sanitary landfills, and dwellings with or without basements. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern during construction. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas as soon as possible helps to control erosion. The seasonal high water table and frost action in both soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source of roadfill, topsoil, sand, and gravel.

The Surplus soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Bemis soil has severe limitations for all recreational uses. The seasonal high water table, slope, very slow to moderately slow permeability in the substratum, large surface stones, and small stones within the soil are the main limitations.

The Surplus soil has fair potential for openland wildlife habitat and the Bemis soil has poor potential for openland wildlife habitat. Both soils have fair potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 7s. The woodland ordination symbol for both soils is 4W.

SSC—Surplus-Saddleback-Ricker association, strongly sloping, very stony

This map unit is very deep to very shallow, gently sloping and strongly sloping, and somewhat poorly drained to excessively drained. It is on mountainsides above 2300 feet. Slopes range from 3 to 15 percent and are concave or smooth. Areas are irregular in shape and range from 15 to over 100 acres in size. Stones cover from 0.1 to 3.0 percent of the surface.

Units of this association consist of about 30 percent Surplus soils, 25 percent Saddleback soils, 20 percent Ricker soils, and 25 percent other soils. The moderately well drained and somewhat poorly drained Surplus soils are on the lower slopes and less sloping areas. The shallow, well drained Saddleback soils, and very shallow, well drained to excessively drained Ricker soils are on the upper slopes.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Surplus soil is 5 inches

of dark reddish brown highly decomposed organic material underlain by a light brownish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 19 inches thick, is dark reddish brown fine sandy loam in the upper part, brown fine sandy loam in the middle part, and mottled, dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is firm, olive gravelly fine sandy loam with sandy loam lenses to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of needles and leaves, the surface layer of the Saddleback soil is 4 inches of dark reddish brown highly decomposed organic material underlain by a grayish brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 10 inches thick, is very dusky red fine sandy loam in the upper part, dark reddish brown fine sandy loam in the middle part, and reddish brown fine sandy loam in the lower part. Granitic bedrock is at 15 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, loam, or silt loam.

Typically, the surface layer of the Ricker soil is 2 inches of dark reddish brown peat underlain by subsurface layers of black muck 3 inches thick and gray gravelly silt loam 2 inches thick. Weathered granitic bedrock is at 7 inches.

Included in mapping are small areas of well drained Sisk soils, poorly drained Bemis soils, and somewhat excessively drained Mahoosuc soils, and areas of rock outcrop. Sisk soils are on higher areas adjacent to Surplus soils. Mahoosuc soils are at the bases of steep areas where rock fragments have accumulated. Areas of rock outcrop are on the tops of knolls and ridges. Bemis soils are in depressions and along drainageways. Also included are areas with slopes less than 3 percent or greater than 15 percent and areas of Surplus, Saddleback, and Ricker soils with more than 3 percent surface stones.

Surplus soils have moderate permeability in the surface layer and subsoil and very slow to moderately slow permeability in the substratum. Saddleback soils have moderate permeability throughout. Ricker soils have moderately rapid permeability in the organic horizons and moderate or moderately rapid permeability in the mineral horizon. Surface runoff is slow to medium and the erosion hazard is moderate. Available water capacity is high in Surplus soils and low in Saddleback and Ricker soils. Surplus soils have a perched water table at a depth of 1.0 foot to 2.0 feet below the surface from October through May. Depth to bedrock is more than 60 inches in Surplus soils, between 10 and 20 inches in Saddleback soils and less than 26 inches in Ricker soils. The seasonal high water table, dense substratum, or bedrock restricts rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to farming. Slope, surface stones, depth to bedrock, and accessibility are the main limitations. These limitations are too costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as balsam fir and red spruce. The seasonal high water table and shallow rooting depth are the main limitations. Equipment limitations on the Surplus soil are moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality on Saddleback and Ricker soils is moderate because of the low available water capacity. Windthrow hazard is severe on Saddleback and Ricker soils where rooting depth is restricted by bedrock and moderate on the Surplus soil where the seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate and severe plant competition, but seedlings will survive and grow if the competing vegetation is controlled. Cooler air and soil temperature limit growth. Trees to favor in natural stands are balsam fir and red spruce. Trees to plant are red spruce and white spruce.

The seasonal high water table and the very slow to moderately slow permeability in the substratum of the Surplus soil, resulting in a slow percolation rate, and the depth to bedrock in the Saddleback and Ricker soils soil are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, the impermeability of the bedrock can cause effluent from the septic field to surface in downslope areas and thus create a health hazard. The seasonal high water table and slope of the Surplus soil and depth to bedrock of the Saddleback and Ricker soils are severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table in the Surplus soil is perched above the dense substratum and

drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Frost action in the Surplus soil and depth to bedrock in the Saddleback and Ricker soils are severe limitations for local roads and streets. Installing drainage in the Surplus soil along with a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of these soils for some urban uses and may need to be removed prior to any construction. Surplus is a fair source of roadfill.

The Saddleback soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Surplus soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Ricker soil has severe limitations for all recreational uses. The seasonal high water table and the very slow to moderately slow permeability in the substratum of the Surplus soil, slope, large surface stones, small stones within the soil, depth to bedrock, and excess humus of the Ricker soil are the main limitations.

The Surplus soil has fair potential for openland and woodland wildlife habitat. The Saddleback soil has fair potential for woodland wildlife habitat and very poor potential for openland wildlife habitat. The Ricker soil has poor potential for woodland wildlife habitat and very poor potential for openland wildlife habitat. All three soils have very poor potential for wetland wildlife habitat.

The land capability classification is 7s for all the soils. The woodland ordination symbol for Surplus is 4W, for Saddleback is 4D, and for Ricker is 4D.

SVC—Surplus-Sisk association, strongly sloping, very stony

This map unit is very deep, gently sloping and strongly sloping, and somewhat poorly to well drained. It is on mountainsides above an elevation of 2300 feet. Slopes range from 3 to 15 percent and are commonly long and smooth. Areas are irregular in shape and range from 15 to over 250 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Surplus soils, 30 percent Sisk soils, and 25 percent other soils. The moderately well drained and somewhat poorly drained Surplus soils are on the lower slopes and the well drained Sisk soils are on the upper slopes.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Surplus soil is 5 inches of dark reddish brown highly decomposed organic material underlain by a light brownish gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 19 inches thick, is dark reddish brown fine sandy loam in the upper part, brown fine sandy loam in the middle part, and mottled, dark yellowish brown gravelly fine sandy loam in the lower part. The substratum is firm, olive gravelly fine sandy loam with sandy loam lenses to a depth of 65 inches or more.

In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of needles, leaves and twigs, the surface layer of the Sisk soil is 3 inches of dark reddish brown highly decomposed organic material underlain by a brown fine sandy loam subsurface layer 1 inch thick. The subsoil, 20 inches thick, is dusky red and dark reddish brown stony fine sandy loam in the upper part, yellowish brown cobbly fine sandy loam in the middle part, and olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam.

Included in mapping are small areas of very shallow to moderately deep, well drained to excessively drained Ricker soils; shallow, well drained Saddleback soils; somewhat excessively drained Mahoosuc soils; and poorly drained Bemis soils and areas of rock outcrop. Ricker and Saddleback soils and areas of rock outcrop are on knobby ridges and other areas where bedrock is at or near the surface. Mahoosuc soils are at the bases of steep areas where rock fragments have accumulated. Bemis soils are in depressions and along drainageways. Also included are areas with slopes less than 3 percent or greater than 15 percent and areas of Surplus and Sisk soils with more than 3 percent surface stones.

Surplus and Sisk soils have moderate permeability in the surface layer and subsoil, and very slow to moderately slow permeability in the substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high. Surplus soils have a perched water table at a depth of

1.0 foot to 2.0 feet below the surface from October through May. Sisk soils have a perched water table at a depth of 2.5 to 3.5 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to farming. Slope, surface stones, and accessibility are the main limitations. These limitations are costly to overcome and it is impractical to use areas of this association for farming.

The potential productivity of this map unit is moderately high for trees such as balsam fir and red spruce. The seasonal high water table is the main limitation. Equipment limitations on the Surplus soil are moderate because of the seasonal high water table. The dense substratum and the seasonal high water table in the Surplus soil may limit rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition on the Surplus soil because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Cooler air and soil temperature limit growth. Trees to favor in natural stands are balsam fir and red spruce. Red spruce is a tree to plant.

The very slow to moderately slow permeability in the substratum, resulting in a slow percolation rate, and the seasonal high water table in these soils are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope of the Surplus soil are severe limitations for sanitary landfills, shallow excavations, buildings with or without basements, and small commercial buildings. Slope is a moderate limitation if the Sisk soil is used for sanitary landfills or dwellings with or without basements, and a severe limitation for sewage lagoons and small commercial buildings. A dense layer and slope are the main limitations of the Sisk soil for shallow excavations. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope and frost action are moderate limitations in the Sisk soil and severe limitations in the Surplus soil for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of these soils for some urban uses and may need to be removed prior to any construction. Surplus is a fair source of roadfill and Sisk is a good source.

The Sisk soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Surplus soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The seasonal high water table in the Surplus soil, slope, large surface stones, small stones within the soil, and the very slow to moderately slow permeability are the main limitations.

The Surplus soil has fair potential for openland wildlife habitat and the Sisk soil has poor potential for openland wildlife habitat. Both soils have fair potential for woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 7s for both soils. The woodland ordination symbol for Surplus is 4W and for Sisk is 4A.

Sw—Swanville silt loam

This map unit is nearly level, very deep, and poorly drained. It is in lacustrine or marine sediments. It is on low-lying areas near streams, rivers, lakes, and bogs on outwash plains and lake basins. Slopes are generally smooth and slightly concave and range from 0 to 3 percent. Areas are irregular in shape and range from 5 to over 100 acres.

Typically, the surface layer is 7 inches of mottled very dark grayish brown silt loam. The subsoil, 17 inches thick, is mottled, olive silt loam in the upper part, mottled, olive gray silt loam in the middle part and mottled, olive silt loam in the lower part. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam.

Included in mapping are small areas of moderately well drained and somewhat poorly drained Boothbay soils, and moderately well drained Nicholville and

Madawaska soils on higher areas. Bucksport and Markey are organic soils in bogs or in depressions. Inclusions make up about 15 percent of the unit.

Swanville soils have moderate permeability in the surface layer and slow or moderately slow permeability in the subsoil and substratum. Surface runoff is slow to medium and erosion is a slight hazard. Available water capacity is high. A seasonal high water table is present from the surface to 1.0 foot below the surface from October through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the firm substratum restrict rooting depth.

Most areas of this map unit are used for woodland. Some areas are used for hayland and pastureland, or idle grassland.

This map unit is poorly suited to cultivated crops and orchards. A seasonal high water table is the main limitation. This map unit dries slowly in the spring. Returning crop residue to the soil and using minimum tillage can reduce crusting of the surface and compaction of the soil.

This map unit is poorly suited to hay and pasture. A seasonal high water table is the main limitation. Grazing when the soil is wet results in compaction of the surface layer, poor tilth, and excessive runoff. Applications of lime and fertilizer will improve the quality and quantity of yields. Restricted grazing during wet periods, rotational grazing, and proper stocking rates are management needs.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, and red spruce. The main limitation is the seasonal high water table. Equipment limitations are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier summer months. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvest to limit exposure of the remaining trees to the prevailing winds. Plant competition is severe because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, and red spruce. Trees to plant are eastern white pine, red spruce, and northern whitecedar.

The slow or moderately slow permeability in the subsoil and substratum of this map unit and the seasonal high water table are the main limitations for most urban uses. This map unit has severe limitations for all sanitary facilities. The seasonal high water table is a severe limitation for shallow excavations, small commercial buildings, and dwellings with or without basements. A seasonal high water table is apparent in the subsoil and substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade and base materials to frost depth during road construction will help to overcome the shrink-swell problems for roads. This map unit is a poor source of roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table is the main limitation.

This map unit has fair potential for openland wildlife, woodland wildlife, and wetland wildlife habitat.

The land capability classification is 4w. The woodland ordination symbol is 7W.

SYB—Swanville-Boothbay association, gently sloping

This map unit is very deep, nearly level and gently sloping, and moderately well drained to poorly drained. It is in valleys along drainageways and on lacustrine plains. Some of these soils in the most southeastern part of the survey area were formed in marine sediments. Slopes range from 0 to 8 percent and are convex or concave. Areas are elongated along drainageways or are irregular in shape and range from 15 to over 100.

Units of this association consist of about 45 percent Swanville soils, 35 percent Boothbay soils, and 20 percent other soils. The poorly drained Swanville soils are on the lower more concave areas and the moderately well drained to somewhat poorly drained Boothbay soils are on the higher, more convex areas of the units.

Typically, the surface layer of the Swanville soil is 7 inches of mottled, very dark grayish brown silt loam. The subsoil, 17 inches thick, is mottled, olive silt loam in the upper part, mottled, olive gray silt loam in the middle part, and mottled olive silt loam in the lower part. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam.

Typically, the surface layer of the Boothbay soil is 10 inches of dark brown silt loam. The subsoil, 8 inches thick, is dark yellowish brown silt loam in the upper part and mottled, olive brown silt loam in the

lower part. The substratum is firm, mottled, light olive brown silty clay loam and silt loam grading to firm, mottled, grayish brown silty clay loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam.

Included in mapping are small areas of excessively drained Adams soils, well drained Allagash soils, moderately well drained Croghan and Madawaska soils, somewhat poorly drained Cornish soils, poorly drained Charles soils, and very poorly drained Bucksport, Markey, and Medomak soils. Adams, Allagash, Croghan, and Madawaska soils are coarser textured soils on outwash terraces on higher positions on the landscape. Charles, Cornish, and Medomak soils are on small flood plains. Bucksport and Markey are organic soils in the lowest depressions. Also included are areas with slopes less than 3 percent or greater than 8 percent.

Swanville and Boothbay soils have moderate permeability in the surface layer and slow or moderately slow permeability in the subsoil and substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high. Swanville soils have a seasonal high water table from the surface to 1.0 foot below the surface from October through May and Boothbay soils have a seasonal high water table from 1.0 foot to 2.0 feet below the surface from November through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the firm substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops. A seasonal high water table is the main limitation. These soils dry slowly in the spring and after heavy rains delaying planting. The Boothbay soil is moderately suited to orchards. Drainage ditches and grassed waterways will help remove excess water from areas of the Boothbay soil. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface helps maintain or increase the organic matter content of the surface layer, improving infiltration. Returning crop residue to the soil and using minimum tillage can reduce crusting of the surface and compaction of the soil.

The Swanville soil is poorly suited to hay and pasture and the Boothbay soil is suited to hay and pasture. A seasonal high water table is the main limitation. Grazing when the Swanville soil is wet results in compaction of the surface layer, poor tilth, and excessive runoff. Applications of lime and fertilizer will improve the quality and quantity of yields. Restricted grazing during wet periods, rotational grazing, and proper stocking rates are management needs.

The potential productivity of this map unit is high for trees such as eastern white pine, white pine, white spruce, red spruce, and balsam fir. The main limitation is the seasonal high water table in the Swanville soil. Equipment limitations on the Swanville soil are severe because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier summer months. Seedling mortality on the Swanville soil is moderate because of the seasonal high water table. The seasonal high water table may restrict rooting depth resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is moderate and severe on these soils because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, and red spruce. Trees to plant are eastern white pine, white spruce, and northern whitecedar.

The slow or moderately slow permeability in the subsoil and substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for most urban uses. The Swanville and Boothbay soils have severe limitations for all sanitary facilities. A larger septic tank absorption field in the Boothbay soil may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. The seasonal high water table is a severe limitation in shallow excavations, small commercial buildings, and dwellings with or without basements. A seasonal high water table is apparent in the subsoil and substratum of these soils and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problems for roads. The Boothbay soil is a fair source of roadfill and topsoil and Swanville soil is poor.

The Boothbay soil has moderate limitations for picnic areas and paths and trails and severe limitations for camp areas and playgrounds. The Swanville soil has severe limitations for all of these

recreational uses. The seasonal high water table and the slow or moderately slow permeability in the substratum are the main limitations.

The Swanville soil has fair potential for openland, woodland, and wetland wildlife habitat. The Boothbay soil has good potential for woodland wildlife and openland wildlife habitat. It has very poor potential for wetland wildlife habitat.

The land capability classification for Swanville is 4w and for Boothbay is 2w. The woodland ordination symbol for Swanville is 7W and for Boothbay is 8A.

TeB—Telos silt loam, 3 to 8 percent slopes

This map unit is gently sloping, very deep, and somewhat poorly drained. It is on areas near the base of upland till plains, hills, and ridges where it receives runoff from higher areas. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 5 to 70 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil, 11 inches thick, is dark brown silt loam in the upper part; mottled, dark yellowish brown silt loam in the middle part; and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Thorndike and Monson soils; moderately deep, well drained Elliottsville soils; moderately well drained Chesuncook soils; and poorly drained Monarda soils. Thorndike, Monson, Elliottsville, and Chesuncook soils are generally higher on the landscape. Monarda soils are lower and in depressions and seeps. Also included are Telos soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 20 percent of the unit.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is more than 65 inches. Rooting depth is restricted by the dense substratum.

Most areas of this map unit have been cleared of their original stone cover and are commonly used for hay and pasture or for residential areas. Some areas are idle or have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. A seasonal high water table and dense substratum are the main limitations. This soil warms slowly in the spring, delaying planting. Surface and subsurface drainage will help to remove excess water. Stone removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and control erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table and dense substratum are the major limitations. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing are practices that help increase production.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, white spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or the drier months of summer. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, white spruce, and black spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the

seasonal high water table, and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table and the slow permeability of the substratum are the main limitations.

This map unit has good potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 3w. The woodland ordination symbol is 8W.

TeC—Telos silt loam, 8 to 15 percent slopes

This map unit is strongly sloping, very deep, and somewhat poorly drained. It is on areas near the base of upland till plains, hills, and ridges where it receives runoff from higher areas. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 5 to 70 acres. Stones cover up to 0.1 percent of the surface.

Typically, the surface layer is 7 inches of dark brown silt loam. The subsoil, 11 inches thick, is dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the surface layer is very fine sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Thorndike and Monson soils; moderately deep, well drained Elliottsville soils; moderately well drained Chesuncook soils; and poorly drained Monarda soils. Thorndike, Monson, Elliottsville, and Chesuncook soils are generally higher on the landscape. Monarda soils are lower and in depressions and seeps. Also included are Telos soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 20 percent of the unit.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit have been cleared of their original stone cover and are commonly used as hay and pasture or for residential areas. Some areas are idle or have reverted to woodland.

This map unit is moderately suited to cultivated crops and orchards. Erosion, a seasonal high water table, dense substratum, and slope are the main limitations. This map unit warms slowly in the spring, delaying planting. Surface and subsurface drainage will remove excess water. Stone removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and control erosion. Contour planting, stripcropping, and diversions help control erosion.

This map unit is moderately suited to hay and pasture. A seasonal high water table and a dense substratum are the main limitations. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing are practices that help increase production. Applications of lime and fertilizer help improve the quality and quantity of yields.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and white spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or the drier months of summer. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, white spruce, and black spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank

absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, and dwellings with or without basements. The seasonal high water table and slope are severe limitations for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, slope, and the slow permeability of the substratum are the main limitations.

This map unit has good potential for openland wildlife and woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is 3e. The woodland ordination symbol is 8W.

TfB—Telos silt loam, 3 to 8 percent slopes, very stony

This map unit is gently sloping, very deep, and somewhat poorly drained. It is on areas near the base of upland till plains, hills and ridges where it receives runoff from higher areas. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 5 to 100 acres. Stones cover from 0 to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part; mottled, dark yellowish brown silt loam in the middle part; and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Thorndike and Monson soils; moderately deep, well drained Elliottsville soils; moderately well drained Chesuncook soils; and poorly drained Monarda soils. Thorndike, Monson, Elliottsville, and Chesuncook soils are generally higher on the landscape. Monarda soils are lower on the landscape and in depressions and seeps. Also included are Telos soils with slopes less than 3 percent or greater than 8 percent. Inclusions make up about 20 percent of the unit.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high. A perched water table is present from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is more than 65 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table, dense substratum, and surface stones are the main limitations. This map unit is moderately suited to cultivated crops if the surface stones are removed. This map unit warms slowly in the spring, delaying planting. Surface drainage and subsurface drainage will help to remove excess water. Stone removal is also necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and control erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, a dense substratum, and a seasonal high water table are the main limitations. If the surface stones are removed this map unit is moderately suited to hay and pasture. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Proper stocking rates, deferred grazing when the soil is wet, and rotational grazing are practices which help increase production. Applications of lime and fertilizer improve the quality and quantity of yields.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, and white spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or the drier months of summer. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe wind throw hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, white spruce, and black spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Seepage and slope are moderate limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around foundations, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. The effects of shrinking and swelling can be minimized by backfilling with material that has low shrink-swell potential. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem with roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, large surface stones, small stones within the soil, and the slow permeability in the substratum are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification 6s. The woodland ordination symbol is 8W.

TfC—Telos silt loam, 8 to 15 percent slopes, very stony

This map unit is very deep, strongly sloping, and somewhat poorly drained. It is on areas near the base of upland till plains, hills and ridges where it receives runoff from higher areas. Slopes are smooth and slightly convex. Areas are irregular in shape and range from 5 to 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Typically, beneath a litter of leaves and twigs, the surface layer is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Included in mapping are small areas of shallow, somewhat excessively drained Thorndike and Monson soils; moderately deep, well drained Elliottsville soils; moderately well drained Chesuncook soils; and poorly drained Monarda soils. Thorndike, Monson, Elliottsville, and Chesuncook soils are generally higher on positions on the landscape. Monarda soils are lower and in depressions and seeps. Also included are Telos soils with slopes less than 8 percent or greater than 15 percent. Inclusions make up about 20 percent of the unit.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Surface runoff is medium, and erosion is a moderate hazard. Available water capacity is high. A perched water table is present from 0.5 foot to 1.5 feet below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Erosion, a seasonal high water table, a dense substratum, slope, and surface stones are the main limitations. This map unit is moderately suited to cultivated crops if the surface stones are removed. This map unit warms slowly in the spring, delaying planting. Surface drainage and subsurface drainage can be used to remove excess water. Stone

removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and control erosion. Conservation practices such as stripcropping, contour plowing, and diversions also help control erosion.

This map unit is very poorly suited to hay and pasture. Surface stoniness, a seasonal high water table, and dense substratum are the main limitations. This map unit is moderately suited to hay and pasture if the surface stones are removed. Special precautions should be taken to avoid pasturing the soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing are practices that help to increase production. Applications of lime and fertilizer will improve the quality and quantity of yields.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The seasonal high water table is the main limitation. Equipment limitations are moderate because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen or the drier months of summer. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is severe plant competition because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are red spruce, white spruce, and black spruce.

The slow permeability in the substratum of this map unit, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. Seepage and slope are severe limitations for sewage lagoons. The seasonal high water table is a severe limitation for sanitary landfills, shallow excavations, and dwellings with or without basements. The seasonal high water table and slope are severe limitations for small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. The seasonal high water table and frost action are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this soil for some urban uses and may have to be removed prior to any construction.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. The seasonal high water table, large surface stones, small stones within the soil, and the slow permeability in the substratum are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat, and very poor potential for wetland wildlife habitat.

The land capability classification is VIs. The woodland ordination symbol is 8W.

THC—Telos-Chesuncook association, strongly sloping, very stony

This map unit is very deep, gently sloping and strongly sloping, and somewhat poorly drained and moderately well drained. It is on the sides of glacial till ridges. Slopes range from 3 to 15 percent and are both convex and concave. Areas are irregular in shape and range from 15 to over 500 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 45 percent Telos soils, 35 percent Chesuncook soils, and 20 percent other soils. The somewhat poorly drained Telos soils are on lower slopes and less sloping areas, and the moderately well drained Chesuncook soils are on the higher areas and steeper slopes.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark

reddish brown and dark brown silt loam in the upper part; mottled, dark yellowish brown silt loam in the middle part; and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of leaves, twigs, needles and moss, the surface layer of the Chesuncook soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown silt loam in the upper part, dark brown silt loam grading to dark yellowish brown gravelly silt loam in the middle part, and olive brown gravelly loam grading to mottled, olive brown gravelly loam in the lower part. The substratum is firm, mottled, olive gravelly loam to a depth of 65 inches or more. In some areas the mineral surface layer is loam or very fine sandy loam.

Included in mapping are poorly drained Monarda soils; moderately deep, well drained Elliottsville soils; and shallow, well drained Thorndike and Monson soils. Monarda soils are on the lowest and less sloping areas. Elliottsville, Thorndike, and Monson soils are on the higher areas where bedrock is near the surface. Also included are areas with slopes less than 3 percent or greater than 15 percent and areas with greater than 3 percent surface stones.

Telos and Chesuncook soils have moderate permeability in the solum and slow permeability in the dense substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is high. Telos soils have a perched water table from 0.5 foot to 1.5 feet below the surface from October through June and Chesuncook soils have a perched water table from 1.5 feet to 2.0 feet below the surface from March through May. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Erosion, a dense substratum, the seasonal high water table, and surface stones are the main limitations. The Chesuncook soil is moderately suited to cultivated crops and orchards and if the surface stones are removed, the Telos soil is moderately suited to cultivated crops. The Telos soil warms slowly in the spring, delaying planting. Surface drainage and subsurface drainage will help to remove excess water. Stone removal is necessary after plowing. Using cover crops, including grasses and legumes, in the cropping system and a conservation tillage system that leaves some or all of the crop residue on the surface help maintain or increase the organic matter content of the surface layer, improve infiltration, and control erosion. Conservation practices such as stripcropping, contour plowing, and diversions also help control erosion.

This map unit is very poorly suited to hay and pasture. Dense substratum, surface stones, and a seasonal high water table are the main limitations. These soils are moderately suited to hay and pasture if the surface stones are removed. Special precautions should be taken to avoid pasturing the soils when they are wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing are practices that help increase production. Applications of lime and fertilizer will improve the quality and quantity of yields.

The potential productivity of this map unit is high and very high for trees such as eastern white pine, balsam fir, and white spruce. The seasonal high water table in the Telos soil is the main limitation. Equipment limitations are moderate on the Telos soil because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate on the Telos soil because of the seasonal high water table. The seasonal high water table and dense substratum may restrict rooting depth resulting in a moderate and severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is moderate and severe, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, and white spruce. Trees to plant are eastern white pine, red spruce, white spruce, and black spruce.

The slow permeability in the substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table and slope are moderate limitations in the Chesuncook soil for area type sanitary landfills and dwellings without basements and are severe limitations in the Telos soil. The seasonal high water table and slope are severe limitations is this map unit is used for sewage lagoons, trench type sanitary landfills, shallow excavations, dwellings with

basements, or small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed to reduce erosion. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, seasonal high water table, and frost action are moderate limitations for local roads and streets in the Chesuncook soil and severe limitation for local roads and streets in the Telos soil. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. The Chesuncook soil is a fair source for roadfill.

The Chesuncook soil has moderate limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The Telos soil has severe limitations for all of these recreational uses. The seasonal high water table, slope, large surface stones, small stones within the soil, and the slow permeability in the substratum are the main limitations.

This map unit has good potential for woodland wildlife habitat and poor potential for openland wildlife habitat. They have very poor potential for wetland wildlife habitat.

The land capability classification for both Telos and Chesuncook is 6s. The woodland ordination symbol for Telos is 8W and for Chesuncook is 9A.

TLB—Telos-Monarda association, gently sloping, rubbly

This map unit is very deep, nearly level and gently sloping, and somewhat poorly drained and poorly drained. It is on glacial till plains and lower footslopes of glacial till ridges. It is in the northwestern part of the survey area. Slopes range from 0 to 8 percent and are mostly concave. Areas are irregular in shape and range from 15 to over 100 acres. Stones and boulders cover more than 50 percent of the surface.

Units of this association consist of about 45 percent Telos soils, 30 percent Monarda soils, and 25 percent other soils. The somewhat poorly drained Telos soils are on slightly higher convex positions than the poorly drained Monarda soils.

Typically, beneath a litter of leaves and twigs, the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material, underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Monarda soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a light gray extremely flaggy silt loam subsurface layer 4 inches thick. The subsoil, 11 inches thick, is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is extremely flaggy very fine sandy loam, extremely flaggy loam, silt loam, very fine sandy loam, or loam.

Included in mapping are moderately well drained Chesuncook, and very poorly drained Burnham, Bucksport, and Markey soils. Chesuncook soils are on higher slopes and knolls. Burnham soils are in depressions. Bucksport and Markey are organic soils in the lowest depressional areas. Also included are areas with slopes greater than 8 percent and areas with less than 50 percent surface stones and boulders.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Monarda soils have moderate or moderately rapid permeability in the surface, very slow to moderately rapid permeability in the subsoil, and very slow or slow permeability in the substratum. Surface runoff is slow and the erosion hazard is slight. Available water capacity is high. Telos soils have a perched water table from 0.5 foot to 1.5 feet below the surface from October through June and Monarda soils have a perched water table from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches. The seasonal high water table and the dense substratum restrict rooting depth.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops or orchards. Surface stones, a seasonal high water table, and dense substratum are the main limitations. The Telos soil is moderately suited to cultivated crops if the

surface stones are removed. These soils dry slowly in the spring, delaying planting. Surface drainage and subsurface drainage will help remove excess water. Surface stone removal is necessary prior to cultivation. Using cover crops, including grasses and legumes, helps increase the organic matter content of the surface layer, improve infiltration and tilth.

This map unit is poorly suited to hay and pasture. Surface stones, a seasonal high water table, and a dense substratum are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment are not restricted during wet periods. Deferred and rotational grazing and the application of lime and fertilizer are practices that help increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The seasonal high water table is the main limitation. Equipment limitations are severe because of the seasonal high water table and surface stones. Harvesting is best suited to the winter months when the ground is frozen or to the drier summer months. Seedling mortality is moderate because of the seasonal high water table. The seasonal high water table and the dense substratum resulting in a severe windthrow hazard restrict rooting depth. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is severe because of the seasonal high water table, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, and balsam fir. Trees to plant are eastern white pine, white spruce, balsam fir, black spruce, and tamarack.

Surface stones, slow and very slow permeability in the substratum of these soils, resulting in a slow percolation rate, and the seasonal high water table are the main limitations for septic tank absorption fields. A larger septic tank absorption field and fill material to raise the level of the septic tank absorption field may be needed on the Telos soil. Slope and seepage are moderate limitations if this map unit is used for sewage lagoons. The seasonal high water table is a severe limitation in both soils for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action in both soils are severe limitations for local roads and streets. Installing drainage and providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source of roadfill and topsoil.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Large surface stones, the seasonal high water table, slow and very slow permeability in the substratum, and small stones within the soil are the main limitations.

This map unit has fair potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for both the Telos and Monarda soils is 7s. The woodland ordination symbol for both soils is 8X.

TMB—Telos-Monarda-Monson association, undulating, very stony

This map unit is very deep to shallow, nearly level and undulating, and somewhat poorly drained, poorly drained, and somewhat excessively drained soils. It is on glacial till plains and lower footslopes of glacial till ridges. Slopes range from 0 to 8 percent and are mostly concave. Areas are irregular in shape and range from 15 to over 200 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 30 percent Telos soils, 25 percent Monarda soils, 20 percent Monson soils, and 25 percent other soils. The somewhat poorly drained Telos soils are on slightly higher convex positions than the poorly drained Monarda soils. The shallow, somewhat excessively drained Monson soils are on the highest positions on the landscape.

Typically, beneath a litter of leaves and twigs the surface layer of the Telos soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a pinkish gray silt loam subsurface layer 2 inches thick. The subsoil, 16 inches thick, is dark reddish brown and dark brown silt loam in the upper part, mottled, dark yellowish brown silt loam in the middle part, and mottled, light olive brown silt loam in the lower part. The substratum is firm, mottled, olive

gravelly silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is very fine sandy loam or loam.

Typically, beneath a litter of needles, leaves, and twigs, the surface layer of the Monarda soil is 2 inches of dark reddish brown highly decomposed organic material underlain by a light gray extremely flaggy silt loam subsurface layer 4 inches thick. The subsoil, 11 inches thick, is mottled, grayish brown gravelly silt loam and dark grayish brown silt loam. The substratum is firm, mottled, olive silt loam to a depth of 65 inches or more. In some areas the mineral surface layer is extremely flaggy very fine sandy loam, extremely flaggy loam, silt loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Monson soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a brown loam subsurface layer 1 inch thick. The subsoil, 16 inches thick, is dark reddish brown loam in the upper part, yellowish red and dark brown silt loam in the middle part, and light olive brown silt loam in the lower part. Slate bedrock is at 18 inches. In some areas the mineral surface layer is very fine sandy loam or silt loam.

Included in mapping are small areas of moderately well drained Chesuncook soils, and very poorly drained Burnham, Bucksport, and Markey soils. Chesuncook soils are on higher slopes and knolls. Burnham soils are in depressions. Bucksport and Markey soils are organic soils in the lowest depression areas. Also included are areas with slopes greater than 8 percent and areas with greater than 3 percent surface stones.

Telos soils have moderate permeability in the solum and slow permeability in the substratum. Monarda soils have moderate or moderately rapid permeability in the surface, very slow to moderately rapid permeability in the subsoil, and very slow or slow permeability in the substratum. Monson soils have moderately permeability throughout. Surface runoff is slow and erosion is a slight hazard. Available water capacity is high in the Telos soils and Monarda soils and moderate in the Monson soils. Telos soils have a perched water table from 0.5 foot to 1.5 feet below the surface from October through June and Monarda soils have a perched water table from the surface to 1.0 foot below the surface from October through June. Depth to bedrock is more than 60 inches in Telos and Monarda soils and between 10 and 20 inches in Monson soils. Rooting depth is restricted by the seasonal high water table, the dense substratum, and bedrock.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops or orchards. A seasonal high water table, dense substratum, depth to bedrock, and surface stones are the main limitations. Rooting depth is restricted and these soils dry slowly in the spring, delaying planting. Surface and subsurface drainage will help remove excess water. Surface stone removal is necessary prior to cultivation. Using cover crops, including grasses and legumes help increase the organic matter content of the surface layer, improve infiltration and tilth.

This map unit is poorly suited to hay and pasture. A seasonal high water table, depth to bedrock, dense substratum, and surface stones are the main limitations. The surface soil will become compacted if grazing and the use of heavy equipment is not limited during wet periods. Deferred and rotational grazing and the application of lime and fertilizer increase the quantity and quality of feed and forage.

The potential productivity of this map unit is high for trees such as eastern white pine, balsam fir, red spruce, and white spruce. The seasonal high water table and shallow rooting depth are the main limitations. Equipment limitations are moderate and severe on the Telos and Monarda soils because of the seasonal high water table. Harvesting is best suited to the winter months when the ground is frozen and to the drier months of summer. Seedling mortality is moderate and severe on the Telos and Monarda soils because of the seasonal high water table and moderate on the Monson soil because of the moderate available water capacity. The seasonal high water table and dense substratum in the Telos and Monarda soil and shallow depth to bedrock in the Monson soil may restrict rooting depth resulting in a severe windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is severe on the Telos and Monarda soils, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, balsam fir, red spruce, white spruce, and paper birch. Trees to plant are eastern white pine, white spruce, balsam fir, black spruce, and tamarack.

The seasonal high water table and the slow and very slow permeability in the substratum of the Monarda and Telos soils, resulting in a slow percolation rate, and the depth to bedrock in the Monson soil are the main limitations for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic

tank absorption field. Seepage and slope in the Telos and Monarda soils are moderate limitations for sewage lagoons and depth to bedrock in the Monson soil is a severe limitation. The seasonal high water table in the Telos and Monarda soils and depth to bedrock in the Monson soil are severe limitations for sanitary landfills, shallow excavations, dwellings with or without basements, and small commercial buildings. A seasonal high water table in the Telos and Monarda soils is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table, and backfilling around foundations will help prevent wet basements. Using backfill material that has low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. The seasonal high water table and frost action in the Telos and Monarda soils and depth to bedrock in the Monson soil are severe limitations for local roads and streets. Providing drainage in the Telos and Monarda soils along with a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of this map unit for some urban uses and they may need to be removed prior to any construction. This map unit is a poor source of roadfill and topsoil.

The Monson soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Telos and Monarda soils have severe limitations for all of these recreational uses. The seasonal high water table, depth to bedrock, large surface stones, and small stones within the soil are the main limitations.

The Telos soil has good potential for woodland wildlife habitat and the Monarda and Monson soils have fair potential for woodland wildlife habitat. All three soils have poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for Telos is 6s, Monarda is 7s, and Monson is 6s. The woodland ordination symbol for Telos and Monarda is 8W, and for Monson is 7D.

TOC—Thorndike-Elliottsville complex, rolling, very stony

This map unit is shallow and moderately deep, undulating and rolling, and somewhat excessively drained and well drained. It is on crests and sides of upland glacial till ridges. Slopes are smooth and convex and range from 3 to 15 percent. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 40 percent Thorndike soils, 30 percent Elliottsville soils, and 30 percent other soils. The somewhat excessively drained, shallow Thorndike soils are on the crests and the well drained, moderately deep Elliottsville soils are on the side slopes.

Typically, beneath a litter of leaves and twigs, the surface layer of the Thorndike soil is 3 inches of very dark brown highly decomposed organic material underlain by a light brownish gray channery loam surface layer 2 inches thick. The subsoil, 9 inches thick, is dark brown grading to brown very channery loam. Fractured slate bedrock is at 14 inches. In some areas the mineral surface layer is channery silt loam.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic materials, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil, 15 inches thick, is dusky red loam in the upper part, reddish brown gravelly loam and dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31 inches. In some areas the mineral surface layer is silt loam.

Included in mapping are small areas of moderately well drained Chesuncook soils and an occasional rock outcrop. Chesuncook soils are on lower areas and rock outcrops are generally on higher areas. Also included are Thorndike and Elliottsville soils with slopes less than 3 percent or greater than 15 percent and areas with greater than 3 percent surface stones. A few wet areas are scattered throughout this complex.

Thorndike and Elliottsville soils have moderate permeability. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is very low in Thorndike soils and high in Elliottsville soils. Depth to bedrock is between 10 and 20 inches in Thorndike soils and between 20 and 40 inches in Elliottsville soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland.

This map unit is poorly suited to cultivated crops and orchards. Slope, depth to bedrock, hazard of erosion, and surface stones are the main limitations. Depth to bedrock is variable and equipment operation may be difficult on shallower areas or around bedrock outcroppings. The Elliottsville soil is moderately suited to orchards if the surface stones are removed. In

shallower areas, the very low available water capacity can cause droughtiness. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve the soil structure and increase available water capacity and also reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended.

This map unit is poorly suited to hay and pasture. Depth to bedrock and surface stones are the main limitations. In shallower areas the very low available water capacity can cause droughtiness, and overgrazing of these areas can result in erosion. Proper stocking rates, rotational grazing, and restricted grazing during droughty periods help keep the pasture in good condition and protect the soil from erosion. Good yields can be expected with proper amounts of lime and fertilizer.

The potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Shallow rooting depth of the Thorndike soil is the main limitation. Bedrock outcroppings may interfere with equipment operation. Seedling mortality is moderate on Thorndike soil because of shallow rooting depth and very low available water capacity, but this can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. Plant competition is moderate on the Elliottsville soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and paper birch. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and tamarack.

The depth to bedrock in this map unit is the main limitation for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern in installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, the impermeability of the bedrock can cause effluent from the septic tank absorption field to seep to the surface on a lower part of the slope and create a health hazard. Slope and depth to bedrock are moderate limitations for dwellings without basements and severe limitations for sewage lagoons, sanitary landfills, shallow excavations, dwellings with basements, and small commercial buildings. The bedrock may be rippable with large machinery. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, depth to bedrock, and frost action are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction and constructing roads on the contour will help to overcome the shrink-swell problem for roads and help control erosion. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction.

This Elliottsville soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Thorndike soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. Slope, depth to bedrock, large surface stones, and small stones within the soil are the main limitations.

The Elliottsville soil has good potential for woodland wildlife habitat and the Thorndike soil has poor potential for woodland wildlife habitat. Both soils have poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 6s. The woodland ordination for Thorndike is 8D and for Elliottsville is 10A.

TOE—Thorndike-Elliottsville complex, steep, very stony

This map unit is shallow and moderately deep, moderately steep and steep, and somewhat excessively drained and well drained. It is on crests and sides of upland glacial till ridges. Slopes are smooth and convex and range from 15 to 45 percent. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this complex consist of about 40 percent Thorndike soils, 30 percent Elliottsville soils, and 30 percent other soils. The somewhat excessively drained, shallow Thorndike soils are on the crests and the well drained, moderately deep Elliottsville soils are on the side slopes.

Typically, beneath a litter of leaves and twigs, the surface layer of the Thorndike soil is 3 inches of very

dark brown highly decomposed organic material underlain by a light brownish gray channery loam subsurface layer 2 inches thick. The subsoil, 9 inches thick, is dark brown grading to brown very channery loam. Fractured slate bedrock is at 14 inches. In some areas the mineral surface layer is channery silt loam.

Typically, beneath a litter of leaves, needles, and twigs and a layer of moderately decomposed organic material, the surface layer of the Elliottsville soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a pinkish gray loam subsurface layer 2 inches thick. The subsoil, 15 inches thick, is dusky red loam in the upper part, reddish brown and dark brown gravelly loam in the middle part, and light olive brown loam in the lower part. The substratum is light olive brown silt loam. Slate bedrock is at 31 inches. In some areas the mineral surface layer is silt loam.

Included in mapping are small areas of moderately well drained Chesuncook soils and an occasional rock outcrop. Chesuncook soils are on lower areas and rock outcrops are generally on higher areas. Also included are areas with slopes less than 15 percent or greater than 45 percent and areas with greater than 3 percent surface stones.

Thorndike and Elliottsville soils have moderate permeability. Surface runoff is rapid and erosion is a severe hazard. Available water capacity is very low in Thorndike soils and high in Elliottsville soils. Depth to bedrock is between 10 and 20 inches in Thorndike soils and between 20 and 40 inches in Elliottsville soils. Rooting depth and water movement are restricted by bedrock. The percentage of shallow material is greater on steeper slopes.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. Depth to bedrock, slope, surface stones, and hazard of erosion are the main limitations. Equipment operation may be difficult on shallower areas and around bedrock outcropping. In shallower areas, the very low available water capacity can cause droughtiness. Surface stones need to be removed prior to any tillage. Increasing the organic matter content by using cover crops in the cropping system and a conservation tillage system that leaves some or all of the crop residue will improve soil structure and increase available water capacity and also reduce the hazard of erosion. Erosion control practices such as contour farming, stripcropping, and no-till planting are recommended.

This map unit is very poorly suited to hay and pasture. Slope, depth to bedrock, and surface stones are the main limitations. In shallower areas the very low available water capacity can cause droughtiness and overgrazing of these areas can result in erosion. Planting and reseeding to establish sod is difficult because of slope and bedrock. Seedbed preparation should be on the contour or across the slope where practical. Proper stocking rates, rotational grazing, and restricted grazing during droughty periods help keep the pasture in good condition and protect the soil from erosion.

The potential productivity of this map unit is very high and high for trees such as eastern white, pine white spruce, red spruce, and balsam fir. Slope is the main limitation. Logging roads and skid trails should be constructed on the contour to reduce the moderate erosion hazard. Equipment limitations are moderate because of slope. Seedling mortality is moderate on the Thorndike soil because of shallow rooting depth and very low available water capacity, but can be reduced by planting in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit the exposure of the remaining trees to the prevailing winds. Plant competition is moderate on the Elliottsville soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, balsam fir, red spruce, and paper birch. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and tamarack.

The moderately deep and shallow depth to bedrock in this map unit and slope are the main limitations for most urban uses including septic tank absorption fields, sewage lagoons, sanitary landfills, shallow excavations, commercial building, dwellings with or without basements, and roads and streets. In most cases developing areas of these soils for urban uses is too costly and impractical. Frost action is an additional consideration for foundations and roads and streets. Constructing roads on the contour will help to overcome the problem of slope. Providing coarser grained subgrade and fill materials to frost depth will help to prevent damage to roads by frost action. The bedrock may be rippable with large machinery.

This map unit has severe limitations for camp areas, picnic areas, playgrounds, and paths and trails. Depth to bedrock, slope, large surface stones, and small stones within the soil are the main limitations.

The Elliottsville soil has good potential for woodland wildlife habitat and the Thorndike soil has poor potential for woodland wildlife habitat. Both soils have poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for both soils is 7s. The woodland ordination symbol for Thorndike soils is 8R and for Elliottsville soils is 10R.

TRC—Tunbridge-Berkshire-Dixfield association, rolling, very stony

This map unit is moderately deep to very deep, undulating and rolling, and well drained and moderately well drained. It is on the tops and sides of bedrock-controlled hills and ridges. Slopes range from 3 to 15 percent and are concave and convex. Areas are irregular in shape and range from 15 to over 100 acres. Stones cover from 0.1 to 3 percent of the surface.

Units of this association consist of about 30 percent Tunbridge soils, 25 percent Berkshire soils, 20 percent Dixfield soils, and 25 percent other soils. The well drained, moderately deep Tunbridge soils and the well drained, very deep Berkshire soils are on the higher, more sloping areas. The moderately well drained, very deep Dixfield soils are in lower, less sloping areas, often between ribs of bedrock.

Typically, beneath a litter of leaves, needles, and twigs, the surface layer of the Tunbridge soil is 2 inches of black, highly decomposed organic material underlain by a subsurface layer of very dark brown fine sandy loam 1 inch thick and gray fine sandy loam 2 inches thick. The subsoil, 13 inches thick, is dark reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 32 inches. In some areas the mineral surface layer is sandy loam, very fine sandy loam, or loam.

Typically, beneath a litter of leaves and needles, the surface layer of the Berkshire soil is 2 inches of black highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 2 inches thick. The subsoil, 28 inches thick, is dark reddish brown fine sandy loam in the upper part, dark yellowish brown fine sandy loam in the middle part, and yellowish brown fine sandy loam grading to light olive brown gravelly fine sandy loam in the lower part. The substratum is light olive brown gravelly fine sandy loam grading to olive yellow gravelly sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam.

Typically, beneath a litter of leaves and twigs, the surface layer of the Dixfield soil is 1 inch of dark reddish brown highly decomposed organic material underlain by a gray fine sandy loam subsurface layer 3 inches thick. The subsoil is 21 inches thick. It is very dusky red and reddish brown fine sandy loam in the upper part, dark brown fine sandy loam in the middle part, and mottled olive brown gravelly fine sandy loam in the lower part. The substratum is very firm, mottled, olive gravelly fine sandy loam to a depth of 65 inches or more. In some areas the mineral surface layer is sandy loam or loam.

Included in mapping are small areas of very shallow, excessively drained Abram soils; shallow, somewhat excessively drained Lyman soils; well drained Marlow soils; somewhat poorly drained Colonel soils; and poorly drained Brayton soils and areas of rock outcrop. Lyman and Abram soils are on knolls and ridges that usually surround the areas of rock outcrop. Marlow soils are on similar positions as the Berkshire soils but have a dense substratum. Colonel and Brayton soils are on lower areas and in depressions. Also included are areas with slopes greater than 15 percent, areas with greater than 3 percent surface stones, and moderately deep to very shallow soils that are moderately well drained and somewhat poorly drained.

Tunbridge and Berkshire soils have moderate or moderately rapid permeability. Dixfield soils have moderate permeability in the solum and slow or moderately slow permeability in the substratum. Surface runoff is slow to medium and erosion is a moderate hazard. Available water capacity is moderate in Tunbridge soils and high in Berkshire and Dixfield soils. Dixfield soils have a perched water table from 1.5 to 2.5 feet below the surface from November through April. Depth to bedrock is between 20 and 40 inches in Tunbridge soils and more than 60 inches in Berkshire and Dixfield soils. Rooting depth is restricted in the Dixfield soils by a seasonal high water table and the dense substratum and in the Tunbridge soils by depth to bedrock.

Most areas of this map unit are used for woodland.

This map unit is very poorly suited to cultivated crops and orchards. A seasonal high water table and dense substratum in the Dixfield soil, hazard of erosion, depth to bedrock, and surface stones are the main limitations. If the surface stones are removed, this map unit is moderately suited to cultivated crops and orchards. Stripcropping, growing cover crops and green manure crops, and applying a conservation tillage system improves the soil and reduces the hazard of erosion.

This map unit is very poorly suited to hay and pasture. Surface stones, slope, depth to bedrock, and the seasonal high water table and a dense substratum in the Dixfield soil are the main limitations. The surface stones and slope restrict the use of farm equipment. If some of the surface stones are removed this map unit can be used for unimproved pasture. This map unit is moderately suited to hay and pasture if the surface stones are removed. Good yields can be expected with proper applications of lime and fertilizer. Special

precautions should be taken to avoid pasturing the Dixfield soil when it is wet in order to avoid compaction and punching of the sod. Deferred grazing and rotational grazing increase production.

Potential productivity of this map unit is very high and high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Their limitations for woodland are insignificant. Windthrow hazard is moderate on the Tunbridge soil where rooting depth is restricted by bedrock. The seasonal high water table and dense substratum in the Dixfield soil restrict rooting depth resulting in a moderate windthrow hazard. Care should be taken during harvesting to limit exposure of the remaining trees from the prevailing winds. There is moderate plant competition on the Dixfield soil, but seedlings survive and grow if the competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, white spruce, red spruce, balsam fir, red pine, and paper birch. Trees to plant are eastern white pine, red spruce, white spruce, European larch, and black spruce.

The seasonal high water table and the moderately slow or slow permeability in the substratum of the Dixfield soil, the moderate depth to bedrock of the Tunbridge soil, and the moderately rapid permeability in the substratum of the Berkshire soil are the main limitations for septic tank absorption fields. A larger septic absorption field may be needed to overcome these limitations. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. The seasonal high water table in the Dixfield soil, depth to bedrock in the Tunbridge soil, seepage, and slope are severe limitations for sewage lagoons and sanitary landfills. The seasonal high water table in the Dixfield soil is a moderate limitation for area type landfills. The depth to bedrock in the Tunbridge soil and the seasonal high water table in the Dixfield soil are severe limitations for shallow excavations and slope on the Berkshire soil is a moderate limitation. The seasonal high water table in the Dixfield soil, depth to bedrock in the Tunbridge soil, and slope are moderate limitations for dwellings without basements. The seasonal high water table in the Dixfield soil and the depth to bedrock in the Tunbridge soil are severe limitations for dwellings with basements. Slope is a severe limitation on the Berkshire soil. Slope is a severe limitation for small commercial buildings. A seasonal high water table in the Dixfield soil is perched above the dense substratum and drainage should be provided for buildings with basements. Installing drains around footings, placing footings above the seasonal high water table and backfilling around foundations will help prevent wet basements. Using backfill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Erosion is a concern in the steeper areas. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Depth to bedrock in the Tunbridge soil and frost action in the Berkshire soil are moderate limitations for local roads and streets. Frost action in the Dixfield soil is a severe limitation. Installing drainage and providing coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads. Surface stones may be a problem when using areas of these soils for some urban uses and they may need to be removed prior to any construction.

The Berkshire soil is a good source of roadfill and the Dixfield soil is a fair source.

The Tunbridge and Berkshire soils have slight limitations for paths and trails, moderate limitations for camp areas and picnic areas, and severe limitations for playgrounds. The Dixfield soil has moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. The seasonal high water table in the Dixfield soil, slope, large surface stones, and small stones within the soil are the main limitations.

This map unit has good potential for woodland wildlife habitat, poor potential for openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for all of these soils is 6s. The woodland ordination symbol for Tunbridge is 8A and for Berkshire and Dixfield is 9A.

TuB—Tunbridge-Lyman complex, 3 to 8 percent slopes

This map unit is gently sloping, moderately deep and shallow, somewhat excessively drained and well drained. It is on the tops and crests of drumlin shaped, bedrock controlled ridges, and till plains. Slopes are smooth and convex. Areas are oval and range from 5 to 40 acres. Stones cover up to 0.1 percent of the surface. Bedrock exposures are common on the highest points and knolls in an intermingled pattern and cover less than l percent of the surface. These bedrock exposures commonly are more than 200 feet apart.

Units of this complex consist of about 60 percent Tunbridge soils, 30 percent Lyman soils, and 10 percent other soils. The moderately deep, well drained Tunbridge soils are on the side slopes and smoother areas and the shallow to bedrock, somewhat excessively drained Lyman soils are on the tops and upper slopes of knolls and ridges.

Typically, the surface layer of the Tunbridge soil is 7 inches of dark brown fine sandy loam. The subsoil, 9 inches thick, is dark brown fine sandy loam in the upper part and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 30 inches. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Typically, the surface layer of the Lyman soil is 7 inches of dark brown fine sandy loam. The subsoil, 6 inches thick, is reddish brown fine sandy loam grading to strong brown fine sandy loam. Schistose bedrock is at 13 inches. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of well drained Berkshire and Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, poorly drained Brayton soils, and very shallow, excessively drained Abram soils. Berkshire and Marlow soils are deeper deposits of glacial till in isolated pockets and on lower slopes. Brayton, Dixfield, and Colonel soils are in depressions and on lower slopes. Abram soils are near the tops of ridges. Also included are areas of Tunbridge and Lyman soils with slopes less than 3 percent or greater than 8 percent.

Tunbridge soils have moderate or moderately rapid permeability. Lyman soils have moderately rapid permeability. Surface runoff is slow, and erosion is a slight hazard. Available water capacity is moderate in the Tunbridge soils and low in the Lyman soils. Depth to bedrock is between 20 to 40 inches in the Tunbridge soils and l0 to 20 inches in the Lyman soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland or pastureland. Some areas are used for apple orchards or cultivated crops.

This map unit is moderately suited to cultivated crops and orchards. Erosion, droughtiness, and depth to bedrock are the main limitations. Occasional bedrock exposures interfere with tillage. Adding manure, growing cover or green manure crops, and rotating grass and legumes will reduce runoff and conserve moisture.

This map unit is moderately suited to hay and pasture. Droughtiness and depth to bedrock are the main limitations. Good pasture management practices include rotational grazing, timely lime and fertilizer application, and seeding with adapted species.

The potential productivity of this map unit is high for trees such as eastern white pine, red spruce, white spruce, and balsam fir. Shallow and moderately deep rooting depth is the major limitation. Seedling mortality is moderate on the Lyman soil because of the shallow rooting depth and the low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition on the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, northern red oak, sugar maple, yellow birch, white ash, and paper birch. Trees to plant are eastern white pine, red spruce, white spruce, balsam fir, and Norway spruce.

Depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. In some areas, the impermeability of the bedrock can cause effluent from the septic tank absorption field to seep to the surface in downslope areas and create a health hazard. Depth to bedrock in these soils is also a severe limitation for sewage lagoons, sanitary landfills, shallow excavations, and dwellings with basements. Depth to bedrock in the Tunbridge soil is a moderate limitation for small commercial buildings and dwellings without basements. They are severe limitations in the Lyman soil for these uses. Using back fill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Frost action and depth to bedrock are moderate limitations for local roads and streets. Providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads.

The Tunbridge soil has slight limitations for camp areas and paths and trails and moderate limitations for playgrounds. The Lyman soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The depth to bedrock, slope, and small stones within the soil are the main limitations.

The Tunbridge soil has good potential for openland wildlife habitat and woodland wildlife habitat. It has very poor potential for wetland wildlife habitat. The Lyman soil has poor potential for openland wildlife and

woodland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification is IIe for Tunbridge and 3e for Lyman. The woodland ordination symbol for Tunbridge is 3A and for Lyman is 7D.

TuC—Tunbridge-Lyman complex, 8 to l5 percent slopes

This map unit is strongly sloping, moderately deep and shallow, and somewhat excessively drained and well drained. It is on the sides and tops of drumlin shaped, bedrock controlled ridges, and till plains. Slopes are smooth, concave or convex. Areas are oval and range from 5 to 50 acres. Stones cover up to 0.1 percent of the surface. Bedrock exposures are common on the highest points and knolls in an intermingled pattern and cover less than l percent of the surface. These bedrock exposures commonly are more than 200 feet apart.

Units of this complex consist of about 60 percent Tunbridge soils, 30 percent Lyman soils, and 10 percent other soils. The moderately deep, well drained Tunbridge soils are on the side slopes and smoother areas and the shallow to bedrock, somewhat excessively drained Lyman soils are on the tops and upper slopes of knolls and ridges.

Typically, the surface layer of the Tunbridge soil is 7 inches of dark brown fine sandy loam. The subsoil, 9 inches thick, is dark brown fine sandy loam in the upper part and dark yellowish brown fine sandy loam in the lower part. The substratum is olive gravelly fine sandy loam. Schistose bedrock is at 30 inches. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Typically, the surface layer of the Lyman soil is 7 inches of dark brown fine sandy loam. The subsoil, 6 inches thick, is reddish brown fine sandy loam grading to strong brown fine sandy loam. Schistose bedrock is at 13 inches. In some areas the surface layer is sandy loam, very fine sandy loam, or loam.

Included in mapping are small areas of well drained Berkshire and Marlow soils, moderately well drained Dixfield soils, somewhat poorly drained Colonel soils, poorly drained Brayton soils, and very shallow, excessively drained Abram soils. Berkshire and Marlow soils are in deeper deposits of glacial till in isolated pockets and on lower slopes. Brayton, Dixfield, and Colonel soils are in depressions and on lower slopes. Abram soils are near the tops of ridges. Also included are areas of Tunbridge and Lyman soils with slopes less than 8 percent or greater than 15 percent.

Tunbridge soils have moderate or moderately rapid permeability. Lyman soils have moderately rapid permeability. Surface runoff is medium and erosion is a moderate hazard. Available water capacity is moderate in the Tunbridge soils and low in the Lyman soils. Depth to bedrock is between 20 to 40 inches in the Tunbridge soils and l0 to 20 inches in the Lyman soils. Rooting depth and water movement are restricted by bedrock.

Most areas of this map unit are used for woodland or pastureland. Some areas are used for apple orchards.

This map unit is moderately suited to cultivated crops and orchards. Slope, hazard of erosion, droughtiness, and depth to bedrock are the main limitations. Occasional bedrock exposures interfere with tillage. Management needs include contour planting, crop rotation, and stripcropping to reduce erosion. A conservation tillage system that includes cover crops and crop residue helps improve and increase organic matter content and retain moisture.

This map unit is moderately suited to hay and pasture. Droughtiness, depth to bedrock, and hazard of erosion are the main limitations. Good pasture management practices include rotational grazing, timely lime and fertilizer applications, and seeding with adapted species.

The potential productivity of this map unit is high for trees such as eastern white pine, white spruce, red spruce, and balsam fir. Shallow and moderately deep rooting depth is the major limitation. Seedling mortality is moderate on the Lyman soil because of the shallow rooting depth and the low available water capacity. Seedlings should be planted in the spring when soil moisture levels are highest. Windthrow hazard is moderate and severe where rooting depth is restricted by bedrock. Care should be taken during harvesting to limit exposure of the remaining trees to the prevailing winds. There is moderate plant competition on the Lyman soil, but seedlings survive and grow if competing vegetation is controlled. Trees to favor in natural stands are eastern white pine, red spruce, white spruce, balsam fir, northern red oak, sugar maple, yellow birch, white ash, and paper birch. Trees to plant are eastern white pine, red spruce, white spruce, balsam fir, and Norway spruce.

Depth to bedrock is the main limitation if this map unit is used for septic tank absorption fields. A larger septic tank absorption field may be needed to overcome this limitation. Fill material may be needed to raise the level of the septic tank absorption field. Slope is a concern when installing septic tank absorption fields. Absorption lines should be installed on the contour. Extensive grading may be needed when installing a septic tank absorption field. In some areas, the impermeability of the bedrock causes

effluent from the septic tank absorption field to seep to the surface in downslope areas and create a health hazard. Slope, depth to bedrock, and seepage in these soils are severe limitations for sewage lagoons and sanitary landfills. Depth to bedrock is a severe limitation for shallow excavations, dwellings with basements, and small commercial buildings. Depth to bedrock is a severe limitation for dwellings without basements in the Lyman soil and along with slope is a moderate limitation in the Tunbridge soil. Using back fill material that has a low shrink-swell potential can minimize the effects of shrinking and swelling around foundations. Only the part of the site that is used for construction should be disturbed because erosion can be a problem. Revegetating disturbed areas around construction sites as soon as possible helps to control soil erosion. Slope, depth to bedrock, and frost action are moderate limitations if the Tunbridge soil is used for local roads and streets, and a severe limitations for the Lyman soil. Providing a coarser grained subgrade or base materials to frost depth during road construction will help to overcome the shrink-swell problem for roads.

The Tunbridge soil has slight limitations for paths and trails, moderate limitations for camp areas and picnic areas and severe limitations for playgrounds. The Lyman soil has slight limitations for paths and trails and severe limitations for camp areas, picnic areas, and playgrounds. The depth to bedrock, slope, and small stones within the soil are the main limitations.

The Tunbridge soil has good potential for woodland wildlife and openland wildlife habitat and very poor potential for wetland wildlife habitat. The Lyman soil has poor potential for woodland wildlife and openland wildlife habitat and very poor potential for wetland wildlife habitat.

The land capability classification for Tunbridge is 3e and for Lyman is 4e. The woodland ordination symbol for Tunbridge is 8A and for Lyman is 7D.

Ud—Udorthents-Urban land complex

This unit is 50 percent fill material that has been placed on poorly drained to somewhat excessively drained soils and 30 percent areas largely covered by asphalt, buildings, concrete, or other impervious surfaces. This map unit is used as a site for buildings, parking lots, roads, railroads, airports, and other nonfarm uses. The areas range from about 3 to over 70 acres. Most areas are nearly level to gently sloping on top with very steep slopes on the sides.

The source and thickness of the fill is variable, but the material is at least 20 inches thick. Some areas are sandy, gravelly, loamy, or clayey materials or bedrock fragments. Other areas are waste materials that have been mixed with or covered by soil material.

Included with this unit in mapping are small areas of soils that have not been significantly altered by filling or excavation. Inclusions make up about 20 percent of the unit.

The characteristics of this unit are so variable that onsite investigation is needed to determine the suitability of the unit for any proposed use.

The land capability classification for Udorthents is undesignated and for Urban land is 8s. There are no ordination symbols for either soil.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the University of Maine Cooperative Extension Service.

Crops and Pasture

Paul D. Hersey, District Conservationist, Natural Resources Conservation Service, helped to prepare this section.

In 1992, according to the Census of Agriculture, 14,876 acres in Franklin County was used for crops and pasture. Of that total, 3,389 acres was used for pasture; 10,534 acres for harvested crops, mainly hay; and 453 acres for all other cropland (United States Dept. of Commerce, 1994).

Drainage is needed on about two-thirds of the acreage used as cropland in the Franklin County area. Natural drainage is inadequate because of the seasonal high water table.

The seasonal high water table in most soils is the result of their position on the landscape. The soils are mainly at the lower elevations, and the amount of water in the soils is increased by the surface runoff from higher areas. Some gently sloping soils have a seasonal high water table because runoff is slow and infiltration into the soil is greater. Soils where permeability in the subsoil or substratum is slow or moderate, or where the substratum is compact can also have a seasonal high water table. Marlow soils, for example, are well drained, but have a seasonal high water table for a short time in spring because permeability in the substratum is restricted.

Soils that have a seasonal high water table, such as Brayton, Colonel, Monarda, Naumburg, Swanville, and Telos soils, tend to dry and warm slowly in the spring and thus delay planting. Soils that have a high water table for the entire year are very poorly suited to crop production. These are Bucksport, Burnham, Markey, Medomak, Peacham, and Searsport soils.

Flooding is of particular concern on soils in the Sandy River and Wilson Stream flood plains. Flooding often causes the formation of secondary stream channels if these soils are left unprotected by crop

residues, cover crops, or grasses and legumes during the winter and spring. These secondary channels are also associated with deposition of coarse textured material such as sand and gravel over the finer textured silt loams and loamy sands. Soils in this group include Fryeburg, Lovewell, and Sunday soils. The unstable nature of these soils may lead to severe bank erosion if they are not protected by vegetation or structural measures such as rock rip-rap.

Erosion is a hazard on about one-third of the cropland in the Franklin County area. This cropland is mainly on soils that have slope of more than 3 percent, such as Allagash, Berkshire, Elliottsville, Marlow, and Tunbridge soils. In addition to the erosion hazard, the seasonal high water table is a limitation of Boothbay, Chesuncook, Dixfield, Madawaska, and Nicholville soils.

Loss of the surface soil is especially damaging to soils with a clayey subsoil or substratum, such as Boothbay and Nicholville soils. It is damaging to soils where bedrock is near the surface, such as Elliottsville, Lyman, Monson, Thorndike, and Tunbridge soils. It is also damaging to soils that have a restrictive layer in or below the subsoil. The Chesuncook, Dixfield, and Marlow soils, for example, have a dense substratum.

Contour farming, terracing, using conservation tillage, stripcropping, and constructing diversions help to control erosion. Using a cropping system that keeps a plant cover on the soil for extended periods also helps to control erosion. On sloping soils, using the soils for pasture and hay or including legumes in the cropping system help to control erosion, add nitrogen to the soils, and improve soil tilth for the following crop.

Fall plowing is generally not a good practice on the soils in the Franklin County area because erosion is a hazard in winter and spring. About one-half of the tilled cropland is on sloping soils that are subject to excessive erosion unless protected by winter cover crop, such as winter rye.

Fertility is naturally low in the upland soils. Most of these soils are also naturally extremely acid to strongly acid. Soils on flood plains, such as Cornish, Fryeburg, and Lovewell soils, range from very strongly acid to slightly acid. Such soils generally have a greater amount of plant nutrients than do most of the upland soils.

Most of the soils in the survey area used for cropland have been limed and fertilized many times. This has altered the natural fertility and acidity of the soils. On most soils that never have been limed, substantial applications of lime are needed to offset the acidity. Thus, these soils can be used for alfalfa and other crops. Also, in most of these soils the levels of available phosphorous and potassium are naturally low.

The organic matter in soil is an important source of nitrogen for crops. It also helps to maintain soil tilth, increase the rate of water intake, control erosion, and prevent surface crusting. On most of the soils used for crops, the surface layer is loam, silt loam, or fine sandy loam and originally the organic matter content was adequate. After years of continuous cropping on many of these soils, however, the organic matter content in the surface layer is low and the soil structure generally is weak. Intense rainfall causes the formation of a surface crust, which reduces infiltration and increases runoff. Regularly adding crop residue and manure helps improve soil tilth, reduce crust formation, and maintain the organic matter content of the surface layer.

Field crops suited to many of the soils in the survey area are the commonly grown row crops such as silage corn, high-moisture corn, potatoes, dry beans, and squash. Timothy and clover are the commonly grown crops used for hay silage and green feed. Alfalfa, birdsfoot trefoil, orchardgrass, bromegrass, millet, and oats also are grown for hay, hay silage, and pasture.

Specialty crops grown in the survey area include vegetables, small fruits, and tree fruits, mainly apples (fig. 13). A small acreage is used for strawberries, native lowbush blueberries, and vegetable gardens.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-

Figure 13.—Strawberries on an area of Allagash fine sandy loam, 0 to 3 percent slopes and Madawaska fine sandy loam, 0 to 8 percent slopes. These soils are valued for this type of specialty crop.

yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 6 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or the University of Maine Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a

substitute for interpretations designed to show suitability and limitations of groups of soils for forestland or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, forestland, wildlife habitat, or recreation.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

The capability classification of map units in this survey area is given in the section “Detailed Soil Map Units” and in the yields table.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 23,358 acres, or approximately 3 percent of the Franklin County area and part of Somerset County soil survey area meets the soil requirements for prime farmland. The areas are scattered throughout the

survey area, mainly in map units of 1,5,7, and 8 of the general soil map. Much of this prime farmland is used for crops, mainly hay, corn silage, and apples and a small acreage of potatoes, vegetables, or other cultivated crops. Other areas of prime farmland are used for pasture, but the majority is in woodland.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in table 6. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 5. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

Woodland Management and Productivity

Robert Leso, District Forester, Maine Forest Service, helped to prepare this section.

The northern part of the Franklin County soil survey area and the part of Somerset County in the soil survey is mainly large, cooperate ownerships and is lightly populated. The Spruce-Fir and Northern Hardwoods timber type dominate the forest.

The southern part of the Franklin County soil survey area is broken into smaller, non-industrial ownerships, interspersed with farms, recreation areas and small communities. Here you find White Pine, Hemlock, and Northern Hardwood timber types.

The abandoned farms of the last century are now covered with mature tree growth, making Franklin County the most heavily forested county in Maine. According to a 1982 survey (Powell and Dixon, 1982), there were 1,087,500 acres in Franklin County. Of that total, 1,014,200 acres (93 percent) were classified as timberland. This represents an increase of 14,200 acres (1.3 percent) since the last survey in 1972.

Of this timberland: 5 percent was classified as White Pine/Red Pine, 11 percent as Aspen/Birch, 39 percent as Spruce-Fir and 45 percent as Northern Hardwoods timber types.

It was further classified as 39 percent sawtimber, 5 percent poletimber, and 7 percent seedling/sapling stand sizes. The net volume of growing stock was evenly divided between hardwood and softwood, while the net volume of sawtimber was 42 percent hardwood and 58 percent softwood.

There are numerous sawmills, bolt mills, veneer mills and pulpmills in and around the soil survey area. These markets provide a variety of outlets for the many products from the woodland. Sawmills use pine, hemlock, spruce-fir and hardwood for building and furniture material, the bolt and veneer mills use birch, maple, ash and beech for flatwear and furniture stock. The pulpmills provide markets for virtually all species and sizes of wood products. Franklin County is the world leader in toothpick production.

However, as many surveys have shown, landowners give a higher priority to other values, such as, recreation, wildlife, aesthetics, etc. than they do to forest management. This is why the multiple use concept continues to be a goal of local, state and federal programs.

Table 7 can help woodland owners or forest managers plan the use of soils for wood crops. Only those soils suitable for wood crops are listed. The table lists the ordination symbol for each soil. Soils assigned the same ordination symbol require the same general management and have about the same potential productivity.

The first part of the *ordination symbol*, a number, indicates the potential productivity of the soils for an indicator tree species. The indicator tree species for Franklin County is eastern white pine. The number indicates the volume, in cubic meters per hectare per year, which the indicator species can produce in a pure stand under natural conditions. The number 1 indicates low potential productivity; 2 or 3, moderate; 4 or 5, moderately high; 6 to 8, high; 9 and 11, very high. The second part of the symbol, a letter, indicates the major kind of soil limitation. The letter *R* indicates steep slopes; *X*, stoniness or rockiness; *W*, excess water in or on the soil; *D*, restricted rooting depth; *S*, sandy texture; *F*, and a high content of rock fragments in the soil. The letter *A* indicates that limitations or restrictions are insignificant. If a soil has more than one limitation, the priority is as follows: R, X, W, D, S, and F.

In table 7, *slight, moderate,* and *severe* indicate the degree of the major soil limitations to be considered in management.

Erosion hazard is the probability that damage will occur as a result of site preparation and cutting where the soil is exposed along roads, skid trails, and fire lanes and in log-handling areas. Forests that have been burned or overgrazed also are subject to erosion. Ratings of the erosion hazard are based on

the percent of the slope. A rating of *slight* indicates that no particular prevention measures are needed under ordinary conditions. A rating of *moderate* indicates that erosion-control measures are needed in certain silvicultural activities. A rating of *severe* indicates that special precautions are needed to control erosion in most silvicultural activities.

Equipment limitation reflects the characteristics and conditions of the soil that restrict use of the equipment generally needed in woodland management or harvesting. The chief characteristics and conditions considered in the ratings are slope, stones on the surface, rock outcrops, soil wetness, and texture of the surface layer. A rating of *slight* indicates that under normal conditions the kind of equipment and season of use are not significantly restricted by soil factors. Soil wetness can restrict equipment use, but the wet period does not exceed 1 month. A rating of *moderate* indicates that equipment use is moderately restricted because of one or more soil factors. If the soil is wet, the wetness restricts equipment use for a period of 1 to 3 months. A rating of *severe* indicates that equipment use is severely restricted either as to the kind of equipment that can be used or the season of use. If the soil is wet, the wetness restricts equipment use for more than 3 months.

Seedling mortality refers to the death of naturally occurring or planted tree seedlings, as influenced by the kinds of soil, soil wetness, or topographic conditions. The factors used in rating the soils for seedling mortality are texture of the surface layer, depth to a seasonal high water table and the length of the period when the water table is high, rock fragments in the surface layer, effective rooting depth, and slope aspect. A rating of *slight* indicates that seedling mortality is not likely to be a problem under normal conditions. Expected mortality is less than 25 percent. A rating of *moderate* indicates that some problems from seedling mortality can be expected. Extra precautions are advisable. Expected mortality is 25 to 50 percent. A rating of *severe* indicates that seedling mortality is a serious problem. Extra precautions are important. Replanting may be necessary. Expected mortality is more than 50 percent.

Windthrow hazard is the likelihood that trees will be uprooted by the wind because the soil is not deep enough for adequate root anchorage. The main restrictions that affect rooting are a seasonal high water table and the depth to bedrock, a fragipan, or other limiting layers. A rating of *slight* indicates that under normal conditions no trees are blown down by the wind. Strong winds may damage trees, but they do not uproot them. A rating of *moderate* indicates that some trees can be blown down during periods when the soil is wet and winds are moderate or strong. A rating of *severe* indicates that many trees can be blown down during these periods.

Plant competition ratings indicate the degree to which undesirable species are expected to invade and grow when openings are made in the tree canopy. The main factors that affect plant competition are depth to the water table and the available water capacity. A rating of *slight* indicates that competition from undesirable plants is not likely to prevent natural regeneration or suppress the more desirable species. Planted seedlings can become established without undue competition. A rating of *moderate* indicates that competition may delay the establishment of desirable species. Competition may hamper stand development, but it will not prevent the eventual development of fully stocked stands. A rating of *severe* indicates that competition can be expected to prevent regeneration unless precautionary measures are applied.

The *potential productivity* of merchantable or *common trees* on a soil is expressed as a *site index* and as a *volume* number. The site index is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that woodland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability.

The *volume*, a number, is the yield likely to be produced by the most important trees. This number, expressed as cubic feet per acre per year, indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

The first species listed under *common trees* for a soil is the indicator species for that soil. It generally is the most common species on the soil and is the one that determines the ordination class.

Trees to plant are those that are suitable for commercial wood production.

The first species listed under *common trees* for a soil is the indicator species for that soil. It generally is the most common species on the soil and is the one that determines the ordination class. The indicator tree species used in Franklin County Area is eastern white pine.

Trees to plant are those that are suitable for commercial wood production.

Recreation

The major public recreation areas in the soil survey area are Mount Blue State Park and Rangeley Lake State Park. Several towns own recreation areas on lake shores for picnicking, boating, and swimming. There are numerous hiking trails within the soil survey area. A section of the Appalachian Trail passes through Franklin County crossing Saddleback Mountain, Crocker Mountains, Spaulding Mountain, and Bigelow Mountain. Sugarloaf Mountain, the second highest peak in Maine, has several hiking trails. Three ski areas are located in the survey area. They are Sugarloaf USA, Saddleback Mountain, and Titcomb Hill.

Private recreation areas in the survey are plentiful. They include camping areas, golf courses, snowmobile trails, youth camps, hunting and fishing camps, and horseback riding trails. The many lakes, rivers, and streams also provide opportunities for recreation.

The soils of the survey area are rated in table 8 according to limitations that affect their suitability for recreation. The ratings are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

In table 8, the degree of soil limitation is expressed as slight, moderate, or severe. *Slight* means that soil properties are generally favorable and that limitations are minor and easily overcome. *Moderate* means that limitations can be overcome or alleviated by planning, design, or special maintenance. *Severe* means that soil properties are unfavorable and that limitations can be offset only by costly soil reclamation, special design, intensive maintenance, limited use, or a combination of these.

The information in table 8 can be supplemented by other information in this survey, for example, interpretations for septic tank absorption fields in table 11 and interpretations for dwellings without basements and for local roads and streets in table 10.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The best soils have mild slopes and are not wet or subject to flooding during the period of use. The surface has few or no stones or boulders, absorbs rainfall readily but remains firm, and is not dusty when dry. Strong slopes and stones or boulders can greatly increase the cost of constructing campsites.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The best soils for picnic areas are firm when wet, are not dusty when dry, are not subject to flooding during the period of use, and do not have slopes or stones or boulders that increase the cost of shaping sites or of building access roads and parking areas.

Playgrounds require soils that can withstand intensive foot traffic. The best soils are almost level and are not wet or subject to flooding during the season of use. The surface is free of stones and boulders, is firm after rains, and is not dusty when dry. If grading is needed, the depth of the soil over bedrock or a firm dense layer should be considered.

Paths and trails for hiking and horseback riding should require little or no cutting and filling. The best soils are not wet, are firm after rains, are not dusty when dry, and are not subject to flooding more than once a year during the period of use. They have moderate slopes and few or no stones or boulders on the surface.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. The best soils for use as golf fairways are firm when wet, are not dusty when dry, and are not subject to prolonged flooding during the period of use. They have moderate slopes and no stones or boulders on the surface. The suitability of the soil for tees or greens is not considered in rating the soils.

Wildlife Habitat

Robert J. Wengrzynek, Biologist, Natural Resources Conservation Service, USDA, helped to prepare this section.

The kind and abundance of wildlife depend largely on the quality, amount, and distribution of habitat elements which provide food, shelter, and water. If any elements are missing, inadequate, or inaccessible, some wildlife species may become scarce or absent. The diversity and quality of habitat elements are

closely related to land use, to the resulting kinds and patterns of vegetation, and to the distribution of wetlands, streams, and ponds. These, in turn, generally are related to the kinds and productivity of the soils, which have influenced land and water use patterns.

Although vegetation and land use patterns are important influences on the kind, distribution, and abundance of wildlife, soils are at least equally important. Vegetation, such as browse, fruits, and forage, produced on fertile soils is richer in protein, nutrients and trace elements than grown on poorer soils. Nutrition affects survival, reproduction, and other physiological processes of wildlife in the same way as it affects domestic livestock and humans.

Soil nutrients are well known to affect the size and health of deer. Together with moisture they can make browse more palatable and nutritious.

The reproductive success of some birds is related to the minerals in the soil. The weight and size of bones in animals and the quality of fur on furbearers are also related to diet, soil minerals, and soil fertility.

The soil type and nutrient level of soils and agricultural land use patterns are related. These factors combined are the main reasons why wildlife is usually more abundant in areas of productive agriculture, like the Sandy River Valley.

The pattern of land use in Franklin County is more diverse than other areas of Maine. The climate is moderate to severe. The mixture of young hardwood and soft forests and topographic type provide good to excellent habitat for most wildlife, particularly woodland species.

Abundant lakes, bogs, and often wetland areas along with scattered cropland, hayland, and pastureland, provide a variety of habitat elements for wildlife. Forestland ownership and management patterns also vary enough to provide relatively diverse conditions for wildlife habitat. Forest management practices effect the quality of wintering habitat for deer and are among the most limiting factors for wildlife habitat. Moose populations are increasing due to the same management techniques.

Deer are moderately abundant in the southern part of the county, with lower populations in the north due to lack of habitat diversity, more severe winter conditions, and mountain terrain. Moose and bear are found throughout the survey area.

Soils affect the type and quality of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. Wildlife habitat can be created by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants, or by planting vegetation which is suitable for habitat and adopted to the climate.

In table 9, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. Knowledge of habitat and soil relationships can be used in planning farms, rural residences, parks, wildlife refuges, nature study areas, and other land management developments for wildlife. This information can be useful in selecting soils that are suitable for creating, improving, or maintaining specific elements of wildlife habitat; and in determining the degree of management needed.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, rye, sorghum, sunflower.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are rye grass, redtop, flat pea, vetch, bluegrass, swithchgrass, timothy, trefoil, fescue, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these

plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are goldenrod, wheatgrass, meadow rye, thistle, mustard, fescue, asters, hawkweed, ragweed, and milkweed.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, blackberry, beech, birch, alder, and willow. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian-olive, autumn-olive, mountain ash, blueberry, rasberry, elderberry, high bush cranberry, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, hemlock, white cedar, and tamarack.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, wildrice, saltgrass, cordgrass, cattails, rushes, and sedges.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobolink, hawk, deer, pheasant, meadowlark, field sparrow, snowshoe hare, and woodchuck.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include ruffed grouse, woodcock, thrushes, songbirds, woodpeckers, squirrels, coyote, red fox, raccoon, moose, deer, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, rails, shore birds, muskrat, otter, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the "Soil Properties" section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil within a depth of 5 or 6 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 or 6 feet of the surface, soil wetness, depth to a seasonal high water table, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Table 10 shows the degree and kind of soil limitations that affect shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. Special feasibility studies may be required where the soil limitations are severe.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for basements, graves, utility lines, open ditches, or other purposes. The ratings are based on soil properties, site features, and observed performance of the soils. The ease of digging, filling, and compacting is affected by the depth to bedrock, a cemented pan, or a very firm dense layer; stone content; soil texture; and slope. The time of the year that excavations can be made is affected by the depth to a seasonal high water table and the susceptibility of the soil to flooding. The resistance of the excavation walls or banks to sloughing or caving is affected by soil texture and depth to the water table.

Dwellings and *small commercial buildings* are structures built on shallow foundations on undisturbed soil. The load limit is the same as that for single-family dwellings no higher than three stories. Ratings are made for small commercial buildings without basements, for dwellings with basements, and for dwellings without basements. The ratings are based on soil properties, site features, and observed performance of the soils. A high water table, flooding, shrinking and swelling, and organic layers can cause the movement of footings. A high water table, depth to bedrock or to a cemented pan, large stones, slope, and flooding affect the ease of excavation and construction. Landscaping and grading that require cuts and fills of more than 5 or 6 feet are not considered.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or stabilized soil material; and a flexible or rigid surface. Cuts and fills are generally limited to less than 6 feet. The ratings are based on soil properties, site features, and observed performance of the soils. Depth to bedrock or to a cemented pan, a high water table, flooding, large stones, and slope affect the ease of excavating and grading. Soil strength (as inferred from the engineering classification of the soil), shrink-swell potential, frost action potential, and depth to a high water table affect the traffic-supporting capacity.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. The ratings are based on soil properties, site features, and observed performance of the soils. Soil reaction, a high water table, depth to bedrock, and available water capacity in the upper 40 inches affect plant growth. Flooding, wetness, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer affect trafficability after vegetation is established.

Sanitary Facilities

Table 11 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, and sanitary landfills. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties

or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required.

The table also shows the suitability of the soils for use as daily cover for landfill. A rating of *good* indicates that soil properties and site features are favorable for the use and good performance and low maintenance can be expected; *fair* indicates that soil properties and site features are moderately favorable for the use and one or more soil properties or site features make the soil less desirable than the soils rated good; and *poor* indicates that one or more soil properties or site features are unfavorable for the use and overcoming the unfavorable properties requires special design, extra maintenance, or costly alteration.

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 72 inches is evaluated. The ratings are based on soil properties, site features, and observed performance of the soils. Permeability, a high water table, depth to bedrock, and flooding affect absorption of the effluent. Large stones and bedrock interfere with installation.

Unsatisfactory performance of septic tank absorption fields, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health. Ground water can be polluted if highly permeable sand and gravel or fractured bedrock is less than 4 feet below the base of the absorption field, if slope is excessive, or if the water table is near the surface. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Many local ordinances require that this material be of a certain thickness. Septic tank absorption fields should be designed and constructed in accordance with existing State of Maine Subsurface Wastewater Disposal Rules.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Lagoons generally are designed to hold the sewage within a depth of 2 to 5 feet. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water.

The table gives ratings for the natural soil that makes up the lagoon floor. The surface layer and, generally, 1 or 2 feet of soil material below the surface layer are excavated to provide material for the embankments. The ratings are based on soil properties, site features, and observed performance of the soils. Considered in the ratings are slope, permeability, a high water table, depth to bedrock, flooding, large stones, and content of organic matter.

Excessive seepage resulting from rapid permeability in the soil or a water table that is high enough to raise the level of sewage in the lagoon causes a lagoon to function unsatisfactorily. Pollution results if seepage is excessive or if floodwater overtops the lagoon. A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope and bedrock can cause construction problems, and large stones can hinder compaction of the lagoon floor.

Sanitary landfills are areas where solid waste is disposed of by burying it in soil. There are two types of landfill—trench and area. In a trench landfill, the waste is placed in a trench. It is spread, compacted, and covered daily with a thin layer of soil excavated at the site. In an area landfill, the waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site.

Both types of landfill must be able to bear heavy vehicular traffic. Both types involve a risk of ground-water pollution. Ease of excavation and revegetation should be considered.

The ratings in the table are based on soil properties, site features, and observed performance of the soils. Permeability, depth to bedrock, a high water table, slope, and flooding affect both types of landfill. Texture, stones and boulders, highly organic layers, and soil reaction affect trench landfills. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, a limitation rated slight or moderate may not be valid. Onsite investigation is needed.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste.

Soil texture, wetness, coarse fragments, and slope affect the ease of removing and spreading the material during wet and dry periods. Loamy or silty soils that are free of large stones or excess gravel are the best cover for a landfill. Clayey soils are sticky or cloddy and are difficult to spread; sandy soils are subject to wind erosion.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. The surface layer generally

has the best workability, more organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

Construction Materials

Table 12 gives information about the soils as a source of roadfill, sand, gravel, and topsoil. The soils are rated *good, fair,* or *poor* as a source of roadfill and topsoil. They are rated as a *probable* or *improbable* source of sand and gravel. The ratings are based on soil properties and site features that affect the removal of the soil and its use as construction material. Normal compaction, minor processing, and other standard construction practices are assumed. Each soil is evaluated to a depth of 5 or 6 feet.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the soil material below the surface layer to a depth of 5 or 6 feet. It is assumed that soil layers will be mixed during excavating and spreading. Many soils have layers of contrasting suitability within their profile. The table showing engineering index properties provides detailed information about each soil layer. This information can help to determine the suitability of each layer for use as roadfill. The performance of soil after it is stabilized with lime or cement is not considered in the ratings.

The ratings are based on soil properties, site features, and observed performance of the soils. The thickness of suitable material is a major consideration. The ease of excavation is affected by large stones, a high water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the engineering classification of the soil) and shrink-swell potential.

Soils rated *good* contain significant amounts of sand or gravel or both. They have at least 5 feet of suitable material, a low shrink-swell potential, few cobbles and stones, and slopes of 15 percent or less. Depth to the water table is more than 3 feet. Soils rated *fair* are more than 35 percent silt- and clay-sized particles and have a plasticity index of less than 10. They have a moderate shrink-swell potential, slopes of 15 to 25 percent, or many stones. Depth to the water table is 1 to 3 feet. Soils rated *poor* have a plasticity index of more than 10, a high shrink-swell potential, many stones, or slopes of more than 25 percent. They are wet and have a water table at a depth of less than 1 foot. They may have layers of suitable material, but the material is less than 3 feet thick.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 12, only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material.

The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the engineering classification of the soil), the thickness of suitable material, and the content of rock fragments. Kinds of rock, acidity, and stratification are given in the soil series descriptions. Gradation of grain sizes is given in the table on engineering index properties.

A soil rated as a probable source has a layer of clean sand or gravel or a layer of sand or gravel that is up to 12 percent silty fines. This material must be at least 3 feet thick and less than 50 percent, by weight, large stones. All other soils are rated as an improbable source. Coarse fragments of soft bedrock, such as shale and siltstone, are not considered to be sand and gravel.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area.

Plant growth is affected by such properties as soil reaction, available water capacity, and fertility. The ease of excavating, loading, and spreading is affected by rock fragments, slope, a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, a water table, rock fragments, and bedrock.

Soils rated *good* have friable, loamy material to a depth of at least 40 inches. They are free of stones and cobbles, have little or no gravel, and have slopes of less than 8 percent. They are naturally fertile or respond well to fertilizer, and are not so wet that excavation is difficult.

Soils rated *fair* are sandy soils, loamy soils that have a relatively high content of clay, soils that have only 20 to 40 inches of suitable material, soils that have an appreciable amount of gravel or stones, or soils that have slopes of 8 to 15 percent. The soils are not so wet that excavation is difficult.

Soils rated *poor* are very sandy or clayey, have less than 20 inches of suitable material, have a large amount of gravel or stones have slopes of more than

15 percent, or have a seasonal high water table at or near the surface.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 13 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and are easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increase in construction costs, and possibly increased maintenance are required.

This table also gives for each soil the restrictive features that affect drainage, terraces and diversions, and grassed waterways.

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, or organic matter. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table and permeability of the aquifer. Depth to bedrock and the content of large stones affect the ease of excavation.

Drainage is the removal of excess surface and subsurface water from the soil. How easily and effectively the soil is drained depends on the depth to bedrock, to a cemented pan, or to other layers that affect the rate of water movement; permeability; depth to a high water table or depth of standing water if the soil is subject to ponding; slope; susceptibility to flooding; subsidence of organic layers; and the potential for frost action. Excavating and grading and the stability of ditchbanks are affected by depth to bedrock, large stones, slope, and the hazard of cutbanks caving. The productivity of the soil after drainage may be adversely affected by extreme acidity. Availability of drainage outlets is not considered in the ratings.

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock or to a cemented pan. The performance of a system is affected by the depth of the root zone and soil reaction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to control erosion and conserve moisture by intercepting runoff. Slope, wetness, large stones, and depth to bedrock affect the construction of terraces and diversions. A restricted rooting depth, a severe hazard of wind erosion or water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Grassed waterways are natural or constructed channels, generally broad and shallow, that conduct surface water to outlets at a nonerosive velocity. Large stones, wetness, slope, and depth to bedrock or to a cemented pan affect the construction of grassed waterways. Low available water capacity, restricted rooting depth, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features, listed in the tables, are explained on the following pages.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow holes are dug and borings made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine grain-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classification, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 14 gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given for each soil series under the heading “Soil Series and Their Morphology.”

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is as much as about 15 percent, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 1993) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 1986).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on

laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of grain-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is omitted in the table.

Physical Properties

Table 15 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term “permeability,” as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and

swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 15, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 15 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of coarse fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 16 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

Table 17 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

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

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 17 indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 17 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short

periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 18 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories *(USDA, 1998 and 1999)*. Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 19 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Spodosol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Orthod (*Orth*, meaning the central concept or most representavite, plus *od*, from Spodosol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Haplorthods (*Hapl*, meaning minimal horizonation, plus *orthod*, the suborder of the Spodosols that has a horizon with an accumulation of iron, aluminum, and humus).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Haplorthods.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle size, mineral content, soil temperature regime, soil depth, and reaction. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is sandy, mixed, frigid Typic Haplorthods.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is the Adams series.

Samples of Berkshire, Charles, Chesuncook, Cornish, Dixfield, Lovewell, Lyman, Monarda, Sunday, Telos, and Tunbridge were taken at selected sites in this survey area and were analyzed in the laboratory. Two sites each of Berkshire and Dixfield soils were sampled *(Rourke, 1994)*. Two sites each of Charles, Cornish, and Lovewell soils were sampled *(Rourke, 1991)*. Two sites of Sunday soils were sampled *(Grant and Epstein, 1962)*. One site each of Chesuncook and Telos soils was sampled *(Rourke, 1994)*. One site of Lyman *(Rourke, 1982)*, one site of Monarda *(Rourke and Schmidt, 1979)*, and one site of Tunbridge *(Rourke, 1990)* soils were sampled. Data obtained from these sites were used to aid in the classification of these soils.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” *(USDA, 1993)*. Many of the technical terms used in the

descriptions are defined in “Soil Taxonomy” *(USDA, 1999)* and in “Keys to Soil Taxonomy” *(USDA, 1998)*. Unless otherwise indicated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series. The relationship of each series to its position, parent material, and drainage is shown in table 20.

The map units of each soil series are described in the section “Detailed Soil Map Units.”

Abram Series

The Abram series consists of very shallow, excessively drained soils. These soils formed in a thin mantle of glacial till on ridges and mountains. Slopes range from 3 to 80 percent.

Abram soils are associated on the landscape with the Berkshire, Colonel, Dixfield, Hermon, Lyman, Marlow, Monadnock, Peacham, and Tunbridge soils and with areas of rock outcrop. Abram soils are shallower to bedrock than these soils.

Typical pedon of Abram very fine sandy loam in a wooded area of Lyman-Tunbridge-Abram complex, rolling, very stony, in the town of Weld along the right-hand trail to the summit of Center Hill, 600 feet from picnic area.

Oi—1 inch to 0; litter of leaves, needles, and twigs.

Oa—0 to 1 inch; black (5YR 2/1) highly decomposed organic material; weak fine and medium granular structure; very friable; many very fine and fine, and few medium roots; very strongly acid; abrupt wavy boundary.

A—1 to 3 inches; very dark gray (5YR 3/1) very fine sandy loam, dark grayish brown (10YR 4/2) dry; weak fine granular structure; very friable; many very fine and fine and few medium roots; 3 percent gravel; very strongly acid; abrupt wavy boundary.

E—3 to 4 inches; brown (7.5YR 5/2) very fine sandy loam; weak fine granular structure; friable; many very fine and fine and few medium roots; 5 percent gravel; strongly acid; abrupt wavy boundary.

Bs—4 to 5 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine granular structure; friable; many very fine and fine and few medium roots; 10 percent gravel; strongly acid; abrupt wavy boundary.

R—5 inches; schistose bedrock.

The thickness of the solum ranges from 1 to 10 inches. The layer of mineral soil directly over the bedrock either is 4 inches or more thick or has half or more of the thickness of the overlying organic soil material. Rock fragments range from 0 to 35 percent by volume and are mainly angular gravel. The soil ranges from extremely acid to strongly acid throughout.

The A horizon has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2.

The E horizon has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 or 2.

The B horizon, has a lower boundary within 5 inches from the mineral surface. It has hue of 2.5YR to 7.5YR, with value and chroma of 2 to 4. Texture of the B horizon is dominantly fine sandy loam or sandy loam but includes very fine sandy loam, loam, or silt loam in the fine-earth fraction. Structure is weak or moderate, fine or medium granular. Consistence is very friable or friable.

Bedrock is granite, phyllite, or schist.

Adams Series

The Adams series consists of very deep, somewhat excessively drained soils. These soils formed in glaciofluvial sands derived from crystalline rock. Adams soils are on kame terraces, deltas, and outwash plains. Slopes range from 0 to 45 percent.

Adams soils are associated on the landscape with the Allagash, Boothbay, Colton, Croghan, Fryeburg, Madawaska, Masardis, Naumburg, Nicholville, Searsport, Sheepscot, and Sunday soils. Adams soils are better drained than Croghan, Madawaska, Naumburg, Searsport, and Sheepscot soils. They are better drained and coarser textured than Boothbay and Nicholville soils. They have less rock fragments in the solum than Colton and Masardis soils and are coarser textured in the solum than Allagash soils. Fryeburg and Sunday soils are on adjacent flood plains.

Typical pedon of Adams loamy sand, in a wooded area of Adams-Croghan association, strongly sloping, in the town of Eustis, 4600 feet northeast of Flagstaff Memorial Cemetery, and 50 feet south of the junction of two logging roads.

Oi—1 inch to 0; litter of leaves, needles and twigs.

A—0 to 2 inches; black (10YR 2/1) loamy sand, dark grayish brown (10YR 4/2) dry; weak fine granular structure; friable; common very fine and fine and medium and few coarse roots; extremely acid; abrupt wavy boundary.

E—2 to 4 inches; light brownish gray (10YR 6/2) loamy sand; single grain; friable; common very fine and fine, and few medium and coarse roots; very strongly acid; clear wavy boundary.

Bhs—4 to 7 inches; dark reddish brown (5YR 3/3)

loamy sand; weak fine granular structure; very friable; few very fine to coarse roots; strongly acid; clear wavy boundary.

Bs1—7 to 11 inches; dark brown (7.5YR 4/4) loamy sand; weak fine granular structure; very friable; few very fine to coarse roots; 2 percent gravel; moderately acid; clear wavy boundary.

Bs2—11 to 17 inches; dark yellowish brown (10YR 4/4) loamy sand; weak fine granular structure; very friable; very few fine to coarse roots; 2 percent gravel; moderately acid; gradual wavy boundary.

BC—17 to 28 inches; olive brown (2.5Y 4/4) sand; single grain; loose; very few fine roots; 3 percent gravel; moderately acid; clear wavy boundary.

C1—28 to 58 inches; olive (5Y 4/3) sand; single grain; loose; 5 percent gravel; moderately acid; abrupt smooth boundary.

C2—58 to 65 inches; 50 percent olive gray (5Y 5/2) and 50 percent light olive gray (5Y 6/2) sand; single grain; loose; moderately acid.

The thickness of the solum ranges from 20 to 30 inches. These soils have up to 5 percent gravel to a depth of 20 inches and up to 10 percent below. Reaction in unlimed areas ranges from extremely acid to strongly acid in the surface, very strongly acid or strongly acid in the subsurface, very strongly acid to moderately acid in the subsoil, and from very strongly acid to slightly acid in the substratum.

The A horizon, or Ap horizon where present, has hue of 7.5YR or 10YR, value of 2 to 5, and chroma of 1 to 3.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 1 or 2. In some areas, a very dark grayish brown or black 0a horizon overlies the E horizon.

The Bhs or Bh horizon has hue of 2.5YR or 5YR, value and chroma of 2 or 3. In some pedons the Bh horizon has a chroma of 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. The B horizon is loamy fine sand or loamy sand in the upper part and loamy sand, fine sand, or sand in the lower part.

The BC horizon has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 to 4. It is fine sand, sand, or course sand.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 4. It is fine sand to coarse sand.

Allagash Series

The Allagash series consists of very deep, well drained soils. These soils formed in material derived mainly from slate, schist, gneiss, phyllite, and quartzite on high stream terraces and glacial outwash plains. Slopes range from 0 to 15 percent.

Allagash soils are associated on the landscape with the Adams, Boothbay, Charles, Colton, Cornish, Croghan, Fryeburg, Lovewell, Madawaska, Masardis, Naumburg, Nicholville, Searsport, Sunday, and Swanville soils. These soils have a finer textured solum than Adams soils. These soils are finer textured and have less rock fragments than Colton and Masardis soils. They are better drained than Boothbay, Croghan, Madawaska, Naumburg, Nicholville, Searsport, and Swanville soils. Charles, Cornish, Fryeburg, Lovewell, and Sunday soils are on adjacent flood plains.

Typical pedon of Allagash fine sandy loam, in a hayfield, in an area of Allagash fine sandy loam, 3 to 8 percent slopes, in the town of Freeman, on the east side of a hay field, 900 feet south of Maine Route 142.

Ap—0 to 5 inches; dark yellowish brown (10YR 4/4) fine sandy loam, pale brown (10YR 6/3) dry; moderate very fine and fine granular structure; very friable; common very fine and fine roots; very strongly acid; abrupt smooth boundary.

Bs1—5 to 9 inches; brown (7.5YR 5/4) fine sandy loam; weak very fine and fine granular structure; very friable; common very fine and fine roots; very strongly acid; clear wavy boundary.

Bs2—9 to 17 inches; yellowish brown (10YR 5/6) fine sandy loam; weak very fine and fine granular structure; very friable; common very fine and fine roots; very strongly acid; gradual wavy boundary.

Bs3—17 to 21 inches; yellowish brown (10YR 5/4) fine sandy loam; weak very fine and fine granular structure; very friable; few very fine and fine roots; strongly acid; gradual wavy boundary.

C1—21 to 33 inches; light olive brown (2.5Y 5/4) loamy fine sand; massive; loose; few very fine roots; moderately acid; gradual wavy boundary.

C2—33 to 65 inches; olive (5Y 5/4) fine sand; single grain; loose; moderately acid.

The solum thickness ranges from 15 to 35 inches. Rock fragments range from 0 to 15 percent by volume above a depth of 40 inches and are primarily pebbles. Reaction in unlimed areas ranges from very strongly acid to slightly acid throughout the soil.

The Ap horizon has hue of 10YR, value of 3 or 4, and chroma of 2 to 4.

The E horizon, where present, has hue of 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bh horizon, where present, has hue of 2.5YR or 5YR, value and chroma of 2 to 4. The Bhs horizon, where present, has hue of 2.5YR or 5YR, value and chroma of 2 or 3. The Bs horizon has hue of 5YR to

10YR, value of 4 to 6, and chroma of 4 to 8. The B horizon is fine sandy loam or very fine sandy loam.

The BC horizon, where present, has hue of 2.5Y, value of 4 or 5, and chroma of 4 or 6. It is fine sandy loam or very fine sandy loam.

The 2C horizon has hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 2 to 4. It is loamy fine sand, loamy sand, fine sand or sand. Consistence is loose or very friable.

Bemis Series

The Bemis series consists of very deep, poorly drained soils. These soils formed in dense glacial till derived mainly from phyllite, schist, and granite. They are in nearly level to strongly sloping high elevation valleys between mountains. Slopes range from 0 to 15 percent.

Bemis soils are associated on the landscape with the Bucksport, Mahoosuc, Markey, Ricker, Saddleback, Sisk, and Surplus soils. Bemis soils are wetter than Mahoosuc, Sisk, and Surplus soils. They are wetter and deeper to bedrock than Ricker and Saddleback soils and are better drained than Bucksport and Markey soils.

Typical pedon of Bemis gravelly fine sandy loam in a wooded area of Surplus-Bemis association, strongly sloping, very stony, in Redington Township about 2.5 miles south of the Redington and Coplin town line and southwest of Nash Stream, about 2.0 miles west of the Redington and Carrabassett Valley town line.

Oi—2 inches to 0; litter of leaves, twigs, and needles between living mosses and herbaceous plants.

Oa—0 to 5 inches; dark reddish brown (5YR 2/2) muck; moderate fine granular structure; very friable; many very fine and common medium and coarse roots; very strongly acid; abrupt wavy boundary.

Bg—5 to 13 inches; dark grayish brown (2.5Y 4/2) gravelly fine sandy loam, grayish brown (2.5Y 5/2) faces of peds; few medium faint light brownish gray (2.5Y 6/2) and prominent reddish brown (5YR 4/4) mottles; weak thin platy structure; friable; few very fine roots; 20 percent gravel, 5 percent cobbles; strongly acid; clear wavy boundary.

Cd1—13 to 23 inches; olive (5Y 5/3) gravelly loam; many coarse distinct light gray (5Y 6/1) and many coarse prominent dark yellowish brown (10YR 4/4) mottles; massive; very firm; 20 percent gravel; very strongly acid; gradual wavy boundary.

Cd2—23 to 36 inches; olive (5Y 4/3) gravelly loam; common medium distinct gray (5Y 5/1) and coarse prominent dark brown (7.5YR 4/4) mottles; massive; very firm; 20 percent gravel; strongly acid; diffuse wavy boundary.

Cd3—36 to 65 inches; olive brown (2.5Y 4/4) gravelly loam; common medium prominent light gray (5Y 6/1) and faint dark yellowish brown (10YR 4/4) mottles; massive; very firm; 20 percent gravel; strongly acid.

The thickness of the solum ranges from 7 to 20 inches. Rock fragment content ranges from 5 to 35 percent in the A horizon, where present, and in the B horizon. It ranges from 5 to 30 percent in the Cd horizon. Rock fragments are pebbles, cobbles, channers, and stones. Reaction ranges from extremely acid to strongly acid throughout.

The Oa horizon and the Oe horizons, where present, have hue of 2.5YR to 10YR, value of 2, and chroma of 1 or 2.

The Bw horizon, where present, has hue of 10YR to 5Y, value of 4 and chroma of 1 to 3. It is dominantly silt loam or loam, but includes sandy loam in the fine-earth fraction. It has granular or subangular blocky structure. It is friable when moist and non-sticky to sticky when wet.

The Bg horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2. It is silt loam, loam, very fine sandy loam, fine sandy loam, or sandy loam in the fine-earth fraction. It has granular, subangular blocky, or platy structure. It is friable when moist and nonsticky or slightly sticky when wet.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 1 to 4. It is silt loam, loam, very fine sandy loam, fine sandy loam, or sandy loam in the fine-earth fraction. It is firm or very firm.

Berkshire Series

The Berkshire series consists of very deep, well drained soils. These soils formed in glacial till derived primarily from mica schist, with some phyllite, gneiss, or granite. They are on upland ridges and on side slopes of bedrock influenced ridges. Slopes range from 3 to 45 percent.

Berkshire soils are associated on the landscape with the Abram, Brayton, Colonel, Dixfield, Hermon, Lyman, Marlow, Monadnock, Peacham, and Tunbridge soils. Berkshire soils are better drained than Brayton, Colonel, Dixfield, and Peacham soils. They are finer textured in the substratum than Hermon and Monadnock soils. They are deeper to bedrock than Abram, Lyman, and Tunbridge soils and lack the dense substratum of Marlow soils.

Typical pedon of Berkshire fine sandy loam in a wooded area of Monadnock-Berkshire complex,

steep, very stony, in the town of Temple on the west side of the Day Mountain Road, 1900 feet north of its junction with the Temple Intervale Road.

Oi—1 inch to 0; litter of leaves and needles.

Oa—0 to 2 inches; black (N 2/0) highly decomposed organic material; strong very fine and fine granular structure; very friable; many very fine and fine and common medium roots; 2 percent stones; extremely acid; abrupt smooth boundary.

E—2 to 4 inches; gray (5YR 6/1) fine sandy loam; weak fine and medium granular structure; very friable; many very fine and fine, and common medium and coarse roots; 5 percent gravel, 2 percent cobbles, 2 percent stones; extremely acid; abrupt broken boundary.

Bh—4 to 6 inches; dark reddish brown (5YR 3/4) fine sandy loam; weak fine granular structure; very friable; many very fine and fine, and common medium and coarse roots; 10 percent gravel, 2 percent cobbles and 2 percent stones; extremely acid; clear wavy boundary.

Bs—6 to 18 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak very fine and fine granular structure; very friable; common very fine and fine and many medium and common coarse roots; 10 percent gravel and 3 percent cobbles; very strongly acid; clear wavy boundary.

BC1—18 to 26 inches; yellowish brown (10YR 5/4) fine sandy loam; weak very fine and fine granular structure; very friable; common very fine and fine, many medium and common coarse roots; 10 percent gravel and 3 percent cobbles; very strongly acid; clear wavy boundary.

BC2—26 to 32 inches; light olive brown (2.5Y 5/4) gravelly fine sandy loam; weak very fine and fine granular structure; friable; common very fine to coarse roots; 10 percent gravel, 5 percent cobbles and 5 percent stones; strongly acid; gradual wavy boundary.

C1—32 to 56 inches; light olive brown (2.5Y 5/4) gravelly fine sandy loam; massive; friable; few very fine and fine roots; 10 percent gravel, 10 percent cobbles, and 5 percent stones; strongly acid; gradual wavy boundary.

C2—56 to 65 inches; olive yellow (2.5Y 6/6) gravelly sandy loam; massive; friable; 15 percent gravel, 10 percent cobbles, and 5 percent stones; strongly acid.

The thickness of the solum ranges from 16 to 35 inches. Rock fragments in the profile range from 5 to 35 percent by volume. Reaction in unlimed areas ranges from extremely acid to moderately acid throughout.

Some pedons have an A horizon with a hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2, or an Ap horizon with hue of 5YR to 10YR, and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bh horizon has hue of 5YR or 7.5YR and value and chroma of 2 to 4, or a Bhs horizon with hue of 5YR or 7.5YR, and value and chroma of 3. The Bs horizon has hue of 5YR to 10YR, and value and chroma of 4 to 6. The B horizon is fine sandy loam, sandy loam, or loam in the fine-earth fraction.

The BC horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4. The BC horizon is fine sandy loam, sandy loam, or loam in the fine-earth fraction.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 6. It is fine sandy loam, sandy loam, or loam in the fine-earth fraction. Consistence is friable or firm.

Boothbay Series

The Boothbay series consists of very deep, moderately well drained and somewhat poorly drained soils. These soils formed in glaciolacustrine and glaciomarine deposits. They are on gently sloping and undulating to hilly, convex lacustrine and marine plains. Slopes range from 3 to 15 percent.

Boothbay soils are associated on the landscape with the Adams, Allagash, Madawaska, Nicholville, and Swanville soils. Boothbay soils are finer textured than Adams, Allagash, Madawaska, and Nicholville soils. Boothbay soils are better drained than Swanville soils.

Typical pedon of Boothbay silt loam, in a field in an area of Boothbay silt loam, 3 to 8 percent slopes, in the town of Farmington, adjacent to U.S. Route 2, 1 mile west of Farmington Falls, 90 feet south into a field.

Ap—0 to 10 inches; dark brown (10YR 3/3) silt loam, pale olive (5Y 6/3) dry; moderate fine granular structure; very friable; common very fine and fine and medium roots; very strongly acid; abrupt smooth boundary.

Bw1—10 to 13 inches; dark yellowish brown (10YR 4/4) silt loam; weak fine and medium subangular blocky structure; friable; common very fine and few fine roots; few medium tubular pores; strongly acid; abrupt smooth boundary.

Bw2—13 to 18 inches; olive brown (2.5Y 4/4) silt loam; common fine to medium prominent light gray (5Y 7/2) mottles, and common fine prominent yellowish brown (10YR 5/6) and yellowish red

(5YR 5/8) mottles; moderate fine and medium subangular blocky structure; firm; common very fine roots; few fine tubular pores and common very fine vesicular pores; moderately acid; clear smooth boundary.

C1—18 to 29 inches; light olive brown (2.5Y 5/4) silty clay loam, grayish brown (2.5Y 5/2) faces of prisms; common fine to medium prominent light gray (5Y 7/1) mottles and common fine distinct yellowish brown (10YR 5/4) mottles; strong very coarse prismatic structure separating to moderate fine and medium angular blocky; firm; few patchy prominent dark reddish brown (5YR 3/2) oxide coatings on faces of peds; few fine roots; common very fine vesicular pores; slightly acid; clear smooth boundary.

C2—29 to 39 inches; light olive brown (2.5Y 5/4) silt loam, light brownish gray (2.5Y 6/2) faces of prisms; common fine to medium prominent strong brown (7.5YR 5/6) mottles and many fine to medium distinct light brownish gray (2.5Y 6/2) mottles; moderate very coarse prismatic structure; friable; common very fine vesicular pores; neutral; clear smooth boundary.

C3—39 to 65 inches; grayish brown (2.5Y 5/2) silty clay loam, light olive gray (5Y 6/2) faces of prisms; many fine to medium prominent strong brown (7.5YR 5/6) mottles and many fine to medium faint light brownish gray (2.5Y 6/2) mottles; strong very coarse prismatic structure; firm; common patchy prominent dark reddish brown (5YR 3/2) oxide coatings throughout; common very fine vesicular pores; neutral.

The thickness of the solum ranges from 18 to 36 inches. Reaction in unlimed areas ranges from very strongly acid to neutral in the solum and moderately acid to neutral in the substratum.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2 to 4.

The Bw horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 6. It is silt loam or silty clay loam, but can include one or more thin layers of very fine sandy loam or silty clay.

The BC horizon has hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 2 to 6. It is primarily silt loam or silty clay loam, but can include one or more thin layers of very fine sandy loam or silty clay.

The C horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam or silty clay loam with thin lenses of loamy very fine sand in some pedons. Structure is weak to moderate, fine to medium angular blocky; thick or very thick platy; moderate or strong coarse or very coarse prismatic structure; or it is massive. Consistence is firm or very firm, but some subhorizons range to friable.

Brayton Series

The Brayton series consists of very deep, poorly drained soils. These soils formed in dense glacial till derived mainly from phyllite, schist, and granite. They are along drainageways and in nearly level to strongly sloping valleys between upland ridges. Slopes range from 0 to 15 percent.

Brayton soils are associated on the landscape with the Berkshire, Bucksport, Colonel, Dixfield, Hermon, Lyman, Markey, Marlow, Monadnock, Peacham, and Tunbridge soils. The Brayton soils are wetter than Berkshire, Colonel, Dixfield, Hermon, Marlow, and Monadnock soils. They are wetter and deeper to bedrock than Lyman and Tunbridge soils and are better drained than Bucksport, Markey, and Peacham soils.

Typical pedon of Brayton fine sandy loam in a wooded area of Brayton-Peacham-Markey association, gently sloping, very stony, in the town of Temple, 0.8 mile from the grate bridge at the northwest end of Varnum Pond where old county road swings east, 1,500 feet north of corner.

Oi—1 inch to 0; litter of leaves, needles, and twigs.

A—0 to 6 inches; very dark grayish brown (10YR 3/2) fine sandy loam, light brownish gray (2.5Y 6/2) dry; few medium distinct light brownish gray (10YR 6/2) mottles; moderate fine granular structure; very friable; many very fine and fine and medium roots; 5 percent gravel and 5 percent stones; strongly acid; clear wavy boundary.

Bg—6 to 14 inches; dark grayish brown (10YR 4/2) fine sandy loam; few medium distinct light brownish gray (2.5Y 6/2), few medium prominent strong brown (7.5YR 5/6) and few medium distinct yellowish brown (10YR 5/4) mottles; moderate fine and medium granular structure; friable; many very fine and fine and few medium roots; 5 percent gravel; moderately acid; clear smooth boundary.

Cd1—14 to 26 inches; olive (5Y 5/3) fine sandy loam, gray (5Y 5/1) faces of peds; few fine prominent yellowish brown (10YR 5/6) mottles; weak thick platy structure; very firm; 10 percent gravel; moderately acid; clear smooth boundary.

Cd2—26 to 65 inches; olive (5Y 4/3) gravelly fine sandy loam, gray (5Y 5/1) faces of peds; many medium prominent yellowish brown (10YR 5/6) and few medium faint light olive gray (5Y 6/2) mottles; weak thick platy structure; very firm; 10 percent gravel and 5 percent stones; moderately acid.

The thickness of the solum ranges from 10 to 25 inches. Reaction ranges from extremely acid to moderately acid in the surface and subsurface and from strongly acid to slightly acid in the subsoil. The substratum ranges from moderately acid to neutral. Rock fragments range from 5 to 35 percent by volume.

The A horizon, or Ap horizon where present, has hue of 10YR to 5Y, value of 2 to 4, and chroma of 1 to 4.

Some pedons have an Eg horizon with hue of 10YR to 5Y, value of 5 or 6, and chroma of 1 or 2.

The B horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 4. It is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

The Cd horizon has hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 2 or 3. It is sandy loam, fine sandy loam, very fine sandy loam, or loam in the fine-earth fraction. Structure is weak or moderate, medium or thick platy; or moderate or strong very coarse prismatic separating to platy; or the horizon is massive. Consistence is firm or very firm.

Bucksport Series

The Bucksport series consists of very deep, very poorly drained soils. These soils formed in well-decomposed organic material more than 51 inches thick. They are in bogs. Slopes are 0 to 1 percent.

Bucksport soils are associated on the landscape with the Bemis, Brayton, Burnham, Charles, Markey, Medomak, Monarda, Naumburg, Peacham, Searsport, and Swanville soils. Bemis, Brayton, Burnham, Monarda, and Peacham are mineral soils on nearby glaciated uplands. Swanville soils are better drained and are lacustrine deposited soils. Naumburg and Searsport are mineral soils on nearby outwash plains. Charles, Cornish, and Medomak soils are mineral soils on adjacent flood plains. Markey is an organic soil that has a mineral layer 12 inches or more thick that has its upper boundary in the control section below the surface tier. They are located around the bogs' shallow perimeters.

Typical pedon of Bucksport muck, in an area of Bucksport and Markey soils, in a wooded bog in the town of New Vineyard, 1100 feet east of Porter Lake, 3000 feet northeast of the intersection of Maine Route 234 and Porter Lake camp road.

Oa1—0 to 13 inches; black (10YR 2/1) muck (sapric material); about 70 percent fiber, 5 percent rubbed; massive; nonsticky, nonplastic; 5 percent woody fragments throughout; few to common very fine to coarse roots throughout; pale brown (10YR 6/3) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; clear smooth boundary.

Oa2—13 to 37 inches; very dark brown (10YR 2/2) muck (sapric material); about 80 percent fiber, 10 percent rubbed; massive; nonsticky, nonplastic; 5 percent woody fragments throughout; very few to few, very fine and fine roots, and few to common medium and coarse roots throughout; light yellowish brown (10YR 6/4) sodium pyrophosphate test; extremely acid in 0.01M calcium chloride; clear smooth boundary.

Oa3—37 to 65 inches; very dark brown (10YR 2/2) muck (sapric material); about 70 percent fiber, 10 percent rubbed; massive; nonsticky, nonplastic; 10 percent woody fragments throughout; light yellowish brown (10YR 6/4) sodium pyrophosphate test; very strongly acid in 0.01M calcium chloride.

The thickness of the organic material is greater than 51 inches. Wood fragments range from 0 to 20 percent throughout the organic material. Mineral material ranges from 0 to 20 percent throughout. Fibers are typically of woody or herbaceous origin, but in some pedons fibers from sphagnum moss make up 70 percent of the surface tier and make up thin layers in the subsurface and bottom tier.

The surface tier is neutral or has hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 or 2. The surface tier is typically sapric material but in some pedons is hemic or fibric material with or without sapric material. Reaction is extremely acid to strongly acid in 0.01M calcium chloride.

The subsurface and bottom tiers have hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 to 3. They are typically sapric material but some pedons have thin layers of fibric material with a total thickness of less than 5 inches or thin layers of hemic material with a total thickness of less than 10 inches. Reaction is extremely acid to moderately acid in the subsurface tier and very strongly acid to slightly acid in the bottom tier in 0.01M calcium chloride.

Burnham Series

The Burnham series consists of very deep, very poorly drained soils. These soils formed in dense glacial till derived mainly from slate and other dark colored sedimentary rocks. They are in depressions and drainageways. Slopes range from 0 to 3 percent.

Burnham soils are associated on the landscape with the Bucksport, Elliottsville, Markey, Monarda, Monson, and Telos soils. Bucksport is a very deep organic soil. Markey soil has a thicker organic surface layer. Burnham soils are wetter than Monarda and

Telos soils. They are wetter and deeper to bedrock than Elliottsville and Monson soils.

Typical pedon of Burnham mucky peat, in a wooded area of Monarda-Burnham-Bucksport association, gently sloping, very stony, in the town of Rangeley, 0.7 mile west of Loon Lake Road on a private road just south of the airport, 500 feet north of the road.

Oi—2 inches to 0; litter of leaves and twigs.

Oe—0 to 6 inches; dark reddish brown (5YR 3/2) mucky peat; weak fine granular structure; very friable; many fine and medium roots; extremely acid; abrupt wavy boundary.

Oa—6 to 8 inches; black (10YR 2/1) muck; weak fine granular structure; very friable; many fine and medium roots; extremely acid; abrupt wavy boundary.

Bg1—8 to 12 inches; olive gray (5Y 4/2) gravelly silt loam; common coarse faint black (5Y 2/2) mottles; weak fine granular structure; friable; few fine roots; 20 percent gravel, 10 percent cobbles; strongly acid; abrupt wavy boundary.

Bg2—12 to 16 inches; olive gray (5Y 5/2) gravelly silt loam; common medium distinct black (5Y 2/2) mottles; moderate medium subangular blocky structure; friable; few fine roots; 15 percent gravel, 5 percent cobbles; moderately acid; clear wavy boundary.

Cdg1—16 to 36 inches; olive (5Y 5/3) gravelly silt loam, light olive gray (5Y 6/2) faces of prisms; common medium faint olive gray (5Y 5/2) and common medium prominent light olive brown (2.5Y 5/6) mottles; weak very coarse prismatic structure; firm; 15 percent gravel; moderately acid; gradual smooth boundary.

Cdg2—36 to 65 inches; olive gray (5Y 4/2) gravelly silt loam, gray (5Y 6/1) faces of prisms; common medium prominent light olive brown (2.5Y 5/6) and common medium faint olive gray (5Y 5/2) mottles; moderate very coarse prismatic structure; firm; 15 percent gravel; slightly acid.

The thickness of the organic surface ranges from 8 to 16 inches. The thickness of the solum ranges from 6 to 16 inches. Reaction ranges from extremely acid to moderately acid in the organic surface, from strongly acid to slightly acid in the solum, and from strongly acid to neutral in the substratum. Rock fragments range from 5 to 35 percent in the mineral horizons.

The O horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2 or it is neutral and has a value of 2 or 3.

Some pedons have an A horizon with hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 2.

The Bg horizon is neutral or has hue of 5Y, value of 4 or 5, and chroma of 1 or 2. It is loam or silt loam in the fine-earth fraction.

The Cdg horizon has hue of 2.5Y to 5GY, value of 4 or 5, and chroma of 1 to 3. It is loam or silt loam. It has weak or moderate very coarse prismatic; or weak, thin to thick platy structure; or the horizon is massive. Consistence is firm or very firm when moist or slightly sticky and slightly plastic when wet.

Charles Series

The Charles series consists of very deep, poorly drained soils. These soils formed in recent alluvium on flood plains. Slopes range from 0 to 2 percent.

Charles soils are associated on the landscape with the Allagash, Bucksport, Cornish, Fryeburg, Lovewell, Madawaska, Markey, Medomak, Sunday, and Swanville soils. Charles soils are wetter than Allagash, Cornish, Fryeburg, Lovewell, Madawaska, and Sunday soils. They are better drained than Bucksport, Medomak, and Markey soils. Allagash, Madawaska, and Swanville soils are also in higher landscape positions than Charles soils and do not flood.

Typical pedon of Charles silt loam in a wooded area in an area of Charles silt loam, in the town of Farmington, 1300 feet east of York farm and 500 feet southwest of U.S. Route 2.

A—0 to 4 inches; dark brown (10YR 3/3) silt loam, light olive gray (5Y 6/2) dry; moderate fine and medium granular structure; very friable; common very fine and fine and medium roots; strongly acid; clear smooth boundary.

Cgl—4 to 14 inches; dark grayish brown (2.5Y 4/2) silt loam, pale brown (10YR 6/3) dry; common medium distinct olive (5Y 5/3) mottles and common fine prominent dark reddish brown (5YR 3/3) mottles; weak fine and medium granular structure; friable; common very fine and fine and few medium roots; very strongly acid; clear smooth boundary.

Cg2—14 to 30 inches; olive (5Y 5/3) silt loam; many coarse prominent grayish brown (10YR 5/2) and common medium prominent yellowish red (5YR 5/6) mottles; massive; friable; few very fine and fine roots in the upper part; very strongly acid; abrupt smooth boundary.

Ab—30 to 33 inches; dark grayish brown (10YR 4/2) silt loam; common fine and medium distinct dark brown (7.5YR 4/4) mottles and few fine prominent olive gray (5Y 5/2) mottles; massive; friable; strongly acid; abrupt smooth boundary.

Cg1—33 to 47 inches; olive gray (5Y 4/2) silt loam; common medium and coarse faint olive gray (5Y

5/2) mottles and common fine and medium prominent dark brown (7.5YR 4/4) mottles; massive; friable; moderately acid; clear smooth boundary.

Cg2—47 to 52 inches; greenish gray (5GY 5/1) silt loam; common medium distinct dark grayish brown (2.5Y 4/2) and few medium prominent yellowish brown (10YR 5/6) mottles; massive; friable; strongly acid; clear smooth boundary.

Cg3—52 to 58 inches; olive gray (5Y 4/2) silt loam; few fine and medium prominent dark brown (7.5YR 4/4) mottles; massive; friable; very strongly acid; abrupt smooth boundary.

Cg4—58 to 65 inches; dark gray (5Y 4/1) coarse sand; single grain; loose; 10 percent gravel; strongly acid.

Reaction in unlimed areas is extremely acid to slightly acid, but some subhorizon within the control section has a reaction of moderately acid or slightly acid.

The A horizon, or Ap horizon where present, has hue of 10YR or 2.5Y, value of 3 or 4 and chroma of 1 to 3.

The C horizon has hue of 2.5Y to 5GY, value of 4 to 6, and chroma of 1 to 3. It is silt loam or very fine sandy loam. Below 40 inches, there are strata of loamy very fine sand to fine gravel. The upper part of the C horizon has weak, fine or medium granular structure or it is massive. The lower part of the C horizon is massive or single grain. Consistence is loose to friable.

Chesuncook Series

The Chesuncook series consists of very deep, moderately well drained soils. They formed in dense glacial till derived mainly from slate and other dark sedimentary and metamorphic rocks. They are on upland ridges. Slopes range from 3 to 25 percent.

Chesuncook soils are associated on the landscape with the Elliottsville, Monarda, Monson, Telos, and Thorndike soils. Chesuncook soils are wetter and deeper to bedrock than Elliottsville, Monson, and Thorndike soils. They are better drained than Monarda and Telos soils.

Typical pedon of Chesuncook silt loam in a wooded area of Chesuncook-Telos association, moderately steep, very stony, in Dallas Plantation, 4000 feet east of Geneva Bog Brook and 200 feet south of access road to Saddleback Mountain ski area.

Oi—2 inches to 0; litter of leaves, twigs, needles, and mosses.

Oa—0 to 2 inches; dark reddish brown (5YR 3/2) highly decomposed organic material; moderate very fine and fine granular structure; very friable; many very fine and fine and common medium and few coarse roots; very strongly acid; abrupt smooth boundary.

E—2 to 4 inches; gray (10YR 6/1) silt loam; weak very fine and fine granular structure; very friable; many very fine and fine and common medium and coarse roots; 10 percent gravel; very strongly acid; abrupt smooth boundary.

Bhs—4 to 5 inches; dark reddish brown (5YR 2/2) silt loam; weak very fine and fine granular structure; very friable; many very fine and fine and common medium and few coarse roots; 10 percent gravel; very strongly acid, abrupt smooth boundary.

Bs1—5 to 9 inches; dark brown (7.5YR 4/4) silt loam; weak very fine and fine granular structure; very friable; common very fine and few medium coarse roots; 10 percent gravel and 2 percent cobbles; strongly acid; clear wavy boundary.

Bs2—9 to 14 inches; dark yellowish brown (10YR 4/4) gravelly silt loam; weak very fine and fine granular structure; very friable; many very fine and fine and few medium and coarse roots; 15 percent gravel, 3 percent cobbles and 2 percent stones; strongly acid, clear wavy boundary.

BC1—14 to 18 inches; olive brown (2.5Y 4/4) gravelly loam; weak fine and moderate medium granular structure; friable; few very fine and fine and medium roots; 15 percent gravel, 3 percent cobbles, and 2 percent stones; strongly acid; clear wavy boundary.

BC2—18 to 20 inches; olive brown (2.5Y 4/4) gravelly loam; many fine and medium prominent olive gray (5Y 5/2) mottles and many very fine to medium prominent dark brown (7.5YR 4/4) mottles; weak medium platy structure; friable; few very fine and fine roots between peds; few to common fine interstitial and tubular pores; few prominent yellowish red (5YR 4/6) patchy oxide coatings on faces of peds; 15 percent gravel, 3 percent cobbles, and 3 percent stones; moderately acid; clear wavy boundary.

Cd—20 to 65 inches; olive (5Y 4/3) gravelly loam; common fine and medium distinct olive gray (5Y 5/2) mottles and common fine and medium prominent dark brown (7.5YR 4/4) mottles; medium and thick platy structure; firm; few to common fine interstitial and tubular pores; 15 percent gravel, 5 percent cobbles, and 5 percent stones; moderately acid.

The solum thickness ranges from 15 to 28 inches. The weighted average of clay in the particle-size control section is 10 to 18 percent. Rock fragment content ranges from 5 to 20 percent in the upper part

of the solum, from 10 to 25 percent in the lower part of the solum, and from 10 to 30 percent in the substratum. In unlimed areas the soil is extremely acid to moderately acid in the solum and very strongly acid to slightly acid in the substratum.

The Oa horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The A horizon, or Ap horizon where present, has hue of 10YR, and value and chroma of 3 or 4.

The E horizon has hue of 5YR to 10YR, value of 6 or 7, and chroma of 1 or 2.

The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bhs horizon, where present, has hue of 2.5YR or 5YR, with value and chroma of 2 or 3. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5 and chroma of 4 to 8. The B horizon is silt loam, loam, or fine sandy loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 4. It is silt loam, loam, or fine sandy loam in the fine-earth fraction. It has weak or moderate, fine or medium granular, very fine to medium subangular blocky or weak thin, or medium platy structure. Consistence is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 2 to 6. It is silt loam or loam in the fine-earth fraction. The Cd horizon has weak very thick platy structure; or moderate or strong very coarse prismatic, which in some pedons separates to weak or moderate, thin to thick platy, or to moderate or strong, medium or coarse angular blocky; or the horizon is massive. Consistence is firm or very firm.

Colonel Series

The Colonel series consists of very deep, somewhat poorly drained soils. They formed in dense glacial till derived mainly from mica schist, granite, phyllite and gneiss. They are on upland drumlin shaped ridges and on side slopes of bedrock influenced ridges. Slopes range from 3 to 15 percent.

Colonel soils are associated on the landscape with Abram, Berkshire, Brayton, Dixfield, Hermon, Lyman, Marlow, Monadnock, Peacham, and Tunbridge soils. Colonel soils are wetter and have a dense substratum that is lacking in Berkshire, Hermon, and Monadnock soils. Colonel soils are better drained than Brayton and Peacham soils and are wetter than Dixfield and Marlow soils. They are deeper to bedrock than Abram, Lyman, and Tunbridge soils.

Typical pedon of Colonel fine sandy loam, in an area of Brayton-Colonel association, gently sloping, very stony, in a wooded area in the township of Freeman, 2.1 miles east from Freeman Center School on a gravel road, south of the road 250 feet.

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 4 inches; very dusky red (2.5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine and medium roots; extremely acid; abrupt wavy boundary.

E—4 to 6 inches; pinkish gray (5YR 6/2) fine sandy loam; weak fine granular structure; very friable; few fine roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bh—6 to 8 inches; red (2.5YR 4/6) fine sandy loam; moderate fine granular structure; very friable; common very fine and fine roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bs1—8 to 12 inches; yellowish red (5YR 4/6) fine sandy loam; moderate very fine subangular blocky structure; very friable; common fine roots; 5 percent gravel; very strongly acid; clear smooth boundary.

Bs2—12 to 16 inches; yellowish brown (10YR 5/4) fine sandy loam; common medium prominent light brownish gray (2.5Y 6/2) and dark reddish brown (2.5YR 3/4) mottles; moderate fine subangular blocky structure; very friable; common fine roots; 5 percent gravel 2 percent cobbles; very strongly acid; clear smooth boundary.

BC—16 to 20 inches; light olive brown (2.5Y 5/4) fine sandy loam; common fine distinct light brownish gray (2.5Y 6/2) and common medium prominent red (2.5YR 4/6) mottles; moderate fine and medium subangular blocky structure; friable; few fine roots; 5 percent gravel, 3 percent cobbles, and 2 percent stones; very strongly acid; clear smooth boundary.

Cd1—20 to 39 inches; grayish brown (2.5Y 5/2) fine sandy loam, light brownish gray (2.5Y 6/2) faces of prisms; few fine distinct light olive gray (5Y 6/2) mottles; strong very coarse prismatic separating to weak thick platy structure; firm; common fine prominent yellowish brown (10YR 5/6) stains on faces of peds; 5 percent gravel, 3 percent cobbles, and 2 percent stones; slightly acid; clear smooth boundary.

Cd2—39 to 65 inches; grayish brown (2.5Y 5/2) gravelly fine sandy loam, light brownish gray (2.5Y 6/2) faces of prisms; few fine distinct light olive gray (5Y 6/2) mottles; strong very coarse prismatic separating to weak thick platy structure; firm; common fine prominent yellowish brown (10YR 5/6) stains on faces of peds; 5 percent gravel, 5 percent cobbles, and 5 percent stones; slightly acid.

The thickness of the solum ranges from 10 to 24 inches. In unlimed areas reaction ranges from extremely acid to slightly acid in the solum and from very strongly acid to slightly acid in the substratum. Rock fragments are predominantly gravel and cobbles with a few stones and range from 5 to 30 percent throughout the soil.

The Oa horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

Some pedons have an A or Ap horizon with hue of 7.5YR or 10YR, with value and chroma of 2 or 3.

The E horizon has hue of 5YR to 10YR, value of 5 or 6, and chroma of 2.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. Some pedons have a Bhs horizon with hue of 2.5YR or 5YR, with value and chroma of 2 or 3. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is most commonly fine sandy loam but ranges from sandy loam to loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 6. It is most commonly fine sandy loam but ranges from sandy loam to loam in the fine-earth fraction. It has weak or moderate, fine or medium granular; moderate, fine or medium subangular blocky; or weak thin platy structure. Consistence is friable or firm.

Some pedons have an E horizon with hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 2 or 3. It is most commonly fine sandy loam but ranges from sandy loam to loam in the fine-earth fraction. It has platy structure. Consistence is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is most commonly fine sandy loam but ranges from sandy loam to loam in the fine-earth fraction. It has weak to strong, thin to thick platy; or strong very coarse prismatic structure, which in some pedons separates to weak or moderate, thin to thick platy; or the horizon is massive. Consistence is firm or very firm.

Colton Series

The Colton series consists of very deep, excessively drained soils. They formed in glaciofluvial deposits on terraces, deltas, kames, and eskers. Slopes range from 0 to 45 percent.

Colton soils are associated on the landscape with the Adams, Allagash, Croghan, Hermon, Madawaska, Masardis, Monadnock, Naumburg, Searsport, and Sheepscot soils. Colton soils have more rock fragments in the solum than Adams and Allagash soils. They are better drained than Croghan, Madawaska, Naumburg, Searsport, and Sheepscot soils. Colton soils have a thinner loamy surface than Masardis soils. Hermon and Monadnock soils are somewhat excessively drained and well drained soils and formed in glacial till.

Typical pedon of Colton gravelly fine sandy loam in a wooded area of Adams-Colton association, steep, in the town of Phillips at the Madrid-Phillips town line on the north side of Reeds Mills Road.

Oi—1 inch to 0; litter of hardwood leaves.

Oa—0 to 3 inches; black (N 2/0) highly decomposed organic material; weak fine granular structure; friable; many very fine and fine and common medium roots; very strongly acid; abrupt wavy boundary.

E—3 to 5 inches; light brownish gray (10YR 6/2) gravelly fine sandy loam, light brownish gray (2.5Y 6/2) dry; weak fine granular structure; friable; many very fine and fine roots; 15 percent gravel; very strongly acid; abrupt broken boundary.

Bh—5 to 8 inches; dark reddish brown (2.5YR 3/4) gravelly fine sandy loam; weak fine granular structure; friable; many very fine and fine and common medium roots; 15 percent gravel and 5 percent cobbles; strongly acid; abrupt wavy boundary.

Bs—8 to 15 inches; reddish brown (5YR 4/4) gravelly loamy sand; weak fine granular structure; friable; common fine and medium roots; 20 percent gravel and 10 percent cobbles; strongly acid; clear smooth boundary.

BC—15 to 28 inches; dark yellowish brown (10YR 4/4) very gravelly loamy sand; single grain; loose; few fine and medium roots; 30 percent gravel and 10 percent cobbles; strongly acid; clear smooth boundary.

C1—28 to 40 inches; dark brown (10YR 4/3) very gravelly sand; single grain; loose; few fine roots; 40 percent gravel and 10 percent cobbles; moderately acid; abrupt smooth boundary.

C2—40 to 65 inches; yellowish brown (10YR 5/4) very gravelly sand; single grain; loose; 45 percent gravel and 15 percent cobbles; moderately acid.

The thickness of the solum ranges from 18 to 36 inches. Rock fragments are mainly gravel and cobbles and comprise 15 to 55 percent of the solum and 35 to 70 percent of the substratum. Reaction in unlimed areas ranges from extremely acid to moderately acid in the solum and very strongly acid to slightly acid in the substratum.

The O horizon has hue of 5YR to 10YR, value of 2, and chroma of 1 or it is neutral and has a value of 2.

The Ap horizon, where present, has hue of 5YR to 10YR, value of 3 to 5, and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 5 or 6, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 2 to 4, and chroma of 1 to 4. Some pedons have a Bhs horizon with value and chroma of 3 or less. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. The B horizon is fine sandy loam to coarse sand in the fine-earth fraction, with fine sandy loam restricted to within 10 inches from the mineral soil surface.

The BC horizon has hue of 10YR to 2.5Y, value of 4 or 5, and chroma of 4 to 6. It is loamy fine sand to coarse sand in the fine-earth fraction.

The C horizon has hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 to 5. It is composed of gravel, cobbles, or stones with loamy sand, sand, or coarse sand in the interstices, and has varying degrees of stratification.

Cornish Series

The Cornish series consists of very deep, somewhat poorly drained soils. These soils formed in recent alluvium on flood plains of streams and rivers. Slopes range from 0 to 2 percent.

Cornish soils are associated on the landscape with the Allagash, Bucksport, Charles, Fryeburg, Lovewell, Madawaska, Markey, Medomak, Sunday, and Swanville soils. Cornish soils are wetter than Allagash, Fryeburg, Lovewell, Madawaska, and Sunday soils. They are better drained than Bucksport, Charles, Markey, Medomak, and Swanville soils.

Typical pedon of Cornish very fine sandy loam, in a cultivated field, in an area of Lovewell-Cornish complex, occasionally flooded, in the town of Farmington, 600 feet east of the treatment plant and 1700 feet north of the Sandy River.

Ap—0 to 8 inches; dark brown (10YR 3/3) very fine sandy loam, light brownish gray (2.5Y 6/2) dry; weak very fine granular structure; friable; few very fine roots; strongly acid; abrupt smooth boundary.

Bw1—8 to 17 inches; olive brown (2.5Y 4/4) very fine sandy loam; few medium distinct light olive brown (2.5Y 5/6) mottles and common medium prominent light olive gray (5Y 6/2) mottles; weak fine granular structure; friable; few very fine roots; very strongly acid; clear wavy boundary.

Bw2—17 to 35 inches; light olive brown (2.5Y 5/4) very fine sandy loam; few medium distinct light olive brown (2.5Y 5/6) mottles and common medium prominent light olive gray (5Y 6/2) mottles; weak medium granular structure; friable; few very fine roots; very strongly acid; clear wavy boundary.

C—35 to 43 inches; olive (5Y 5/3) silt loam; few medium distinct dark reddish brown (5YR 3/4) mottles and common medium distinct light olive gray (5Y 6/2) and prominent light olive brown (2.5Y 5/6) mottles; massive; friable; very strongly acid; abrupt wavy boundary.

Cg1—43 to 62 inches; olive gray (5Y 5/2) silt loam; common medium distinct olive (5Y 5/6) mottles and prominent yellowish brown (10YR 5/6) mottles; massive; friable; very strongly acid; abrupt wavy boundary.

Cg2—62 to 65 inches; olive gray (5Y 4/2) loamy fine sand; massive; very friable; very strongly acid.

The thickness of the solum ranges from 20 to 35 inches. A few pebbles occur in some pedons. In unlimed areas the soil ranges from very strongly acid to slightly acid throughout.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4.

The Bw horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6. It is silt loam or very fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam or very fine sandy loam. Below 40 inches there are layers ranging from loamy very fine sand to fine gravel. The horizon is massive or single grain. Consistence ranges from loose to friable.

Croghan series

The Croghan series consists of very deep, moderately well drained soils. These soils formed in glaciofluvial sands on kame terraces and outwash plains. Slopes range from 0 to 8 percent.

Croghan soils are associated on the landscape with the Adams, Allagash, Colton, Fryeburg, Madawaska, Masardis, Naumburg, Nicholville, Searsport, Sheepscot, and Sunday soils. Croghan soils are wetter than Adams, Allagash, Colton, Fryeburg, and Masardis soils. They are better drained than Naumburg and Searsport soils. Croghan soils are coarser textured in the solum than Madawaska and Nicholville soils but lack the rock fragment content of Sheepscot soils. Fryeburg and Sunday soils are on adjacent floodplains.

Typical pedon of Croghan loamy sand in a wooded area in an area of Croghan loamy sand, 0 to 8 percent slopes, in the town of Eustis, 1.8 miles north of the South Branch of the Dead River on Maine Route 27, 200 feet west of the road.

Oi—1 inch to 0; litter of leaves, needles, and twigs.

Oa—0 to 2 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak very fine and fine granular structure; very friable; many very fine, fine and medium roots; extremely acid; abrupt smooth boundary.

E—2 to 5 inches; pinkish gray (5YR 6/2) loamy sand; weak fine granular structure; very friable; many very fine to medium roots; very strongly acid; abrupt wavy boundary.

Bhs—5 to 8 inches; dark reddish brown (5YR 3/3) loamy sand; weak fine granular structure; very friable; common very fine to medium roots; strongly acid; clear wavy boundary.

Bs1—8 to 18 inches; yellowish red (5YR 4/6) loamy sand; weak fine granular structure; very friable; common very fine to medium roots; moderately acid; clear wavy boundary.

Bs2—18 to 21 inches; yellowish brown (10YR 5/4) loamy sand; common medium faint yellowish brown (10YR 5/6) and distinct light brownish gray (10YR 6/2) mottles; weak fine granular structure; very friable; common very fine and fine and few medium roots; moderately acid; clear smooth boundary.

BC—21 to 34 inches; light olive brown (2.5Y 5/4) loamy sand; common medium prominent yellowish brown (10YR 5/6) and grayish brown (10YR 5/2) mottles; massive; friable; few patchy prominent reddish brown (5YR 4/3) oxide stains throughout; moderately acid; clear smooth boundary.

C1—34 to 48 inches; olive (5Y 5/3) sand; common medium distinct light brownish gray (2.5Y 6/2), and prominent yellowish brown (10YR 5/6), and reddish brown (5YR 4/3) mottles; single grain; loose; few patchy prominent very dusky red (2.5YR 2/2) oxide stains throughout; moderately acid; clear wavy boundary.

C2—48 to 65 inches; olive gray (5Y 5/2) sand; single grain; loose; moderately acid.

The solum thickness ranges from 28 to 42 inches. Rock fragments, consisting of gravel, range from 0 to 3 percent in the surface layer and from 0 to 10 percent in the subsoil and substratum. The Oe horizon has hue of 5YR to 10YR, value of 2 and chroma of 1 or 2. Reaction ranges from extremely acid to moderately acid.

The Ap horizon, where present, has hue of 7.5YR or 10YR,value of 3 to 5, and chroma of 2. Reaction ranges from extremely acid to moderately acid.

The E horizon has hue of 5YR or 7.5YR, value of 5 to 7, and chroma of 1 or 2. Reaction ranges from extremely acid to moderately acid.

The Bhs horizon has hue of 5YR or 7.5YR, value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 or 3 and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 6. The B horizon is loamy fine sand to sand. Reaction ranges from very strongly acid to moderately acid.

The BC horizon has hue of 7.5YR to 2.5Y, value of 4 to 6, and chroma of 2 to 4. It is loamy sand or sand. Reaction ranges from very strongly acid to moderately acid.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 4. It is loamy sand, fine sand, sand or coarse sand. Reaction ranges from very strongly acid to moderately acid.

Dixfield Series

The Dixfield series consists of very deep, moderately well drained soils. They formed in dense glacial till derived mainly from mica schist and some granite, phyllite, or gneiss. They are on upland drumlin shaped ridges and on side slopes of bedrock influenced ridges. Slopes range from 3 to 25 percent.

Dixfield soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Hermon, Lyman, Marlow, Monadnock, Peacham, and Tunbridge soils. Dixfield soils are wetter than Berkshire, Hermon, Marlow, and Monadnock soils. They are better drained than Brayton, Colonel, and Peacham soils, and are deeper to bedrock than Abram, Lyman, and Tunbridge soils.

Typical pedon of Dixfield fine sandy loam in a wooded area of Colonel-Dixfield association, strongly sloping, very stony, in Coplin Plantation, 0.5 mile on a logging road which is the first left past Nash Stream on a gravel road going south from Maine Route 16, 4.5 miles west of Stratton Village, 200 feet north of the logging road.

Oi—I inch to 0; litter of leaves and twigs.

Oa—O to 1 inch; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine and common medium roots; extremely acid; abrupt wavy boundary.

E—1 to 4 inches; gray (5YR 6/1) fine sandy loam; weak fine and medium granular structure; very friable; many very fine and fine and common medium roots; 5 percent gravel; extremely acid; abrupt broken boundary.

Bhs—4 to 7 inches; very dusky red (2.5YR 2/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 5 percent gravel; very strongly acid; abrupt broken boundary.

Bsl—7 to 12 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine granular structure; friable; common very fine and fine and few medium roots; 5 percent gravel, 5 percent cobbles; very strongly acid; clear wavy boundary.

Bs2—12 to 20 inches; dark brown (7.5YR 4/4) fine sandy loam; moderate fine granular structure; friable; few very fine, fine and medium roots; 5 percent gravel, 5 percent cobbles; very strongly acid; clear wavy boundary.

BC—20 to 25 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; common fine and medium distinct light brownish gray (2.5Y 6/2) mottles and prominent dark brown (7.5YR 4/4) mottles, and few fine and medium distinct yellowish brown (10YR 5/6) mottles; moderate medium subangular blocky structure; friable; few very fine and fine roots; 10 percent gravel, 5 percent cobbles; very strongly acid; abrupt wavy boundary.

Cd—25 to 65 inches; olive (5Y 5/3) gravelly fine sandy loam; few fine distinct light brownish gray (2.5Y 6/2) and common medium prominent dark brown (7.5YR 4/4) mottles, and few fine and medium prominent yellowish brown (10YR 5/6) mottles; strong very coarse prismatic structure separating to moderate thin and medium platy; very firm; 10 percent gravel, 10 percent cobbles; very strongly acid.

The thickness of the solum ranges from 18 to 26 inches. The weighted average of clay in the particle-size control section is less than 10 percent. Reaction ranges from extremely acid to slightly acid in the surface and subsurface, and from very strongly acid to slightly acid in the subsoil and substratum. Rock fragments are predominantly gravel and cobbles with a few stones and range from 5 to 30 percent throughout the soil. The Oa horizon has hue of 5YR to 10YR, value of 2 or 3 and chroma of 1 or 2.

The A horizon, or Ap horizon where present, has hue of 5YR to 10YR, value and chroma of 2 to 4.

The E horizon has hue of 7.5YR or 10YR, value of 4 to 6 and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR, value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5 and chroma of 4 to 8. Texture is most commonly fine sandy loam but the range includes sandy loam and loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 4 to 6 and chroma of 3 or 4. Texture is most commonly fine sandy loam but the range includes sandy loam and loam in the fine-earth fraction. It has weak or moderate, fine or medium granular, weak or moderate, fine or medium subangular blocky or weak, thin or medium platy structure. Consistence is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 to 6 and chroma of 2 to 4. Texture is most commonly fine sandy loam but the range includes sandy loam and loam in the fine-earth fraction. It has weak or moderate, thin to thick platy structure, or has strong very coarse prismatic which in some pedons separates to weak or moderate, thin to thick platy, or the horizon is massive. Consistence is firm or very firm.

Elliottsville Series

The Elliottsville series consists of moderately deep, well drained soils. They formed in glacial till derived mainly from slate, phyllite or schist. They are on upland ridges and hills. Slopes range from 3 to 45 percent.

Elliottsville soils are associated on the landscape with the Burnham, Chesuncook, Monarda, Monson, Telos, and Thorndike soils and with areas of rock outcrop. Elliottsville soils are shallower to bedrock than Burnham, Chesuncook, Monarda, and Telos soils. They are deeper to bedrock than Monson and Thorndike soils and areas of rock outcrop.

Typical pedon of Elliottsville loam, in a wooded area of Elliottsville-Monson complex, rolling, very stony, in Rangeley Plantation, 2.2 miles east of Maine Route 17 on South Shore Road, 0.8 mile south on a gravel road east of South Bog Stream, and 1.25 miles east-northeast on a logging road, 50 feet east of the road.

Oi—2 inches to 1 inch; litter of leaves, needles and twigs.

Oe—1 inch to 0; dark reddish brown (5YR 3/2) moderately decomposed organic material; weak fine granular structure; very friable; many very fine to coarse roots; extremely acid; abrupt wavy boundary.

Oa—0 to 1 inch; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine to coarse roots; extremely acid; abrupt wavy boundary.

E—1 to 3 inches; pinkish gray (7.5YR 6/2) loam; weak fine granular structure; friable; many very fine and fine and medium and common coarse roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bhs—3 to 6 inches; dusky red (2.5YR 3/2) loam; weak fine granular structure; friable; many very fine and fine and medium roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bs1—6 to 10 inches; reddish brown (5YR 4/4) gravelly

loam; weak fine granular structure; friable; many very fine and fine and common medium roots; 10 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

Bs2—10 to 14 inches; dark brown (7.5YR 4/4) gravelly loam: weak fine granular structure; friable; many very fine and fine and few medium roots; 10 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

BC—14 to 18 inches; light olive brown (2.5Y 5/6) loam; weak fine granular structure; friable; many very fine and fine roots; 10 percent gravel; very strongly acid; gradual wavy boundary.

C—18 to 31 inches; light olive brown (2.5Y 5/4) silt loam; weak thin platy structure; firm; common very fine and fine roots; 10 percent gravel; very strongly acid.

R—31 inches; slate bedrock.

The thickness of the solum ranges from 14 to 29 inches, the depth to bedrock ranges from 20 to 40 inches. Reaction in unlimed areas ranges from extremely acid to strongly acid in the solum and from very strongly acid to moderately acid in the substratum.

The O horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

Some areas have an Ap horizon with hue of 10YR, and value and chroma of 3 or 4.

The E horizon has hue of 7.5YR or 10YR, value of 6 or 7, and chroma of 1 to 3.

The Bhs horizon has hue of 2.5YR or 5YR, with value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR or 5YR, value of 3 to 5, and chroma of 3 to 6. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is predominantly silt loam or loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 4 or 6. It is silt loam or loam in the fine-earth fraction. It has weak fine and medium granular, thin and medium platy structure; or very fine to medium subangular blocky structure.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 3 or 4. It is silt loam or loam in the fine-earth fraction. The C horizon has weak or moderate, thin to thick platy structure or it is massive.

The bedrock is generally slate, phyllite, or schist.

Fryeburg Series

The Fryeburg series consists of very deep, well drained soils. They formed in recent alluvium on flood plains. Slopes range from 0 to 3 percent.

Fryeburg soils are associated on the landscape with the Adams, Allagash, Charles, Cornish, Croghan, Lovewell, Madawaska, Medomak, Nicholville, and Sunday soils. Fryeburg soils are better drained than Charles, Cornish, Lovewell, Medomak, and Nicholville soils. They are finer textured than Adams, Allagash, Croghan, Madawaska, and Sunday soils.

Typical pedon of Fryeburg silt loam, in a cultivated field in an area of Fryeburg silt loam, in the town of Farmington, 900 feet southwest of the intersection of U.S. Route 2 and High Street.

Ap—0 to 10 inches; brown (10YR 4/3) silt loam, pale olive (5Y 6/3) dry; weak fine granular structure; very friable; many very fine and common fine and medium roots; moderately acid; abrupt smooth boundary.

Bw—10 to 35 inches; yellowish brown (10YR 5/4) silt loam; weak fine granular structure; very friable; common very fine and few fine roots; strongly acid; abrupt smooth boundary.

C1—35 to 50 inches; yellowish brown (10YR 5/4) loamy very fine sand; massive; friable; few very fine roots; strongly acid; abrupt smooth boundary.

C2—50 to 65 inches; light brownish gray (2.5Y 6/2) very fine sandy loam; massive; friable; strongly acid.

The solum thickness ranges from 15 to 35 inches. In unlimed areas, reaction ranges from strongly acid to slightly acid throughout.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4.

The Bw horizon has hue of 10YR or 2.5Y value of 4 or 5, and chroma of 3 to 6. It is silt loam or very fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 4. It is silt loam, very fine sandy loam, or loamy very fine sand. Some pedons are stratified in the lower part. It is massive or single grain and is loose to friable.

Hermon Series

The Hermon series consists of very deep, somewhat excessively drained soils. They formed in glacial till derived primarily from granite and gneiss. They are on hillsides and ridges. Slopes range from 3 to 45 percent.

Hermon soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Colton, Dixfield, Lyman, Marlow, Monadnock, Peacham, and Tunbridge soils. Hermon soils are coarser textured in the substratum than Berkshire, Brayton, Colonel, Dixfield, Marlow, and Peacham soils. They lack the firm substratum of the Brayton, Colonel, Dixfield, Marlow, and Peacham soils. Hermon soils are coarser

textured in the subsoil than Monadnock soils. They are deeper to bedrock than Abram, Lyman, and Tunbridge soils. Hermon soils lack the stratification of the Colton soils.

Typical pedon of Hermon fine sandy loam, in an area of Hermon-Monadnock association, rolling, very stony, in a wooded area in the town of Temple, 2 miles from gate at town road on Mosher's Edes Turn Road in a pit on the north side of the road.

Oa—0 to 1 inch; very dark gray (10YR 3/1) highly decomposed organic material; weak fine granular structure; friable; many very fine and fine and common medium roots; extremely acid; abrupt wavy boundary.

E—1 to 2 inches; grayish brown (10YR 5/2) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bh—2 to 3 inches; dark reddish brown (5YR 3/4) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs1—3 to 5 inches; yellowish red (5YR 4/6) fine sandy loam; weak fine granular structure; very friable; many very fine and fine and common medium roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs2—5 to 19 inches; yellowish red (5YR 4/6) gravelly sandy loam; moderate fine and medium granular structure; friable; common fine and medium roots; 20 percent gravel; very strongly acid; clear smooth boundary.

C1—19 to 47 inches; dark yellowish brown (10YR 4/4) very gravelly loamy sand; single grain; loose; common fine and medium roots; 30 percent gravel, 10 percent cobbles, and 5 percent stones; strongly acid; gradual smooth boundary.

C2—47 to 65 inches; olive brown (2.5Y 4/4) very gravelly loamy sand; single grain; loose; common fine and medium roots; 30 percent gravel, 10 percent cobbles, and 5 percent stones; strongly acid.

The solum thickness ranges from 14 to 35 inches. Rock fragment content in individual horizons in the particle-size control section ranges from 15 to 70 percent but weighted average ranges from 35 to 65 percent. Rock fragments in the upper 10 inches range from 5 to 50 percent. Rock fragments are predominantly gravel but include cobbles and stones. Reaction ranges from extremely acid to strongly acid in the surface and subsurface layers, from extremely acid to moderately acid in the subsoil, and is strongly acid or moderately acid in the substratum.

The Ap horizon, where present, has hue of 10YR, value of 3 or 4, and chroma of 2 or 3. Some pedons have an A horizon with hue of 10YR, value of 2 or 3, and chroma of 1 to 3.

The E horizon has hue of 5YR to 2.5Y value of 5 to 7, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 1 to 4. Some pedons have a Bhs horizon with chroma of 3 or less. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6 and chroma of 4 or 6. The B horizon is fine sandy loam, sandy loam, coarse sandy loam, loamy sand, loamy coarse sand, sand, or coarse sand in the fine-earth fraction.

Some pedons have a BC horizon with hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 to 6. It is sandy loam, coarse sandy loam, loamy sand, loamy coarse sand, sand, or coarse sand in the fine-earth fraction. Structure is weak fine or medium granular; or the horizon is single grain or massive. Consistence is loose to firm but some pedons have discontinuous cementation.

The C horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 to 4. It is loamy sand, loamy coarse sand, sand, or coarse sand in the fine-earth fraction. Structure is weak thin or medium platy or the horizon is single grain or massive. Consistence is loose to firm.

Lovewell Series

The Lovewell series consists of very deep, moderately well drained soils. They formed in recent alluvium on flood plains of streams and rivers. Slopes range from 0 to 2 percent.

Lovewell soils are associated on the landscape with the Allagash, Bucksport, Charles, Cornish, Fryeburg, Madawaska, Markey, Medomak, Nicholville, Swanville, and Sunday soils. Lovewell soils have finer textures than Allagash and Madawaska soils. They are wetter than Fryeburg soils and are better drained than Bucksport, Charles, Cornish, Markey, and Medomak soils. Lovewell soils are lower in the landscape than Nicholville and Swanville soils.

Typical pedon of Lovewell very fine sandy loam in a cultivated field in an area of Lovewell-Cornish complex, occasionally flooded, in the town of Farmington; 1350 feet north of the green bridge on Maine Route 156 in Farmington Falls; 200 feet west of riverbank of Wilson Stream.

Ap—0 to 11 inches; dark brown (10YR 4/3) very fine sandy loam, pale olive (5Y 6/3) dry; moderate fine

granular structure; very friable; common very fine and fine roots; strongly acid; abrupt smooth boundary.

Bw—11 to 23 inches; light olive brown (2.5Y 5/4) very fine sandy loam; moderate fine subangular blocky structure; very friable; strongly acid; clear smooth boundary.

C1—23 to 35 inches; light olive brown (2.5Y 5/4) very fine sandy loam; common medium distinct light brownish gray (2.5Y 6/2) and prominent very dark gray (N 3/0) mottles; massive; very friable; strongly acid; clear smooth boundary.

C2—35 to 40 inches; light brownish gray (2.5Y 6/2) very fine sandy loam; few common prominent strong brown (7.5YR 5/6) mottles; massive; very friable; strongly acid; clear smooth boundary.

C3—40 to 65 inches; brown (10YR 5/3) silt loam; common fine distinct light gray (10YR 7/2) mottles and prominent strong brown (7.5YR 5/6) mottles; massive; very friable; strongly acid.

Thickness of the solum ranges from 20 to 30 inches. Mottles with chroma of 2 or less are between a depth of 16 to 24 inches. In unlimed areas the soil is very strongly acid to slightly acid throughout. Gravel ranges from 0 to 5 percent by volume to 40 inches and from 0 to 20 percent below 40 inches.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 2 to 4.

The B horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2 to 6. It is silt loam or very fine sandy loam.

The C horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 to 4. It is silt loam, very fine sandy loam or loamy very fine sand. Structure of the C horizon is massive or single grained depending on texture. Consistence ranges from loose to friable.

Lyman Series

The Lyman series consists of shallow, somewhat excessively drained soils. These soils formed in glacial till on rocky hills and ridges. Slopes range from 3 to 60 percent.

Lyman soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Dixfield, Hermon, Marlow, Monadnock, Peacham, and Tunbridge soils and with areas of rock outcrop. Lyman soils are deeper to bedrock than Abram soils and areas of rock outcrop. They are shallower to bedrock than Berkshire, Brayton, Colonel, Dixfield, Hermon, Marlow, and Tunbridge soils.

Typical pedon of Lyman fine sandy loam in a wooded area of Lyman-Tunbridge-Abram complex, rolling, very stony, in the town of Rangeley, 0.6 mile north of the bridge over the outlet of Lost Logan on a gravel road, 250 feet north of road.

Oi—2 to 1 inch; litter of leaves and twigs.

Oe—1 inch to 0; moderately decomposed leaves and twigs.

Oa—0 to 2 inches; black (N 2/0) highly decomposed organic material; weak fine granular structure; very friable; common to many very fine and fine roots; extremely acid; abrupt wavy boundary.

E—2 to 3 inches; reddish gray (5YR 5/2) fine sandy loam; weak fine granular structure; very friable; common to many very fine and fine roots; 5 percent gravel; extremely acid; abrupt broken boundary.

Bh—3 to 5 inches; dark reddish brown (2.5YR 2/4) fine sandy loam; weak fine granular structure; very friable; common to many very fine and fine roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bs1—5 to 9 inches; reddish brown (5YR 4/4) fine sandy loam; weak fine subangular blocky structure; very friable; common to many very fine and fine, and few coarse roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs2—9 to 15 inches; strong brown (7.5YR 5/6) fine sandy loam; weak fine subangular blocky structure; very friable; common to many very fine and fine, and few coarse roots; 5 percent gravel and 5 percent cobbles; very strongly acid; abrupt wavy boundary.

R—15 inches; dark gray schistose bedrock.

The thickness of the solum ranges from 10 to 20 inches and corresponds to the depth to bedrock. Rock fragments range from 5 to 35 percent by volume. Reaction in unlimed areas ranges from extremely acid to moderately acid throughout.

Some pedons have an A horizon with hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2 or it is neutral and has a value of 2 or 3. Some pedons have an Ap horizon with hue of 10YR, value and chroma of 3 or 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 2 to 4, and chroma of 2 to 6. Some pedons have a Bhs horizon with value and chroma of 3 or less. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

Some pedons have a BC horizon with hue of 10YR to 5Y, value of 3 to 5, and chroma of 3 or 4. It is sandy

loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

Bedrock is generally dark gray schistose bedrock, but may be phyllite, granite or gneiss.

Madawaska Series

The Madawaska series consists of very deep, moderately well drained and somewhat poorly drained soils. They formed in material derived mainly from slate, shale, and quartzite on stream terraces and glacial outwash plains. Slopes range from 0 to 8 percent.

Madawaska soils are associated on the landscape with the Adams, Allagash, Boothbay, Charles, Colton, Croghan, Fryeburg, Lovewell, Naumburg, Nicholville, Searsport, Sheepscot, Sunday, and Swanville soils. Madawaska soils are wetter than Adams, Allagash, and Colton soils and are better drained than Naumburg and Searsport soils. They have a coarser textured solum than Boothbay, Nicholville, and Swanville soils. Madawaska soils are finer textured than Colton, Croghan, and Sheepscot soils. Charles, Cornish, Lovewell, and Sunday soils are on adjacent flood plains.

Typical pedon of Madawaska fine sandy loam, in a wooded area in an area of Madawaska fine sandy loam, 0 to 8 percent slopes, in the town of Farmington, one-half mile west of North Chesterville on Maine Route 156 on the north side of road.

Ap—0 to 8 inches; dark brown (10YR 3/3) fine sandy loam, pale brown (10YR 6/3) dry; moderate fine granular structure; friable; many very fine and fine and common medium and coarse roots; very strongly acid; abrupt smooth boundary.

Bs1—8 to 12 inches; dark brown (7.5YR 4/4) fine sandy loam; moderate fine granular structure; friable; common very fine and fine and few medium and coarse roots; very strongly acid; abrupt smooth boundary.

Bs2—12 to 16 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak fine granular structure; friable; few very fine and fine and medium roots; very strongly acid; clear wavy boundary.

Bs3—16 to 24 inches; yellowish brown (10YR 5/6) fine sandy loam; common medium distinct strong brown (7.5YR 5/6) and prominent grayish brown (10YR 5/2) mottles; weak fine granular structure; friable; strongly acid; clear smooth boundary.

2C—24 to 65 inches; light brownish gray (2.5Y 6/2) fine sand; common fine distinct grayish brown (10YR 5/2) mottles; single grain; loose; strongly acid.

Some pedons have an E horizon with hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 1 or 2.

The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. Some pedons have a Bh horizon with hue of 5YR or 7.5YR, and value and chroma of 2 or 3. The B horizon is very fine sandy loam or fine sandy loam.

The BC horizon, where present, has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 4 to 8. It is very fine sandy loam or very fine sandy loam.

The 2C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 1 to 4. It ranges from loamy fine sand to sand and in some pedons may have thin bands of coarse sand less than 5 inches thick.

Mahoosuc Series

The Mahoosuc series consists of deep and very deep, somewhat excessively drained soils formed in thin organic materials overlying fragmental colluvium. They are very steep mountain soils above 2300 feet in elevation. Slopes range from 15 to 80 percent.

Mahoosuc soils are associated on the landscape with the Bemis, Ricker, Saddleback, Sisk, and Surplus soils and areas of rock outcrop. Mahoosuc soils are deeper to bedrock than Ricker soils and areas of rock outcrop and do not have the mineral layers of Saddleback soils. They have more rock fragments than Bemis, Sisk, and Surplus soils.

Typical pedon of Mahoosuc mucky peat in an area of Saddleback-Mahoosuc-Sisk association, very steep, very stony, in the town of Madrid, 1,000 feet southeast of the summit of Saddleback Junior, along the trail, on the north side of the trail.

Oi—0 to 2 inches; dark reddish brown (5YR 3/2) peat (fibric material) consisting of needles and twigs; massive; very friable; many very fine and fine and common medium roots; extremely acid; abrupt smooth boundary.

Oe—2 to 5 inches; black (5YR 2/1) mucky peat (hemic material); moderate fine and medium granular structure; very friable; many very fine and fine and common medium roots; extremely acid; abrupt irregular boundary.

Cl—5 to 16 inches; fragmental materials consisting of gravel, cobbles, stones, and boulders with about 15 percent organic soil material in the interstices; diffuse irregular boundary.

C2—16 to 65 inches; fragmental materials consisting of cobbles, stones, and boulders.

Depth to the fragmental material ranges from 5 to 12 inches.

The Oi horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 2.

The Oe horizon has hue of 5YR, value of 2, and chroma of 1 or it is neutral and has a value of 2.

The rock fragments in the C horizon are stones, boulders, gravel, cobbles, channers, and flagstones.

Thickness of the solum ranges from 18 to 32 inches. Gravel ranges from 0 to 10 percent throughout the soil. In unlimed areas, reaction ranges from very strongly acid to moderately acid throughout.

The Ap horizon has hue of 10YR, value of 3 or 4 and chroma of 2 or 3.

Some pedons have an E horizon with hue of 7.5YR to 2.5Y, value of 5 to 7, and chroma of 1 or 2.

The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. Some pedons have a Bh horizon with hue of 5YR or 7.5YR, and value and chroma of 2 or 3. The B horizon is very fine sandy loam or fine sandy loam.

The BC horizon, where present, has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 4 to 8. It is fine sandy loam or very fine sandy loam.

The 2C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 1 to 4. It ranges from loamy fine sand to sand and in some pedons may have thin bands of coarse sand less than 5 inches thick.

Markey Series

The Markey series consists of moderately deep to sandy mineral material, very poorly drained organic soils. These soils formed in a mantle of well-decomposed organic soil material over sandy mineral deposits. They are in bogs. Slopes are 0 to 1 percent.

Markey soils are associated on the landscape with the Bemis, Brayton, Bucksport, Burnham, Charles, Cornish, Lovewell, Monarda, Naumburg, Peacham, Searsport, Swanville, and Telos soils. Bemis, Brayton, Burnham, Monarda, Peacham, and Telos soils are mineral soils on nearby glaciated uplands. Swanville soils are lacustrine deposits and are better drained. Naumburg and Searsport soils are mineral soils on nearby outwash plains. Charles, Cornish, Lovewell, and Medomak soils are mineral soils on nearby floodplains. Bucksport soils are organic soils in very deep areas of the bog that are highly decomposed.

Typical pedon of Markey mucky peat in an area of Bucksport and Markey soils in a shrubby area in the town of Salem, 540 feet northeast of the Salem-Phillips town line on Maine Route 142 and 50 feet northeast of the highway.

Oe—0 to 5 inches; black (10YR 2/1) mucky peat (hemic material); about 80 percent fiber, 60 percent rubbed; massive; nonsticky, nonplastic; 5 percent woody fragments; many very fine and fine and common medium and coarse roots; very pale brown (10YR 7/4) sodium pyrophosphate test; very strongly acid in 0.01M calcium chloride; abrupt smooth boundary.

Oa1—5 to 13 inches; black (10YR 2/1) muck (sapric material); about 40 percent fiber, 5 percent rubbed; massive; nonsticky, nonplastic; 10 percent woody fragments; few to common very fine and fine roots; brown (10YR 4/3) sodium pyrophosphate test; very strongly acid in 0.01 M calcium chloride; clear smooth boundary.

Oa2—13 to 30 inches; very dark gray (10YR 3/1) muck, (sapric material); about 95 percent fiber; 10 percent rubbed; massive; nonsticky, nonplastic; 5 percent woody fragments; brown (10YR 5/3) sodium pyrophosphate test; very strongly acid in 0.01 M calcium chloride; clear smooth boundary.

Oa3—30 to 37 inches; very dark brown (10YR 2/2) muck (sapric material); about 70 percent fiber, 10 percent rubbed; massive; nonsticky, nonplastic; 5 percent woody fragments; brown (10YR 4/3) sodium pyrophosphate test; very strongly acid in 0.01 M calcium chloride; abrupt smooth boundary.

Cg—37 to 65 inches; gray (5Y 5/1) gravelly loamy sand; massive; nonsticky, nonplastic; 25 percent gravel; 2 percent woody fragments; very strongly acid.

The thickness of the organic soil material and the depth to the mineral substratum ranges from 16 to 50 inches. The content of woody fragments in the organic material ranges from 0 to 15 percent. The content of mineral material in the organic layers ranges from 0 to 20 percent. The fibers are typically of herbaceous origin but the fibers in some layers are of woody origin. In some pedons, fibers from sphagnum moss are dominant in the surface tier and make up thin layers in the subsurface and bottom tier. The reaction of the organic material in 0.01 M calcium chloride ranges from 4.5 to 6.5.

The surface tier is neutral or has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2. The surface tier is typically hemic material but in some pedons may be sapric or fibric materials with or without hemic materials. It is massive or has weak fine granular structure. Consistence is nonsticky or slightly sticky. The surface tier ranges from very strongly acid to slightly acid in 0.01 M calcium chloride.

The subsurface and bottom tiers have hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. They are typically sapric materials but some pedons have thin layers of fibric material with a total thickness of less than 5 inches or thin layers of hemic material with a total thickness of less than 10 inches. The

subsurface and bottom tiers are massive or have weak thin platy structure. Consistence is nonsticky or slightly sticky. Reaction ranges from very strongly acid to slightly acid in 0.01 M calcium chloride.

The C horizon has hue of 5YR to 5Y, value of 4 to 6, and chroma of 1 to 4. It is dominantly loamy sand but ranges to sand. Consistence is nonsticky. The content of rock fragments ranges from 0 to 25 percent and are mostly gravel size. Reaction ranges from very strongly acid to neutral.

Marlow Series

The Marlow series consists of very deep, well drained soils. These soils formed in dense glacial till derived mainly from mica schist and some granite, phyllite, or gneiss. They are on upland drumlin shaped ridges and on side slopes of bedrock influenced ridges. Slopes range from 3 to 25 percent.

Marlow soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Dixfield, Hermon, Lyman, Monadnock, Peacham, and Tunbridge soils. Marlow soils have a dense substratum that is lacking in Berkshire, Hermon, and Monadnock soils. Marlow soils are better drained than Brayton, Colonel, Dixfield, and Peacham soils. They are deeper to bedrock than Abram, Lyman, and Tunbridge soils.

Typical pedon of Marlow fine sandy loam, in an area of Dixfield-Marlow association, strongly sloping, very stony, in a wooded area in the town of Industry, 1.20 miles northeast from the junction of Federal Row and Maine Route 148 along dirt road to Rand Road, 50 feet north of the road.

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 1 inch; very dark grayish brown (10YR 3/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and few fine roots; strongly acid; abrupt wavy boundary.

Ap—1 inch to 6 inches; dark brown (10YR 3/3) fine sandy loam, pale olive (5Y 6/3) dry; strong very fine through medium granular structure; very friable; many very fine and common fine and medium roots; 10 percent gravel; very strongly acid; abrupt smooth boundary.

Bs1—6 to 11 inches; dark brown (7.5YR 4/4) gravelly fine sandy loam; moderate very fine and fine granular structure; very friable; many very fine and few fine and medium roots; 10 percent gravel and 5 percent cobbles; very strongly acid; clear smooth boundary.

Bs2—11 to 15 inches; dark yellowish brown (10YR 4/4) fine sandy loam; moderate very fine and fine granular structure; very friable; common very fine and few fine, medium, and coarse roots; 10 percent gravel; very strongly acid; gradual wavy boundary.

BC—15 to 23 inches; olive (5Y 5/3) gravelly fine sandy loam; moderate very fine and fine subangular blocky structure; friable; few very fine, fine, and medium roots; 15 percent gravel and 5 percent cobbles; very strongly acid; gradual smooth boundary.

Cd1—23 to 31 inches; olive (5Y 4/4) gravelly fine sandy loam; moderate medium and thick platy structure; firm; 15 percent gravel and 5 percent cobbles; very strongly acid; gradual wavy boundary.

Cd2—31 to 65 inches; olive (5Y 4/3) gravelly fine sandy loam; moderate medium and thick platy structure; very firm; 15 percent gravel and 10 percent cobbles; common medium prominent dark yellowish brown (10YR 4/4) oxide stains on exterior faces of peds; very strongly acid.

The thickness of the solum ranges from 18 to 32 inches. Rock fragments are dominantly gravel, but include some cobbles and stones. They range from 5 to 30 percent throughout the pedon. Reaction ranges from extremely acid to moderately acid throughout.

The O horizon has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 4 or it is neutral and has a value of 2 to 4.

The Ap horizon has hue of 5YR to 10YR, value and chroma of 2 to 4. The A horizon, where present, has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 4 or it is neutral and has a value of 2 to 4.

The E horizon, where present, has hue of 5YR to 2.5Y, value of 4 to 7, and chroma of 1 or 2 or it is neutral and has a value of 4 to 7.

Some pedons have a Bh or Bhs horizon with hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 3. In some pedons the Bh horizon has value of 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is sandy loam, fine sandy loam, or loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 3 to 6, and chroma of 2 to 6. It is sandy loam, fine sandy loam, or loam in the fine-earth fraction.

An E horizon is present below the B horizon in some pedons. It has a hue of 10YR to 5Y, value of 4 to 6, and chroma of 2 or 3.

The Cd horizon has hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 2 to 4. It is fine sandy loam, loam, and sandy loam in the fine-earth fraction. Structure is weak or moderate, medium or thick platy or the horizon is massive. Consistence is firm or very firm.

Masardis Series

The Masardis series consists of very deep, somewhat excessively drained soils. They formed in glaciofluvial deposits on terraces, deltas, kames, and eskers. Slopes range from 0 to 45 percent.

Masardis soils are associated on the landscape with the Adams, Allagash, Colton, Croghan, Naumburg, Searsport, and Sheepscot soils. Masardis soils have more rock fragments in the solum than Adams soils. They are coarser textured than Allagash soils and are better drained than Croghan, Naumburg and, Sheepscot soils. Masardis soils have a thicker loamy cap and a higher slate and shale content than Colton soils.

Typical pedon of Masardis fine sandy loam, in a wooded area of Masardis-Adams association, steep, in the town of Phillips, 2,000 feet east of the intersection of an abandoned railroad bed and a paved road, on the south side of Toothaker Pond, and 180 feet north of the old railroad bed.

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 1 inch; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots; very strongly acid; abrupt smooth boundary.

E—1 to 3 inches; grayish brown (10YR 5/2) fine sandy loam; weak very fine and fine granular structure; very friable; many very fine and fine roots; 5 percent gravel and 5 percent cobbles; very strongly acid; abrupt wavy boundary.

Bhs—3 to 4 inches; dark reddish brown (5YR 3/3) gravelly fine sandy loam; weak very fine and fine granular structure; friable; many very fine and fine and medium and common coarse roots; 10 percent gravel and 5 percent cobbles; very strongly acid; clear wavy boundary.

Bs1—4 to 8 inches; dark brown (7.5YR 4/4) gravelly fine sandy loam; weak very fine and fine granular structure; friable; many very fine and fine and medium, and common coarse roots; 15 percent gravel and 5 percent cobbles; very strongly acid; gradual wavy boundary.

Bs2—8 to 14 inches; yellowish brown (10YR 5/4) very gravelly sandy loam; weak fine and medium granular structure; friable; many very fine and fine and medium and common coarse roots; 25 percent gravel and 10 percent cobbles; very strongly acid; gradual wavy boundary.

BC—14 to 28 inches; olive brown (2.5Y 4/4) very gravelly loamy sand; weak very fine and fine granular structure; very friable; common very fine and fine and medium, and few coarse roots; 35 percent gravel and 10 percent cobbles; strongly acid; gradual wavy boundary.

C—28 to 65 inches; olive (5Y 4/3) very gravelly coarse sand; single grain; loose; 35 percent gravel and 15 percent cobbles; strongly acid.

The thickness of the solum ranges from 15 to 38 inches. Solum textures in the fine-earth fraction range from silt loam to coarse sandy loam in the upper 10 inches, from fine sandy loam to coarse sand between 10 and 17 inches, and from loamy sand to coarse sand below 17 inches. The substratum is loamy coarse sand, sand, or coarse sand in the fine-earth fraction. Some pedons have strata of sand, gravel, and cobbles in the substratum. Rock fragments are mostly pebble and cobble size and average 35 to 60 percent in the control section. The soil is extremely acid to moderately acid in the solum and very strongly acid to moderately acid in the substratum.

The A horizon, where present, has hue of 10YR, value of 3 or 4, and chroma of 1 or 2. The Ap horizon, where present, has hue of 5YR to 10YR, value of 3 to 5, and chroma of 2 to 4.

The E horizon has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR, value of 3, and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR or 5YR and value and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8.

The BC horizon has hue of 10YR or 2.5Y, value of 4 to 6 and chroma of 3 to 6.

The C horizon has hue of 10YR to 5Y, value of 3 to 5, and chroma of 2 to 4.

Medomak Series

The Medomak series consists of very deep, very poorly drained soils. These soils formed in recent alluvium on flood plains of rivers and streams, and adjacent to lakes. Slopes range from 0 to 2 percent.

Medomak soils are associated on the landscape with the Bucksport, Charles, Cornish, Fryeburg, Lovewell, Markey, and Sunday soils. Medomak soils are wetter than Charles, Cornish, Fryeburg, Lovewell, and Sunday soils and have thinner organic surface layers than Bucksport and Markey soils.

Typical pedon of Medomak silt loam, in a marsh in an area of Medomak silt loam, in the town of Wilton, 145 feet west of Pease Pond Stream and 20 feet north of Pease Pond Road.

Oi—2 inches to 0; litter of grasses and roots.

A1—0 to 11 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (2.5Y 5/2) dry;

moderate very fine and fine granular structure; very friable; slightly sticky, slightly plastic; many very fine to coarse roots; strongly acid; clear smooth boundary.

A2—11 to 14 inches; very dark grayish brown (2.5Y 3/2) silt loam, light olive gray (5Y 6/2) dry; few fine faint grayish brown (2.5Y 5/2) and prominent dark yellowish brown (10YR 4/4) mottles; weak very fine and fine granular structure; very friable; slightly sticky, slightly plastic; many very fine to coarse roots; strongly acid; clear smooth boundary.

Cg1—14 to 21 inches; dark grayish brown (2.5Y 4/2) silt loam; few fine faint grayish brown (2.5Y 5/2) and prominent dark yellowish brown (10YR 4/4) mottles; massive; friable; slightly sticky, slightly plastic; few very fine roots; strongly acid; clear smooth boundary.

Cg2—21 to 28 inches; grayish brown (2.5Y 5/2) silt loam; common medium faint olive gray (5Y 5/2) mottles and few fine prominent dark yellowish brown (10YR 4/4) mottles; massive; friable; slightly sticky, slightly plastic; few very fine roots; moderately acid; abrupt smooth boundary.

Cg3—28 to 36 inches; dark grayish brown (2.5Y 4/2) silt loam; common medium distinct dark brown (10YR 4/3) and prominent gray (5Y 6/1), brown (7.5YR 4/4) and yellowish red (5YR 5/8) mottles; massive; friable; slightly sticky, slightly plastic; strongly acid; abrupt smooth boundary.

Cg4—36 to 40 inches; dark grayish brown (10YR 4/2) very fine sandy loam; common medium prominent olive gray (5Y 5/2) and brown (7.5YR 4/4) mottles; massive; friable; slightly sticky, slightly plastic; strongly acid; clear smooth boundary.

Cg5—40 to 46 inches; olive gray (5Y 4/2) very fine sandyloam; common medium faint gray (5Y 5/1) mottles and common medium prominent brown (7.5YR 4/4) and reddish brown (5YR 4/4) mottles; massive; friable; slightly sticky, slightly plastic; strongly acid; abrupt smooth boundary.

Cg6—46 to 65 inches; very dark gray (5Y 3/1) very fine sandy loam; common medium prominent reddish brown (5YR 4/4) mottles, and few medium prominent brown (10YR 4/3) streaks; massive; friable; slightly sticky, slightly plastic; extremely acid.

Rock fragments above 40 inches are less than 5 percent, and below 40 inches range from 0 to 30 percent and are primarily pebbles. In unlimed areas, the soil is very strongly acid to slightly acid throughout, but some subhorizon within the control section has a reaction of moderately acid or slightly acid.

The A horizon or Ap horizon, where present, has hue of 7.5YR to 2.5Y, value of 2 or 3, and chroma of 1 or 2 or it is neutral and has a value of 2 or 3.

The C horizon has hue of 10YR to 5GY, value of 3 to 6, and chroma of 1 or 2 or it is neutral and has a value of 2 or 3. It is silt loam or very fine sandy loam with some pedons ranging from silt loam to loamy very fine sand. Consistence is very friable, friable, nonsticky and nonplastic, or slightly sticky and slightly plastic but ranges to loose in the sandy textures.

Monadnock Series

The Monadnock series consists of very deep, well drained soils. They formed in a loamy mantle over sandy glacial till. They are located on hillsides and ridges. Slopes range from 3 to 45 percent.

Monadnock soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Colton, Dixfield, Hermon, Lyman, Marlow, Peacham, and Tunbridge soils. Monadnock soils have coarser textures in the substratum than Berkshire and lack the dense substratum of Brayton, Colonel, Dixfield, Marlow, and Peacham soils. They are deeper to bedrock than Abram, Lyman, and Tunbridge soils. Monadnock soils lack the stratification of Colton soils and are not as coarse textured in the subsoil as Hermon soils.

Typical pedon of Monadnock fine sandy loam, in an area of Hermon-Monadnock association, rolling, very stony, in a wooded area in the town of Weld, 0.7 miles east of Township 6 - Weld town line on a dirt road to Byron, 700 feet north of a road on the edge of a borrow pit.

Oi—1 inch to 0; litter of leaves, twigs, and needles.

Oa—0 to 3 inches; black (5YR 2/1) highly decomposed organic material; weak fine granular structure; friable; many very fine, common fine and medium, and few coarse roots; extremely acid; abrupt wavy boundary.

E—3 to 5 inches; gray (5YR 5/1) fine sandy loam; weak fine granular structure; very friable; many very fine and common fine, and medium and few coarse roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bhs—5 to 8 inches; dark reddish brown (5YR 3/2) fine sandy loam; weak fine granular structure; very friable; many very fine and common fine and medium and few coarse roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs1—8 to 14 inches; reddish brown (5YR 4/4) gravelly fine sandy loam; weak fine granular structure; friable; common very fine and fine and medium roots; 10 percent gravel, 5 percent cobbles; very strongly acid; clear wavy boundary.

Bs2—14 to 27 inches; dark yellowish brown (10YR 4/6) gravelly fine sandy loam; weak fine granular structure; friable; common very fine and fine and medium roots; 15 percent gravel, 10 percent cobbles; very strongly acid; clear wavy boundary.

2C—27 to 65 inches; olive brown (2.5Y 4/4) very gravelly loamy sand; massive; loose; 30 percent gravel, 20 percent cobbles; very strongly acid.

Solum thickness ranges from 15 to 30 inches. Rock fragments in individual horizons in the particle-size control sections range from 5 to 30 percent in the solum and 5 to 60 percent in the substratum. Rock fragments are predominantly gravel but include cobbles and stones. Reaction ranges from extremely acid to moderately acid throughout.

The O horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2.

Some pedons have an A or Ap horizon. The A horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2. The Ap horizon has hue of 10YR, and value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bhs horizon, or Bh horizon where present, has hue of 2.5YR to 7.5YR, value and chroma of 3 or less. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 or 6. The B horizon is fine sandy loam, loam, or very fine sandy loam in the fine-earth fraction.

Some pedons have a BC horizon, which has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 to 6. It has textures of loam, fine sandy loam, sandy loam, loamy sand, or loamy fine sand.

The 2C horizon has hue of 2.5Y or 5Y, value of 4 to 7, and chroma of 2 to 4. The 2C horizon is loamy coarse sand, loamy sand or loamy fine sand in the fine-earth fraction. Structure is weak thick platy or the horizon is massive or single grain. Consistence is loose to firm.

Monarda Series

The Monarda series consists of very deep, poorly drained soils. These soils formed in dense glacial till derived mainly from slate and other dark colored sedimentary and metamorphic rocks. They are on glaciated uplands. Slopes range from 0 to 8 percent.

Monarda soils are associated on the landscape with the Bucksport, Burnham, Chesuncook, Elliottsville, Markey, Monson, Telos, and Thorndike soils. Monarda soils are wetter than Chesuncook, Elliottsville, Monson, Telos, and Thorndike soils. They are also deeper to bedrock than Elliottsville, Monson, and Thorndike soils. Monarda soils are better drained than Bucksport, Burnham, and Markey soils.

Typical pedon of Monarda extremely flaggy silt loam, in a wooded area of Monarda extremely flaggy silt loam, 0 to 8 percent slopes very stony, in Rangeley Plantation, 0.9 mile east of Maine Route 17 on South Shore Drive, 200 feet south of the road.

Oi—1 inch to 0; litter of needles, leaves and twigs.

Oa—0 to 2 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; friable; many very fine to coarse roots; extremely acid; abrupt wavy boundary.

Eg—2 to 6 inches; light gray (5Y 7/1) extremely flaggy silt loam; few fine faint gray (5Y 6/1) mottles; weak very fine and fine granular structure; very friable; many very fine to medium roots; 30 percent gravel and 40 percent flagstones; extremely acid; abrupt broken boundary.

Bg1—6 to 11 inches; grayish brown (2.5Y 5/2) gravelly silt loam; common fine distinct gray (5Y 6/1) mottles and medium prominent yellowish red (5YR 4/6) mottles; weak thin and medium platy structure separating to weak very fine and fine subangular blocky; firm; few very fine, and common fine and medium roots; 15 percent gravel; strongly acid; clear wavy boundary.

Bg2—11 to 17 inches; dark grayish brown (2.5Y 4/2) silt loam, grayish brown (2.5Y 5/2) faces of peds; common medium distinct light brownish gray (10YR 6/2) mottles and common prominent yellowish red (5YR 4/6) mottles; weak thin and medium platy structure separating to weak very fine and fine subangular blocky; firm; few fine and medium roots; 10 percent gravel; strongly acid; clear wavy boundary.

Cd1—17 to 28 inches; olive (5Y 4/3) silt loam, gray (5Y 6/1) faces of prisms; common medium distinct gray (5Y 6/1) mottles and many medium prominent yellowish red (5YR 5/6) mottles; strong very coarse prismatic structure separating to moderate medium and thick platy; firm; slightly sticky, slightly plastic; few very fine and fine roots; common very fine tubular pores; 5 percent gravel; moderately acid; clear wavy boundary.

Cd2—28 to 65 inches; olive (5Y 5/3) silt loam, gray (5Y 6/1) faces of prisms; common medium distinct light olive gray (5Y 6/2) mottles and many medium prominent yellowish red (5YR 5/6) mottles; strong very coarse prismatic structure separating to moderate thick platy; firm; slightly sticky, slightly plastic; common very fine tubular pores; 5 percent gravel; moderately acid.

The thickness of the solum ranges from 12 to 24 inches. Rock fragment content ranges from 5 to 70 percent in the Eg horizon and A horizon, where present, and from 5 to 35 percent in the B, BC, and C horizons.

The Oa horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2. Reaction is extremely acid.

The A or Ap horizon, where present, has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 1 to 3. Reaction is extremely acid to moderately acid, unless limed.

The Eg horizon has hue of 7.5YR to 5Y, value of 5 to 7, and chroma of 1 or 2. Reaction is extremely acid to moderately acid.

The B horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 to 4. It is silt loam, loam or very fine sandy loam in the fine-earth fraction. Reaction is very strongly acid to moderately acid.

The BC horizon, where present, has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam or loam in the fine-earth fraction. Reaction is strongly acid to moderately acid.

The Cd horizon has hue of 2.5Y to 5GY, values of 4 to 6, and chroma of 1 to 4. It is silt loam, loam, or very fine sandy loam in the fine-earth fraction. It has weak to strong, coarse or very coarse prismatic structure separating to weak or moderate, medium to very thick platy, or the horizon is massive. Reaction is strongly acid to neutral.

Monson Series

The Monson series consists of shallow, somewhat excessively drained soils. They formed in glacial till derived mainly from slate, phyllite, or schist. They are on upland ridges, hills, and mountains. Slopes range from 3 to 30 percent.

Monson soils are associated on the landscape with the Burnham, Chesuncook, Elliottsville, Monarda, Telos, and Thorndike soils and areas of rock outcrop. Monson soils are shallower to bedrock than Burnham, Chesuncook, Elliottsville, Monarda, and Telos soils and deeper than areas of rock outcrop. Monson soils lack the rock fragments of Thorndike soils.

Typical pedon of Monson loam in an area of Elliottsville-Monson complex, rolling, very stony, in a wooded area in Rangeley Plantation, 2.2 miles east of Maine Route 17 on South Shore Road, 0.8 mile south on a gravel road east of South Bog Stream, and 1.1 miles east on logging road, 100 feet east of the logging road.

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 1 inch; dark reddish brown (5YR 2/2) highly decomposed organic material; weak and moderate fine granular structure; very friable; many fine and common medium roots; extremely acid; abrupt wavy boundary.

E—1 to 2 inches; brown (7.5YR 5/2) loam; weak fine granular structure; very friable; few very fine and fine and medium roots; 5 percent gravel and 5 percent cobbles; extremely acid; abrupt broken boundary.

Bhs—2 to 4 inches; dark reddish brown (5YR 3/2) loam; weak fine granular structure; very friable; few fine roots; 5 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

Bs1—4 to 7 inches; yellowish red (5YR 4/6) silt loam; weak fine granular structure; very friable; few fine roots; 2 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

Bs2—7 to 11 inches; dark brown (7.5YR 4/4) silt loam; weak fine granular structure; very friable; few fine roots; 2 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

BC—11 to 18 inches; light olive brown (2.5Y 5/4) silt loam; weak fine subangular blocky structure; friable; 2 percent gravel and 5 percent cobbles; extremely acid; clear wavy boundary.

R—18 inches; slatey bedrock.

The depth of mineral soil over bedrock ranges from 10 to 20 inches. Reaction in unlimed areas ranges from extremely acid to moderately acid throughout.

The Oa horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2.

Some areas have an Ap horizon with hue of 10YR and value and chroma of 3 or 4.

The E horizon has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR to 7.5YR, with value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 or 3, and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. The B horizon is silt loam, loam, or very fine sandy loam in the fine-earth fraction.

The BC horizon has hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 3 to 6. It is silt loam, loam, or very fine sandy loam in the fine-earth fraction. It has weak very fine or fine granular or subangular blocky structure.

The bedrock is generally slate, phyllite, or schist.

Naumburg Series

The Naumburg series consists of very deep, somewhat poorly drained or poorly drained soils. These soils formed in glaciofluvial sands and occupy low-lying areas on outwash plains, deltas, and terraces. Slopes range from 0 to 3 percent.

Naumburg soils are associated on the landscape with the Adams, Allagash, Bucksport, Colton, Croghan, Madawaska, Masardis, Searsport, Sheepscot, and Sunday soils. Naumburg soils are wetter than Adams, Allagash, Colton, Croghan, Madawaska, Masardis, Sheepscot, and Sunday soils. They are better drained than Searsport soils.

Typical pedon of Naumburg loamy sand, in an area of Naumburg-Searsport association, nearly level, in a wooded area in the town of Chesterville, 1.2 miles south of Maine Route 156 on Pope Road and 400 feet west of the road.

Oi—2 inches to 0; litter of leaves, twigs, and moss.

Oa—0 to 3 inches; black (5YR 2/1) highly decomposed organic material; massive; very friable; many very fine and fine and common medium and few coarse roots; extremely acid; abrupt smooth boundary.

E—3 to 7 inches; pinkish gray (5YR 6/2) loamy sand; massive; very friable; many very fine and fine and common medium and few coarse roots; extremely acid; abrupt wavy boundary.

Bhs—7 to 11 inches; dark reddish brown (5YR 3/2) loamy sand; common medium prominent dark brown (7.5YR 4/4) mottles; massive; very friable; common very fine and fine and medium and few coarse roots; extremely acid; clear wavy boundary.

Bs—11 to 15 inches; dark brown (7.5YR 4/4) loamy sand; common medium prominent dark reddish brown (2.5YR 3/4) mottles; massive; very friable; few fine and medium roots; strongly acid; clear wavy boundary.

BC—15 to 25 inches; dark brown (10YR 4/3) sand; common medium distinct dark brown (7.5YR 4/4) and grayish brown (10YR 5/2) mottles; single grain; loose; 20 percent firm parts; very strongly acid; gradual wavy boundary.

C—25 to 65 inches; grayish brown (2.5Y 5/2) sand; common medium prominent strong brown (7.5YR 5/6) and faint light brownish gray (2.5Y 6/2) mottles; single grain; loose; strongly acid.

The thickness of the solum ranges from 20 to 40 inches. Some pedons contain less than 5 percent gravel by volume. Reaction ranges from extremely acid to strongly acid in the surface layer and subsoil, and from very strongly acid to slightly acid in the substratum.

The O horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 4 or it is neutral and has a value of 2 or 3.

Some pedons have an Ap or A horizon with hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 3.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 2 or 3.

The Bhs horizon has hue of 5YR to 10YR, and value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 to 3. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. The B horizon is loamy fine sand to sand.

The BC horizon has hue of 5YR to 2.5Y, value of 3 to 6 and chroma of 2 to 4. It is loamy fine sand to sand.

The C horizon has hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 to 4. It is loamy fine sand to coarse sand.

Nicholville Series

The Nicholville series consists of very deep, moderately well drained soils. These soils formed in glaciolacustrine sediments. These soils are on gently sloping and strongly sloping lake plains. Slopes range from 3 to 15 percent.

Nicholville soils are associated on the landscape with the Adams, Allagash, Boothbay, Croghan, Fryeburg, Lovewell, Madawaska, Sunday, and Swanville soils. Nicholville soils have coarser textures in the lower part of the subsoil and in the substratum than Boothbay and Swanville soils and have finer textures than Adams, Allagash, Croghan, Fryeburg, Lovewell, Madawaska, and Sunday soils. Nicholville soils are better drained than Swanville soils.

Typical pedon of Nicholville silt loam, in a cultivated field in an area of Nicholville silt loam, 3 to 8 percent slopes, in the town of Farmington, 500 feet northwest of Wilson Stream and 250 feet southwest of Webster Road.

Ap—0 to 10 inches; dark brown (10YR 4/3) silt loam; light brownish gray (10YR 6/2) dry; weak very fine and fine granular structure; friable; many very fine and fine and common medium roots; moderately acid; abrupt smooth boundary.

Bs1—10 to 12 inches; brown (7.5YR 5/4) silt loam; weak very fine and fine granular structure; friable; common very fine and fine and medium roots; moderately acid; clear wavy boundary.

Bs2—12 to 18 inches; dark yellowish brown (10YR 4/4) silt loam; weak very fine and fine granular structure; friable; few very fine and fine roots; moderately acid; clear wavy boundary.

Bs3—18 to 21 inches; dark yellowish brown (10YR 4/4) silt loam; few medium prominent grayish brown (2.5Y 5/2) and few fine prominent reddish brown (5YR 4/4) and red (2.5YR 4/6) mottles; weak fine and medium subangular blocky

structure; friable; few very fine roots; moderately acid; clear wavy boundary.

C1—21 to 37 inches; olive (5Y 5/3) silt loam; common medium faint olive gray (5Y 5/2) mottles, many medium faint olive (5Y 5/4) mottles, and common fine and medium prominent dark brown (7.5YR 3/2) and brown (7.5YR 5/4) mottles; weak thin and medium platy structure; friable; moderately acid; gradual wavy boundary.

C2—37 to 65 inches; olive (5Y 5/3) silt loam with varves of loamy very fine sand; common medium and coarse distinct light olive gray (5Y 6/2) mottles, common medium prominent yellowish red (5YR 5/6) and fine prominent dark yellowish brown (10YR 4/4) mottles and many coarse prominent brown (7.5YR 5/4) mottles; massive; very friable; moderately acid.

The thickness of the solum ranges from 16 to 30 inches. In unlimed areas the soil is very strongly acid to moderately acid in the solum and very strongly acid to slightly acid in the substratum.

The Ap horizon has hue of 10YR, value of 3 or 4, and chroma of 2 or 3.

In undisturbed areas, the soil has an O horizon, an E horizon, and a Bh or Bhs horizon.

The Bs horizon has hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 4 to 8. It is silt loam to loamy very fine sand.

The C horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. It is silt loam to very fine sand. It has platy structure or the horizon is massive. Consistence is very friable to firm.

Peacham Series

The Peacham series consists of very deep, very poorly drained soils. They formed in organic materials less than 16 inches thick over dense glacial till derived mainly from schist, phyllite, and granite. They are in depressions and drainageways of glaciated uplands. Slopes range from 0 to 3 percent.

Peacham soils are associated on the landscape with the Abram, Berkshire, Brayton, Bucksport, Colonel, Dixfield, Hermon, Lyman, Markey, Marlow, Monadnock, and Tunbridge soils. Peacham soils are wetter than Berkshire, Brayton, Colonel, Dixfield, Hermon, Marlow, and Monadnock soils. They are wetter and deeper than Abram, Lyman, and Tunbridge soils. Peacham soils have a thinner organic surface than Bucksport and Markey soils.

Typical pedon of Peacham cobbly muck, in an area of Peacham-Brayton-Markey association, gently sloping, very stony, in a wooded area in the town of Industry, 260 feet, south 40 degrees west from the junction of Maine Route 234 and Lane Farm Road.

Oi—2 inches to 0; litter of leaves, ferns, needles, grasses, and sphagnum moss.

Oa—0 to 8 inches; black (10YR 2/1) cobbly muck; about 10 percent fiber unrubbed, less than 5 percent rubbed; moderate fine and medium granular structure; nonsticky, nonplastic; many very fine to coarse roots; 20 percent cobbles and 5 percent stones; very strongly acid; gradual wavy boundary.

Bg1—8 to 12 inches; dark grayish brown (2.5Y 4/2) silt loam; common medium prominent dark yellowish brown (10YR 4/4) and dark gray (5YR 4/1) mottles; massive; slightly sticky, slightly plastic; common very fine and fine roots; few fine pores; 5 percent gravel and 5 percent cobbles; strongly acid; gradual smooth boundary.

Bg2—12 to 20 inches; grayish brown (2.5Y 5/2) fine sandy loam; many medium faint olive gray (5Y 5/2) and few fine prominent olive brown (2.5Y 4/4) mottles; massive; nonsticky, nonplastic; few very fine and fine roots; few fine pores; 10 percent gravel and 2 percent cobbles; moderately acid; clear smooth boundary.

Cdg—20 to 65 inches; olive gray (5Y 4/2) gravelly fine sandy loam; many medium faint olive gray (5Y 5/2) mottles; massive; firm; 10 percent gravel and 10 percent cobbles; moderately acid.

The thickness of the solum ranges from 10 to 20 inches. Rock fragments range from 5 to 30 percent throughout. Reaction ranges from very strongly acid to neutral throughout.

The Oa horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2 or it is neutral and has a value of 2 or 3. An Oe horizon is present in some pedons.

Some pedons have an A horizon with hue of 10YR to 5Y, value of 2 to 4, and chroma of 1 or 2.

The Bg horizon has hue of 10YR to 5GY, value of 4 to 6, and chroma of 1 or 2. It is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction.

The Cdg horizon has hue of 2.5Y to 5GY value of 4 to 6, and chroma of 1 or 2. It is sandy loam, fine sandy loam, very fine sandy loam, loam, or silt loam in the fine-earth fraction. Structure is weak, thin to thick platy or the horizon is massive. Consistence is firm or very firm.

Ricker Series

The Ricker series consists of very shallow to moderately deep, well drained to excessively drained

organic soils underlain in most places by a very thin mineral horizon over bedrock. They formed in glaciated areas over bedrock, primarily granite, gneiss, schist, and slate. They are on mountainous areas. Slopes range from 3 to 80 percent.

Ricker soils are associated on the landscape with the Bemis, Mahoosuc, Saddleback, Sisk, and Surplus soils and areas of rock outcrop. Ricker soils are not as deep to bedrock as Mahoosuc soils and lack the thicker mineral layers of Bemis, Saddleback, Sisk, and Surplus soils. They are deeper to bedrock than areas of rock outcrop.

Typical pedon of Ricker peat in an area of Ricker-Saddleback association, very steep, in the town of Madrid, 1,600 feet southeast of the summit of Saddleback Junior along a trail, south side of the trail.

Oi—0 to 2 inches; dark reddish brown (2.5YR 2/4) broken face peat (fibric material); dark reddish brown (5YR 2/2) crushed and rubbed; about 95 percent fiber, 80 percent rubbed; massive; very friable; many very fine to coarse roots; extremely acid; abrupt smooth boundary.

Oa—2 to 5 inches; black (N 2/0) broken, crushed, and rubbed muck (sapric material); about 30 percent fiber, 10 percent rubbed; massive; friable; many very fine to coarse roots; extremely acid; abrupt smooth boundary.

E—5 to 7 inches; gray (5Y 5/1) gravelly silt loam; massive; friable; few very fine and fine and common medium and coarse roots; 15 percent gravel, 5 percent cobbles, and 5 percent stones; extremely acid; abrupt wavy boundary.

R—7 inches, weathered granitic bedrock.

Depth to bedrock ranges from 2 to 26 inches. Rock fragments range from 0 to 50 percent of the volume. Very thin mineral layers are at the bedrock interfaces in most pedons. The soil is extremely acid in the organic material and extremely or very strongly acid in the mineral horizons.

The Oi horizon has hue of 2.5YR to 10YR, value of 2 to 4, and chroma of 1 to 4. The Oe horizon, where present, has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 to 4, or it is neutral and has value of 2 or 3. The Oa horizon has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 1 or 2, or it is neutral and has value of 2 to 5.

The mineral horizons have hue of 5YR to 5GY, value of 4 to 7, and chroma of 1 or 2. They are coarse sand, sand, loamy sand, fine sandy loam, very fine sandy loam, loam, and silt loam in the fine-earth fraction.

Bedrock is granite, phyllite, or schist.

Saddleback Series

The Saddleback series consists of shallow, well drained soils formed in glacial till. They are on mountain ridges at elevations greater than 2,300 feet. Slopes range from 3 to 60 percent.

Saddleback soils are associated on the landscape with the Bemis, Mahoosuc, Ricker, Sisk, and Surplus soils and areas of rock outcrop. Saddleback soils are shallower to bedrock than Bemis, Mahoosuc, Sisk, and Surplus soils. They have thicker mineral layers than Ricker soils and are deeper to bedrock than areas of rock outcrop.

Typical pedon of Saddleback fine sandy loam in an area of Ricker-Saddleback association, very steep, in a wooded area in Sandy River Plantation on the east side of the westernmost ski trail at Saddleback Ski Area, 1300 feet east of Rock Pond and 3900 feet south of the Saddleback Base Lodge.

Oi—1 inch to 0; litter of needles and leaves.

Oa—0 to 4 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak very fine and fine granular structure; very friable; many very fine and fine and medium and coarse roots; extremely acid; abrupt wavy boundary.

E—4 to 5 inches; grayish brown (10YR 5/2) fine sandy loam; weak very fine granular structure; very friable; common very fine and fine and few medium roots; 10 percent gravel; extremely acid; abrupt broken boundary.

Bhs—5 to 8 inches; very dusky red (2.5YR 2/2) fine sandy loam; weak very fine granular structure; very friable; common very fine and fine roots; weakly smeary; 10 percent gravel; extremely acid; clear wavy boundary.

Bh—8 to 11 inches; dark reddish brown (5YR 3/4) fine sandy loam; weak very fine granular structure; friable; few very fine and fine roots; 10 percent gravel; very strongly acid; clear wavy boundary.

Bs—11 to 15 inches; reddish brown (5YR 4/4) fine sandy loam; weak very fine granular structure; friable; few very fine and fine roots; 10 percent gravel and 3 percent cobbles; extremely acid; abrupt wavy boundary.

R—15 inches; granitic bedrock.

The depth of soil over bedrock including the decomposed organic horizon ranges from 10 to 20 inches. Rock fragment content of the particle-size control section ranges from 5 to 25 percent. The soil ranges from extremely acid to strongly acid throughout.

The O horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The E horizon has hue of 5YR to 10YR, value of 4 to 7, and chroma of 1 to 3 or it is neutral and has a value of 4 to 7

The Bhs horizon has hue of 2.5YR to 10YR, with value and chroma of 3 or less. The Bh horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 to 4. The Bs horizon has hue of 2.5YR to 10YR, value of 4 or 5, and chroma of 4. The Bh horizon, where present, has hue of 2.5YR to 10YR and value and chroma of 2 or 3. The B horizon is sandy loam, fine sandy loam, very fine sandy loam, silt loam, and loam in the fine-earth fraction.

Bedrock is generally metasandstone, slate, granite, schist, or gneiss.

Searsport Series

The Searsport series consists of very deep, very poorly drained soils. They formed in depressional areas on outwash plains, deltas, and terraces. Slopes range from 0 to 3 percent.

Searsport soils are associated on the landscape with the Adams, Allagash, Bucksport, Colton, Croghan, Madawaska, Markey, Masardis, Naumburg, and Sheepscot soils. Searsport soils are wetter than Adams, Allagash, Colton, Croghan, Madawaska, Masardis, Naumburg, and Sheepscot soils. They have a thinner organic surface than Bucksport and Markey soils.

Typical pedon of Searsport mucky peat, in an area of Naumburg-Searsport association, nearly level, in a wooded area in the town of Chesterville, 1.1 mile south of Chesterville Village on Ridge Road; 0.75 mile east of Ridge Road on gravel pit road and 100 feet north of dirt a road.

Oi—2 inches to 0; litter of leaves, twigs, needles, and grasses.

Oe—0 to 10 inches; black (5YR 2/1) mucky peat; about 50 percent fiber, 30 percent after rubbing; moderate medium granular structure; friable; slightly sticky, slightly plastic; many very fine and fine and common medium roots; extremely acid; abrupt smooth boundary.

A—10 to 14 inches; very dark grayish brown (10YR 3/2) loamy fine sand, gray (10YR 6/1) dry; weak fine granular structure; friable; nonsticky, nonplastic; many very fine and common fine and medium roots; extremely acid; abrupt smooth boundary.

Eg—14 to 16 inches; gray (10YR 5/1) loamy fine sand; weak fine and medium granular structure; friable; nonsticky, nonplastic; few very fine roots; very strongly acid; abrupt broken boundary.

Cg1—16 to 28 inches; grayish brown (2.5Y 5/2) loamy sand; common fine and medium distinct gray (10YR 5/1) and prominent yellowish brown (10YR 5/6) mottles; single grain; loose; nonsticky, nonplastic; very strongly acid; clear wavy boundary.

Cg2—28 to 34 inches; olive gray (5Y 5/2) loamy sand; common coarse prominent grayish brown (10YR 5/2) and medium prominent yellowish brown (10YR 5/6) mottles; single grain; loose; nonsticky, nonplastic; strongly acid; clear wavy boundary.

Cg3—34 to 65 inches; gray (5Y 5/1) sand; common coarse prominent yellowish brown (10YR 5/6) and medium distinct light brownish gray (2.5Y 6/2) mottles; single grain; loose; nonsticky, nonplastic; very strongly acid.

Rock fragments range from 0 to 15 percent in the particle-size control section and from 0 to 45 percent below. The soil ranges from extremely acid to moderately acid in the surface and subsurface and very strongly acid to slightly acid in the substratum.

The Oe horizon has hue of 5YR to 5Y, value of 2 or 3, and chroma of 1 or 2, or it is neutral and has value of 2 or 3.

The A horizon has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2. It is fine sandy loam, sandy loam, loamy fine sand, loamy sand, fine sand or sand.

The Eg horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 1 or it is neutral and has a value of 4 to 7. It is fine sandy loam, sandy loam, loamy fine sand, loamy sand, fine sand, or sand.

The Cg horizon has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2, or it is neutral and has value of 4 to 6. It is loamy fine sand, loamy sand, fine sand, sand, or coarse sand in the fine-earth fraction.

Sheepscot Series

The Sheepscot series consists of very deep, moderately well drained soils. These soils formed in glaciofluvial deposits derived mainly from slates, phyllites, and other dark colored metamorphic and sedimentary rocks. They are mainly on outwash plains, deltas, and terraces. Slopes range from 0 to 15 percent.

Sheepscot soils are associated on the landscape with the Adams, Colton, Croghan, Madawaska, Masardis, Naumburg, and Searsport soils. Sheepscot soils are wetter than Adams, Colton, and Masardis soils. They are coarser textured than Croghan, Madawaska, and Naumburg soils. They are better drained than Searsport soils.

Typical pedon of Sheepscot very fine sandy loam in an area of Colton-Sheepscot association, rolling, in a wooded area in the township of Salem, 1.75 miles

northeast of the Phillips town line on Maine Route 142, then west on private gravel road, across small stream, north of the road.

Oi—1 inch to 0; litter of grasses and hardwood leaves.

A—0 to 3 inches; dark reddish brown (5YR 2/2) very fine sandy loam, dark grayish brown (10YR 4/2) dry; weak very fine granular structure; very friable; many very fine and fine and medium roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

E—3 to 4 inches; pinkish gray (5YR 6/2) very fine sandy loam; weak very fine granular structure; very friable; common very fine and fine roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bh—4 to 6 inches; dark reddish brown (2.5YR 3/4) fine sandy loam; moderate fine granular structure; very friable; common very fine and fine roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs—6 to 16 inches; strong brown (7.5YR 5/6) gravelly fine sandy loam; moderate fine granular structure; very friable; many very fine and fine roots; 20 percent gravel; extremely acid; clear wavy boundary.

BC—16 to 25 inches; light olive brown (2.5Y 5/4) very gravelly loamy sand; few medium prominent light brownish gray (2.5Y 6/2) and strong brown (7.5YR 5/8) mottles; single grain; loose; few fine roots; 35 percent gravel and 10 percent cobbles; very strongly acid; clear wavy boundary.

C—25 to 65 inches; light olive brown (2.5Y 5/4) very gravelly loamy sand; common medium prominent light brownish gray (2.5Y 6/2) and strong brown (7.5YR 5/8) mottles; single grain; loose; 35 percent gravel and 10 percent cobbles; strongly acid.

The thickness of the solum ranges from 14 to 30 inches. Rock fragment content averages from 35 to 60 percent in the control section but individual horizons range from 5 to 50 percent in the upper part of the solum and from 35 to 75 percent in the lower part of the solum and substratum. Rock fragments are mostly gravel, with some cobbles and a few stones. The soil is extremely acid to slightly acid in the solum, and very strongly acid to slightly acid in the substratum. The loamy cap ranges from 10 to 17 inches in thickness.

Some pedons have an Oa horizon with hue of 2.5YR to 10YR, value of 2, and chroma of 1 or 2.

The A horizon has hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 or 2. Some pedons have an Ap horizon with hue of 10YR, value of 3 or 4, and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 5 to 7, and chroma of 1 or 2.

The Bh horizon has hue of 2.5YR to 7.5YR, value of 3 or 4, and chroma of 2 to 4. The Bhs horizon, where present, has hue of 2.5YR to 7.5YR, value of 3, and chroma of 2 or 3. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. The B horizon within a depth of 10 inches from the surface ranges from fine sandy loam to coarse sandy loam in the fine-earth fraction, and from 10 to 17 inches it ranges from fine sandy loam to coarse sand in the fine-earth fraction. It ranges from loamy sand to coarse sand in the fine-earth fraction below 17 inches.

The BC horizon has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 to 6. It ranges from loamy sand to coarse sand in the fine-earth fraction.

The C horizon has hue of 2.5Y or 5Y, value of 4 to 6, and chroma of 2 to 6. It is loamy sand, loamy coarse sand, sand, or coarse sand in the fine-earth fraction, but some pedons have stratification of these textures or strata of gravel and cobbles with sand in the interstices.

Sisk Series

The Sisk series consists of very deep, well drained soils. They formed in dense glacial till on mountainside slopes above 2300 feet in elevation. Slopes range from 12 to 25 percent.

Sisk soils are associated on the landscape with the Bemis, Mahoosuc, Ricker, Saddleback, and Surplus soils. Sisk soils have less rock fragments than Mahoosuc soils. They are deeper to bedrock than Ricker and Saddleback soils and are better drained than Bemis and Surplus soils.

Typical pedon of Sisk fine sandy loam, in a wooded area of Sisk-Surplus association, moderately steep, very stony, in Sandy River Plantation, at the Saddleback Ski Area, 1570 feet southeast of the water supply pond on the south side of the easternmost alpine ski trail.

Oi—1 inch to 0; litter of needles, leaves and twigs; clear wavy boundary.

Oa—0 to 3 inches; dark reddish brown (5YR 3/2) highly decomposed organic material; moderate very fine and fine granular structure; very friable; many very fine and fine and common medium and coarse roots; very strongly acid; abrupt wavy boundary.

E—3 to 4 inches; brown (7.5YR 5/2) fine sandy loam; weak very fine granular structure; very friable; common very fine to coarse roots; 5 percent gravel and 5 percent cobbles; extremely acid; abrupt wavy boundary.

Bhs1—4 to 5 inches; dusky red (2.5YR 3/2) stony fine sandy loam; weak very fine granular structure;

very friable; common very fine to coarse roots; weakly smeary; 5 percent gravel, 10 percent cobbles and 15 percent stones; very strongly acid; clear wavy boundary.

Bhs2—5 to 9 inches; dark reddish brown (5YR 3/3) stony fine sandy loam; weak very fine granular structure; very friable; common very fine to coarse roots; weakly smeary; 5 percent gravel, 10 percent cobbles, and 15 percent stones; extremely acid; abrupt wavy boundary.

Bs—9 to 16 inches; yellowish brown (10YR 5/4) cobbly fine sandy loam; weak very fine and fine granular structure; friable; few to common very fine and fine, and few medium and coarse roots; 5 percent gravel, 10 percent cobbles, and 5 percent few to stones; extremely acid; clear wavy boundary.

BC—16 to 24 inches; olive brown (2.5Y 4/4) gravelly fine sandy loam; weak medium platy structure; friable; few very fine and fine roots; few patchy prominent yellowish red (5YR 5/6) oxide stains on faces of peds; 10 percent gravel, 5 percent cobbles, and 5 percent stones; very strongly acid; clear wavy boundary.

Cd—24 to 65 inches; olive (5Y 4/3) gravelly fine sandy loam; moderate thin and medium platy structure; very firm; common patchy prominent yellowish red (5YR 5/6) oxide stains on faces of peds and on rock fragments; 10 percent gravel, 5 percent cobbles and 5 percent stones; very strongly acid.

The solum thickness ranges from 20 to 36 inches. Rock fragments range from 5 to 30 percent and reaction ranges from extremely acid to strongly acid throughout.

The Oa horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The A horizon, where present, has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The E horizon has hue of 2.5YR to 10YR, value of 4 to 6, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR, value of 3, and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bh and Bhs horizons are silt loam, loam, very fine sandy loam, or fine sandy loam in the fine-earth fraction.

The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. It is silt loam, loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 4. It is loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The Cd horizon has hue of 10YR to 5Y, value of 4 or 5, and chroma of 2 to 4. It is loam, fine sandy loam, or sandy loam in the fine-earth fraction. It has weak or moderate, very thin to thick platy structure. It is firm or very firm.

Sunday Series

The Sunday series consists of very deep, excessively drained soils. These soils formed in sandy alluvial deposits on flood plains. Slopes range from 0 to 3 percent.

Sunday soils are associated on the landscape with the Adams, Allagash, Charles, Cornish, Croghan, Fryeburg, Lovewell, Madawaska, Medomak, Naumburg, and Nicholville soils. Sunday soils are on flood plains adjacent to Adams, Allagash, Croghan, Madawaska, Naumburg, and Nicholville soils. They are coarser textured than Charles, Cornish, Fryeburg, Lovewell, and Medomak soils.

Typical pedon of Sunday loamy fine sand in an old hayfield in an area of Sunday loamy fine sand, in the town of Farmington, on the west bank of the Sandy River, 800 feet south of the Fairbanks Bridge.

Ap—0 to 9 inches; dark brown (10YR 3/3) loamy fine sand, pale olive (5Y 6/3) dry; weak fine granular structure; very friable; many very fine and fine roots; extremely acid; abrupt smooth boundary.

C1—9 to 14 inches; light yellowish brown (2.5Y 6/4) loamy sand; single grain; loose; few very fine and fine roots; very strongly acid; clear smooth boundary.

C2—14 to 65 inches; light brownish gray (2.5Y 6/2) sand; single grain; loose; moderately acid.

In some pedons, pebbles range from 0 to 10 percent by volume below 20 inches.

The Ap horizon or A horizon, where present, has hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 or 3. In unlimed areas, reaction ranges from extremely acid to slightly acid.

The C horizon has hue of 10YR or 2.5Y, value of 3 to 6, and chroma of 2 to 6. It is loamy fine sand to coarse sand. Consistence is very friable to loose. Reaction ranges from very strongly acid to slightly acid. Strata of loamy fine sand, fine sand, sand, coarse sand and fine gravel commonly occur in the C horizon below 40 inches.

Surplus Series

The Surplus series consists of very deep, moderately well drained and somewhat poorly drained soils. These soils formed in dense glacial till on mountainside slopes above 2300 feet in elevation. Slopes range from 3 to 25 percent.

Surplus soils are associated on the landscape with the Bemis, Mahoosuc, Ricker, Saddleback, and Sisk soils. Surplus soils have less rock fragments than Mahoosuc soils. They are deeper to bedrock than Ricker and Saddleback soils, and wetter than Sisk soils. They are better drained than Bemis soils.

Typical pedon of Surplus fine sandy loam, in an area of Sisk-Surplus association, moderately steep, very stony, in a wooded area in Dallas Plantation on the north side of Saddleback Mountain, 1320 feet east of Saddleback Ski Lodge and 30 feet east of cross-country ski trail.

Oi—1 inch to 0; litter of needles, leaves and twigs.

Oa—0 to 5 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak very fine and fine granular structure; very friable; common to many very fine to coarse roots; extremely acid; abrupt smooth boundary.

E—5 to 7 inches; light brownish gray (10YR 6/2) fine sandy loam; weak very fine and fine granular structure; very friable; common very fine to coarse roots; 5 percent gravel and 5 percent cobbles; extremely acid; abrupt wavy boundary.

Bhs—7 to 13 inches; dark reddish brown (5YR 3/3) fine sandy loam; weak very fine and fine granular structure; friable; few very fine to coarse roots; weakly smeary; 5 percent gravel, 5 percent cobbles, and 2 percent stones; extremely acid; gradual wavy boundary.

Bs—13 to 19 inches; brown (7.5YR 4/4) fine sandy loam; weak very fine and fine granular structure; friable; few very fine to coarse roots; 5 percent gravel, 5 percent cobbles, and 2 percent stones; extremely acid; clear wavy boundary.

BC—19 to 26 inches; dark yellowish brown (10YR 4/4) gravelly fine sandy loam; common fine distinct grayish brown (10YR 5/2) and fine to medium prominent strong brown (7.5YR 5/6) mottles; weak very fine and fine granular structure; friable; common patchy prominent yellowish red (5YR 5/8) oxide stains on rock fragments; few very fine and fine roots; 10 percent gravel, 5 percent cobbles, and 5 percent stones; very strongly acid; clear wavy boundary.

Cd—26 to 65 inches; olive (5Y 4/3) gravelly fine sandy loam; moderate thin and medium platy structure; firm; common patchy prominent dark reddish brown (5YR 3/4) oxide stains on faces of peds; 10 percent sandy loam lenses; 15 percent gravel, 5 percent cobbles, and 5 percent stones; very strongly acid.

The thickness of the solum ranges from 20 to 30 inches. Rock fragment content ranges from 3 to 30 percent throughout. The organic surface horizon is generally extremely acid. The soil ranges from extremely acid to strongly acid in the solum and is very strongly acid or strongly acid in the substratum.

The Oe or Oa horizon has hue of 2.5YR to 10YR, value of 2 or 3, and chroma of 1 or 2.

The E horizon has hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2 or it is neutral and has a value of 5 to 7.

The Bhs horizon has hue of 2.5YR or 5YR, value of 3, and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value 2 to 5 and chroma of 2 to 4. It is silt loam, loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 or 6. It is silt loam, loam, fine sandy loam, or sandy loam in the fine-earth fraction.

The BC horizon has hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 3 or 4. It is loam, fine sandy loam, or sandy loam in the fine-earth fraction. It has weak very fine and fine granular or weak or moderate thin or medium platy structure and is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 4 to 6 and chroma of 3 or 4. It is loam, fine sandy loam, or sandy loam in the fine-earth fraction but lenses of loamy fine sand or loamy sand occur in some pedons. It has weak or moderate thin to thick platy structure and is firm or very firm.

Swanville Series

The Swanville series consists of very deep, poorly drained soils. These soils formed in glaciolacustrine or glaciomarine sediments. They are on low-lying lacustrine plains. Slopes range from 0 to 3 percent.

Swanville soils are associated on the landscape with the Allagash, Boothbay, Bucksport, Charles, Cornish, Lovewell, Madawaska, Nicholville, and Markey soils. Swanville soils are finer textured than Allagash, Madawaska, and Nicholville soils. They are better drained and have less organic matter than Bucksport and Markey soils. They are wetter than Boothbay soils. Charles, Cornish, and Lovewell soils are on nearby flood plains.

Typical pedon of Swanville silt loam, in a hayfield in an area of Swanville silt loam, in the town of Farmington, 150 feet on the east side of the Webster Road, 6700 feet south of its junction with the Knowlton Corner Road.

Ap—0 to 7 inches; very dark grayish brown (2.5Y 3/2) silt loam, pale olive (5Y 6/3) dry; few fine prominent yellowish brown (10YR 5/4) and olive gray (5Y 5/2) mottles; moderate fine and medium granular structure; very friable; many very fine and

common fine roots; moderately acid; abrupt smooth boundary.

Bw—7 to 11 inches; olive (5Y 5/3) silt loam, gray (5Y 5/1) faces of peds; few fine faint olive gray (5Y 5/2) mottles; weak very fine and fine subangular blocky structure; friable; common very fine and few fine roots; moderately acid; clear smooth boundary.

Bg—11 to 18 inches; olive gray (5Y 5/2) silt loam, light olive gray (5Y 6/2) faces of prisms; many coarse distinct gray (5Y 5/1) and common medium prominent yellowish brown (10YR 5/6) mottles; strong very coarse prismatic structure separating to weak very fine and fine subangular blocky; friable; few very fine roots; moderately acid; clear wavy boundary.

BC—18 to 24 inches; olive (5Y 4/3) silt loam, gray (5Y 6/1) faces of prisms; many medium faint olive gray (5Y 5/2) and common medium prominent yellowish brown (10YR 5/6) mottles; strong very coarse prismatic structure separating to weak fine and medium subangular blocky; friable; moderately acid; clear wavy boundary.

C—24 to 65 inches; olive (5Y 4/3) silt loam, gray (5Y 6/1) faces of prisms; many medium faint olive gray (5Y 5/2) and common medium prominent yellowish brown (10YR 5/4) mottles; strong, very coarse prismatic structure; firm; moderately acid.

The thickness of the solum ranges from 18 to 40 inches. Rock fragment content is less than 5 percent by volume throughout the soil. Reaction ranges from very strongly acid to neutral in the solum and moderately acid to neutral in the substratum.

The Ap horizon has hue of 10YR or 2.5Y, value of 3 to 4, and chroma of 1 to 3. The E horizon, where present, has hue of 10YR to 5Y, value of 4 to 6, and chroma of 1 or 2.

The B and BC horizons have hue of 10YR to 5Y, value of 3 to 6, and chroma of 1 to 4. They are very fine sandy loam, silt loam, and silty clay loam.

The C horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 1 to 4. It is silt loam or silty clay loam. Some pedons have thin layers that range from silt to fine sand. It has weak to strong, medium to very thick platy, moderate very fine angular blocky, or moderate or strong coarse or very coarse prismatic structure, all of which is inherited, or the horizon is massive. Consistence is friable or firm.

Telos Series

The Telos series consists of very deep, somewhat poorly drained soils. They formed in dense glacial till derived mainly from slate and other dark colored sedimentary and metamorphic rocks. They are on upland ridges. Slopes range from 0 to 25 percent.

Telos soils are associated on the landscape with the Bucksport, Burnham, Chesuncook, Elliottsville, Markey, Monarda, Monson, and Thorndike soils. Telos soils are wetter than Chesuncook. They are wetter and deeper than Elliottsville, Monson, and Thorndike soils. Bucksport and Wonsqueak soils are very poorly drained organic soils. Telos soils are better drained than Burnham and Monarda soils.

Typical pedon of Telos silt loam in an area of Monarda-Telos association, gently sloping, very stony, in a wooded area in the town of Rangeley, 0.7 mile east of Round Pond on a gravel road and 150 feet south of the road.

Oi—1 inch to 0; litter of leaves and twigs.

Oa—0 to 2 inches; dark reddish brown (5YR 2/2) highly decomposed organic material; weak fine granular structure; very friable; many very fine and fine roots; extremely acid; abrupt wavy boundary.

E—2 to 4 inches; pinkish gray (7.5YR 6/2) silt loam; weak fine granular structure; friable; common very fine and fine roots; 5 percent gravel; extremely acid; abrupt wavy boundary.

Bhs—4 to 7 inches; dark reddish brown (5YR 3/3) silt loam; moderate fine granular structure; friable; common very fine and fine roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs1—7 to 12 inches; dark brown (7.5YR 4/4) silt loam; weak fine and medium granular structure; friable; common very fine and fine roots; 5 percent gravel; extremely acid; clear wavy boundary.

Bs2—12 to 15 inches; dark yellowish brown (10YR 4/4) silt loam; common medium prominent pinkish gray (7.5YR 6/2) mottles; moderate fine and medium subangular blocky structure; friable; common very fine and fine roots; few very fine vesicular pores; 10 percent gravel; extremely acid; clear wavy boundary.

BC—15 to 20 inches; light olive brown (2.5Y 5/4) silt loam; many medium prominent pinkish gray (7.5YR 6/2) mottles; weak thin platy structure; friable; few very fine and fine roots; 10 percent gravel; very strongly acid; clear smooth boundary.

Cd—20 to 65 inches; olive (5Y 5/3) gravelly silt loam, light olive gray (5Y 6/2) faces of prisms; many medium and common fine prominent dark yellowish brown (10YR 4/4) mottles; strong very coarse prismatic separating to weak medium platy structure; firm; 20 percent gravel; strongly acid.

The thickness of the solum ranges from 13 to 21 inches. The reaction in unlimed areas ranges from extremely acid to moderately acid in the solum and

strongly acid to slightly acid in the substratum. Rock fragment content ranges from 5 to 35 percent in the A or E horizon, where present, from 5 to 25 percent in the B and BC horizons and from 20 to 40 percent in the Cd horizon. Rock fragments are mainly pebbles.

The Oa horizon has hue of 2.5YR or 5YR, value of 2 or 3, and chroma of 1 or 2.

The Ap horizon, where present, has hue of 10YR and value and chroma of 3 or 4.

The E horizon has hue of 5YR or 7.5YR, value of 6 or 7, and chroma of 1 or 2.

The Bhs horizon has hue of 2.5YR or 5YR, value and chroma of 2 or 3. The Bh horizon, where present, has hue of 2.5YR to 7.5YR, value of 2 to 5, and chroma of 2 to 6. The Bs horizon has hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 8. The B horizon is silt loam, loam, or fine sandy loam.

The BC horizon has hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 3 or 4. It is silt loam, loam, or fine sandy loam. It has weak thin to thick platy structure or it has moderate or strong very coarse prismatic structure separating to weak or moderate thin to thick platy structure or fine subangular blocky structure. The horizon is friable or firm.

The Cd horizon has hue of 2.5Y or 5Y, value of 3 to 5, and chroma of 1 to 4. It is silt loam or loam in the fine earth fraction. It has strong, very coarse prismatic structure, which may separate to weak to strong, thin to thick platy structure or to moderate or strong, fine to coarse angular blocky structure, or the horizon is massive. It is firm or very firm.

Thorndike Series

The Thorndike series consists of shallow, somewhat excessively drained soils. These soils formed in glacial till derived primarily from phyllite or slate. They are located on hills and mountains. Slopes range from 3 to 45 percent.

Thorndike soils are associated on the landscape with the Chesuncook, Elliottsville, Monarda, Monson, and Telos soils and areas of rock outcrop. Thorndike soils are shallower to bedrock than Chesuncook, Elliottsville, Monarda, and Telos soils and are deeper than areas of rock outcrop. Thorndike soils have more rock fragments than Monson soils.

Typical pedon of Thorndike channery loam, in an area of Thorndike-Elliottsville complex, rolling, very stony, in a forested area in the town of Moose River, Somerset County, Maine, 2.2 miles north of the Moose River Dennistown town line on US route 201, 1500 feet east of the road.

Oi—2 inches to 0; litter of leaves and twigs.

Oa—0 to 3 inches; very dark brown (10YR 2/2) highly decomposed organic material; weak fine granular structure, very friable; many fine roots; very strongly acid; abrupt wavy boundary.

E—3 to 5 inches; light brownish gray (10YR 6/2) channery loam; weak very fine granular structure; friable; many fine and medium roots; 15 percent channers; very strongly acid; abrupt wavy boundary.

Bhs—5 to 9 inches; dark brown (7.5YR 3/2) very channery loam; weak medium granular structure; very friable; many fine and medium roots; 40 percent channers; very strongly acid; abrupt irregular boundary.

Bs—9 to 14 inches; brown (7.5YR 4/4) very channery loam; weak medium granular structure; very friable; common fine and medium roots; 45 percent channers; strongly acid; gradual wavy boundary.

R—14 inches; fractured slatey bedrock.

The thickness of the solum and depth to bedrock ranges from 10 to 20 inches. Weighted average of rock fragments in the solum ranges from 35 to 60 percent by volume. They are primarily slate, or phyllite. In unlimed areas the soil is very strongly acid to moderately acid throughout.

The Ap horizon, where present, has hue of 10YR, value of 3 to 5, and chroma of 2 to 6. Some pedons have an A horizon with hue of 10YR, value of 3 or 4, and chroma of 1 to 3.

The E horizon has a hue of 7.5YR or 10YR, value of 5 to 7, and chroma of 1 or 2.

The Bhs horizon has hue of 5YR or 7.5YR, value of 3, and chroma of 2 or 3. The Bh horizon, where present, has a hue of 5YR or 7.5YR, value of 3 or 4, and chroma of 2 to 4. The Bs horizon has hue of 5YR to 10YR, value of 4 to 6, and chroma of 4 to 8. The B horizon is silt loam or loam in the fine-earth fraction.

The bedrock is generally slate or phyllite that is fractured in the upper part.

Tunbridge Series

The Tunbridge series consists of moderately deep, well drained soils. They formed in glacial till derived mainly from mica schist, gneiss, or phyllite. They are on upland hills and ridges. Slopes range from 3 to 45 percent.

Tunbridge soils are associated on the landscape with the Abram, Berkshire, Brayton, Colonel, Dixfield, Hermon, Lyman, Marlow, Monadnock, and Peacham soils, and areas of rock outcrop. Tunbridge soils are shallower to bedrock than Berkshire, Brayton, Colonel,

Colton, Dixfield, Hermon, Marlow, Monadnock, and Peacham soils. They are deeper to bedrock than Abram and Lyman soils and areas of rock outcrop.

Typical pedon of Tunbridge fine sandy loam, in a wooded area of Tunbridge-Berkshire-Dixfield association, rolling, very stony, in the town of Avon, 0.8 mile from Mt. Blue Road on the road to Spruce Mountain, 200 feet southwest of the road.

Oi—1 inch to 0; litter of leaves, needles and twigs.

Oa—0 to 2 inches, black (10YR 2/1) highly decomposed organic material; weak fine granular structure; friable; many very fine and fine and common medium, and few coarse roots; very strongly acid; abrupt wavy boundary.

A—2 to 3 inches; very dark brown (10YR 2/2) fine sandy loam, light brownish gray (10YR 6/2) dry; weak fine granular structure; very friable; many very fine and fine and common medium, and few coarse roots; 5 percent gravel; very strongly acid; abrupt wavy boundary.

E—3 to 5 inches; gray (5YR 5/1) fine sandy loam; weak fine granular structure; very friable; many very fine and fine, common medium, and few coarse roots; 5 percent gravel; very strongly acid; abrupt wary boundary.

Bhs—5 to 7 inches; dark reddish brown (5YR 3/2) fine sandy loam; weak fine granular structure; friable; many very fine and fine and common medium, and few coarse roots; 5 percent gravel; very strongly acid; clear wavy boundary.

Bs1—7 to 10 inches; dark brown (7.5YR 4/4) fine sandy loam; weak fine granular structure; friable; common very fine and fine and few medium and coarse roots; 5 percent gravel and 5 percent cobbles; very strongly acid; clear wavy boundary.

Bs2—10 to 18 inches; dark yellowish brown (10YR 4/6) fine sandy loam; weak medium subangular blocky structure; friable; few very fine, fine and medium roots; 5 percent gravel and 5 percent cobbles; strongly acid; clear wavy boundary.

C—18 to 32 inches; olive (5Y 4/4) gravelly fine sandy loam; massive; firm in place, friable when removed; 5 percent gravel, 5 percent cobbles, and 5 percent stones; moderately acid; abrupt wavy boundary.

R—32 inches; schistose bedrock.

The thickness of the solum ranges from 14 to 28 inches and depth to bedrock ranges from 20 to 40 inches. Rock fragments are primarily pebbles, cobbles, and a few stones and range from 5 to 35 percent throughout the soil. In unlimed areas the soil is extremely acid to moderately acid in the solum and strongly acid to slightly acid in the substratum.

The A horizon and Ap horizon, where present, have hue of 7.5YR or 10YR, value and chroma of 2 to 4.

The E horizon has hue of 5YR to 10YR, value of 4 to 6 and chroma of 1 or 2.

The Bhs horizon has hue of 5YR to 10YR, value and chroma of 3 or less. Some pedons have a Bh horizon with hue of 5YR to 10YR, and value of 2 or 3 and chroma of 0 to 2. The Bs horizon has hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 or 6. The B horizon is fine sandy loam, sandy loam, very fine sandy loam, or loam in the fine-earth fraction.

Some pedons have a BC horizon with hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 3 to 6.

The C horizon has hue of 2.5Y or 5Y, value of 4 or 5, and chroma of 2 to 6. It is fine sandy loam, sandy loam, very fine sandy loam, or silt loam in the fine-earth fraction.

Bedrock is slightly weathered schist, gneiss, or phyllite.

Udorthents

Udorthents consist of deep, excessively drained to well drained fill areas overlying bedrock or soil. The fill material differs greatly from place to place, but generally is compacted gravel, sand, loamy sand, sandy loam, or mixed combinations of these materials. These materials have more than 35 percent rock fragments. The underlying soil generally is moderately well drained to poorly drained, but ranges to excessively drained. Slopes dominantly range from 0 to 8 percent, but the sides of fill areas may be very steep.

Udorthents are adjacent to various other soils, but mainly to those that are moderately well drained to poorly drained.

These soils differ from area to area thus a typical pedon is not given. The soils are more than 20 inches thick, and generally are 30 to 65 inches thick. Depth to bedrock is 20 inches or more. Reaction is very strongly acid to neutral.

The surface layer to a depth of up to 10 inches may be applied topsoil or a mixture of topsoil and gravelly fill. Thickness, color, texture, and gravel content differ greatly.

The underlying layers dominantly are neutral, or have hue of 7.5YR to 5Y, value of 5 to 8, and chroma of 1 to 4. These layers are commonly discontinuous. Generally, they are sandy loam to coarse sand in the fine-earth fraction.

Formation of the Soils

This section relates the factors of soil formation to the soils in Franklin County and part of Somerset County and explains the processes of soil formation.

Morphology of the Soils

Robert V. Rourke, Senior Soil Scientist, Maine Agricultural and Forest Experiment Station, assisted in preparing this section.

The mineral soils of Franklin County and part of Somerset County have distinct features as a result of soil formation. The soils reflect: the addition of organic matter; or, translocation of organic matter, iron and aluminum; or transformation of iron or organic matter; some weathering of primary minerals to clay size particles; and the formation of soil structure. Not all processes are present in each soil.

The weathering process, important in the formation of horizons in mineral soils ranging in drainage from excessive drained to somewhat poorly drained, involves the movement of organic matter, iron oxides, and aluminum oxides from the surface horizon to the B horizon. Loss of soluable cations accompanied by the decomposition of organic matter in the surface horizon creates acidity which solubilizes sesquioxides (iron and aluminum oxides), reduces iron, and forms soluable metal-organic complexes. These materials are leached from the soil mineral surface horizon into an alluvial B horizon and precipitated there through mechanical, chemical, and biological processes *(Buol, Hole, and McCracken, 1980)*.

In some areas, the surface mineral soil develops into gray or white E horizon and represents an area of intense leaching. When the accumulation of the leached material is significant the horizons formed are the dark red to black Bh, Bs, and/or Bhs. This type of leaching and accumulation has occurred in the Adams, Berkshire, Chesuncook, Hermon, and Saddleback soils. If there is only slight accumulation resulting in a minor color change or if there is just soil structure development, the horizon formed is the Bw, such as in the Swanville soil. These horizons are above the slightly weathered C horizon which may be very dense or loose in consistence reflecting the type of parent material in which the soil has developed.

In very young soils of the floodplain along the streams and rivers, such as Fryeburg soils, there has not been time to develop well-expressed subsurface horizons. These soils usually have an A horizon above a weakly expressed B horizon and are excessively drained to very poorly drained. There may be sequences of buried soil horizons from previous stable periods evident at lower depths in the soil profile.

Organic matter that is incorporated into the mineral soil surface forms the A horizon. In many soils, cultivation has caused the change of an A horizon to an Ap horizon. In cultivation, organic material is incorporated into the Ap horizon.

In wooded areas there is an O (organic) horizon composed of an accumulation of materials, such as, leaves, twigs, or other humified matter on the mineral soil surface. The amount and rate of organic accumulation and breakdown relates to the type of vegetation, the aspect, climatic conditions, and soil drainage. Usually excessively drained soils develop thinner organic horizons than do poorly drained and wetter soils because of more rapid organic matter oxidation.

The poorly drained and very poorly drained mineral soils, such as Brayton and Peacham, have soil horizons that reflect the wet conditions under which they are developed. The surface of these soils frequently has an organic horizon that is eight or more inches thick. The mineral horizons beneath the organic layers have mottles that represent areas of reduction or oxidation as a result of being saturated for periods of time when soil microbes are active. Often beneath the organic horizon is a horizon of mixed organic and mineral (A) materials or a leached mottled horizon (Eg). These horizons are above a mottled horizon that often exhibits soil structure and some slight color development (Bg). The lowest soil horizon in these soils (Cg) is either highly reduced with blue or greenish color or is mottled and has matrix colors that are low of chroma. These wet soils develop in many different types of parent material.

There are areas of organic soils, such as Bucksport and Markey soils, that usually have formed in wet depressions in the landscape. These soils are derived from organic materials that have accumulated for many years. The soils may have layers that are highly

decomposed with no indication of the source of the organic material remaining (Oa), or there may be some evidence of the fiber source (Oe), or there may be a highly undecomposed fiber content (Oi) that allows the identification of the plant source. These soils are usually very wet and as a result do not decompose rapidly.

Factors of Soil Formation

A soil is a three-dimensional natural body consisting of mineral and organic material that can support plant growth. The nature of any soil at a given site is the result of the interaction of five general factors—parent material, climate, plants and animals, relief, and time. Climate and plants and animals have an effect on parent material that is modified by relief over time. Theoretically, if all these factors were identical at different sites, the soils at these sites would be identical. Differences among the soils are caused by variations in one or more of these factors.

Parent Material

The parent material of Franklin County and part of Somerset County and the inherent landscape features have largely resulted from the Wisconsin stage of glaciation, the last glacial advance and retreat over the area. The five major parent materials of the soils of the soil survey area are glacial till, glaciofluvial deposits, marine and lacustrine sediments, organic material, and recent alluvium.

Soils that formed in friable glacial till, such as Hermon soils, reflect the gouging, scraping, and transportation action of the glacier while depositing the material across the landscape. Marlow and Dixfield soils formed in dense, compact glacial till on smooth, drumlin-shaped landforms derived mainly from a mixture of micaceous schist, gneiss, and granite. Brayton soils formed in depressional areas on these landforms and also have a dense substratum. Berkshire soils formed in less dense glacial till.

Glaciofluvial deposits were accumulated when meltwater from the glacier picked up the particles of various sizes and deposited them as strata of sandy, loamy, or gravelly material on deltas, outwash plains, terraces, kames, and eskers. Adams, Allagash, Madawaska, Colton, Naumburg, Searsport, and Sheepscot soils formed in such material.

Some other soils formed in marine and lacustrine deposits that were deposited as particles in quiet bodies of water. Buxton and Scantic soils formed in silt and clay deposits.

Some soils formed in recent alluvium deposited along streams and rivers. Charles, Cornish, Fryeburg, Lovewell, and Medomak soils formed in such material.

Still other soils formed in organic material in depressional areas that were ponded at one time and subsequently have accumulated plant remains over many years. Bucksport and Markey soils formed in material from mosses, grasses, and herbaceous and woody plants.

Climate

Physical weathering, in the form of alternate freezing and thawing, takes place from fall to spring. This promotes the granulation of soil material and the breaking of rock fragments into smaller units. This alternate freezing and thawing process improves soil structure in those soils that have been compacted as a result of the use of heavy equipment.

The soil survey area is at a latitude just halfway between the North Pole and the Equator. These soils, therefore, are more deeply weathered and thickly formed than those in polar regions, but they are not so highly weathered or deep as most soils in tropical latitudes, where climate commonly masks the influence of different parent materials.

Plants and Animals

The presence of living plants and animals and their decaying remains in a mineral soil is one of the features that distinguishes the soil from its parent material. Plants generally supply the organic matter that gives color to the surface layer. In areas of poor drainage, this organic matter tends to collect on the surface, creating thick organic layers.

The decaying plants and animals also supply nutrients to the soil. Many of the trees and other plants take up these plant nutrients and store them in leaves, stems, and roots. When the trees and plants die, they are acted on by bacteria or fungi, and the nutrients are returned to the soil. Fungi produce some of the organic acids in areas of such soils as Adams, Berkshire, Hermon, and Marlow soils, especially where the soils are not plowed.

Earthworms, insects, rodents, and other animals that live in the soil help to mix the soil layers. Earthworms aid in soil aeration and the formation of granular soil structure. They also help in the decomposition of organic matter.

The most obvious result of man's activities is the mixing of layers through plowing. Compact, impermeable layers have been created in some areas within the soil by plowing or use of machinery. Soil erosion is accelerated in cultivated areas to the point that on some soils the surface layer has eroded away.

In places that have been limed and fertilized for long periods, the soils have become less acid. In places where man has added drainage systems, the soils have often become more aerated and warmer and have a lower organic matter content in the surface layer.

Relief

The influence of topography on the soils can be seen by comparing soils that have the same kind of parent material and climatic conditions, but have different topography and drainage.

The Marlow, Dixfield, Colonel, Brayton, and Peacham soils, for example, formed in dense glacial till. The Marlow soils are well drained, have mainly convex slopes, and are on the tops and upper parts of till ridges. The Dixfield soils are moderately well drained, have mainly convex slopes, and are on the upper parts of till ridges. The Colonel soils are somewhat poorly drained, have mainly concave slopes, and are on the lower parts of till ridges. The Brayton soils are poorly drained, have mainly concave slopes, and are at lower slope positions. The Peacham soils are very poorly drained and are nearly level or in depressions.

Time

The degree of development, or maturity, of a soil commonly reflects the length of time that the parent material has been in place. In this soil survey area, most of the upland soils have been forming in their present state for about 13,500 years, since the retreat of the last glacier.

Most soils on floodplains are continually being reworked and are considered immature. Their layers are not well defined; their colors show only slight differences, and their structure is weak. Charles soils are an example of soils on flood plains.

Some soils show evidence of change and maturity, such as the formation of a reddish, dark layer that is distinct from the other layers in the soil. This distinct layer is a result of the accumulation of organic matter, iron, and aluminum over a long period. Hermon soils, which are more mature soils, have such a layer.

Geology

D. Bruce Champeon, Geologist (retired), Natural Resources Conservation Service assisted in preparing this section

PHYSIOGRAPHY - This area is located in the Central Highlands physiographic province of New England *(Denny, 1982)*, which is characterized by hills and many rugged mountains. Topography is mature and relief is moderate to high. One-fourth of Maine's 56 peaks with summit elevations over 3500 feet are found within five contiguous townships (Carrabassett Valley, Madrid, Mt. Abram, Redington, and Sandy River Plantation) in central Franklin County. The two highest are Sugarloaf Mountain (elev. 4,237 feet) and Crocker Mountain (elev. 4,168 feet).

The drainage system is well developed. Major drainageways in the eastern three-fourths of the Franklin County area include the Carrabassett, Dead, and Sandy Rivers. Moose River drains the Jackman area. All of these rivers are within the Kennebec River Basin. The western one-fourth of the Franklin County area is within the Androscoggin River Basin.

The northern part of the Franklin County soil survey area includes all of Rangeley Lake and part of Cupsuptic, Flagstaff, and Mooselookmeguntic Lakes. The western section of Mt. Blue State Park is on Webb Lake in Weld. The Jackman soil survey area includes parts of both Long and Woods Ponds.

BEDROCK GEOLOGY - The bedrock of this area has a long and complex history dating from the Lower and Middle Paleozoic Era of about 570 million to 360 million years ago *(Osberg, 1985)*. Gravelly, sandy, muddy, and limy sediments and chemical precipitates were deposited into the ocean where they eventually hardened into sedimentary rocks such as conglomerate, various types of sandstone, pelite, and carbonate rocks *(Loiselle and Thompson, 1987)*. Some rocks were also formed from minor amounts of ash and larger fragments derived from offshore volcanic island arcs.

The original sedimentary and volcanic rocks (protoliths) described above were later folded, faulted, and subjected to extreme temperatures and pressures during two major episodes of geologic plate movement and mountain building. New rock types such as slate, phyllite, schist, gneiss, quartzite, metasandstone, metaconglomerate, metavolcanic rocks, and calc-silicate rocks were formed from the existing rocks during this complex recrystallization process known as metamorphism. Many original depositional features of the stratified rocks, including animal fossils, which are generally used for relative age determinations, were also destroyed by metamorphism. The degree of metamorphism in this soil survey area is highest near the southern county boundary and near Weld and Phillips, and lowest near Farmington and in the Jackman area. Many major pre-and post-metamorphic normal and thrust faults have been identified and delineated.

Deposition of marine sediments and some volcanic debris began in Cambrian time and continued to Middle Ordovician time. In Middle Ordovician time offshore island arcs collided with mainland North

America, causing the formation of Vermont's Taconic Mountains. This collision, known as the Taconic Orogeny, also caused deformation and metamorphism of the pre-Middle Ordovician rocks of western Maine. Igneous activity took place near Jackman during this time, but none occurred in the Franklin County soil survey area.

Deposition continued through the remainder of the Ordovician, through the Silurian, and into the Early Devonian Periods. Sandy, silty, and loamy sediments predominated. Cyclical and/or graded beds of pelite and sandstone were common. Deposition of gravelly and volcanic sediment was limited, but did occur.

The last, and most severe, deformation and metamorphism of the area's rocks occurred during Early Devonian time when northeastern North America collided with The European/African plate. This collision, known as the Acadian Orogeny, created much of the northern Appalachian Mountain chain and resulted in the intrusion of most of Maine's igneous plutons, including all of those in the Franklin County soil survey area and one in the Jackman area.

The oldest stratified rocks of the soil survey area predate the Taconic Orogeny. They occur in the extreme northern and northwestern part of the Franklin County soil survey area in The Lobster Mountain Anticlinorium. The post-Taconic Orgeny stratified rocks, which occur throughout the Franklin County soil survey area, are all part of the Kearsarge-Central Maine Synclinorium. Stratified rocks in the Jackman area were deposited during Ordovician through Devonian time. They are part of the Boundary Mountain Anticlinorium and are generally less deformed and less metamorphosed than rocks in the Franklin County area.

Franklin County Soil Survey Area

Cambrian aged melange of the Hurricane Mountain formation is found in the extreme northwestern corner of Eustis. Late Cambrian to Early Ordovician aged thinly interbedded pelitic schist and metasandstone, quartzite, and feldspathic metasandstone of the Dead River formation are located in Carrabassett Valley.

Middle to Late Ordovician aged feldspathic metasandstone and sulfidic/carbonaceous metapelite of the Kamankeag formation are found northwest of Rangeley Lake. Interbedded sulfidic schist and metasandstone, quartzite, metagraywacke, and metavolcanic rocks of the Late Ordovician aged Quimby formation occur from southwest of Rangeley Lake to the Carrabassett Valley area.

Several formations are of Early Silurian age. Feldspathic metasiltstone, metasandstone, and calc-silicate rocks of the Greenvale Cove formation border the Quimby formation northeast of Rangeley Lake. Interbedded slate and metasandstone, sulfidic schist, and metaconglomerate of the Rangeley formation are found mostly west and southwest of Saddleback Mountain. Pelitic schist, metagraywacke, metaconglomerate, and metalimestone\metadolostone of various members of the Sangerville formation occur along the southern boundary of Franklin County. Interbedded pelitic schist and quartzite of the Perry Mountain formation is found in Madrid and Phillips, and northeast of Mount Abraham.

Sulfidic schist, quartzite, and calc-silicate rocks of the Late Silurian aged Smalls Falls formation outcrops in the Madrid, Phillips, and New Vineyard area. Metasandstone, schist, and calc-silicate rocks of the Late Silurian to Early Devonian aged Madrid formation are found in bands from Madrid to Kingfield, and from Temple to New Vineyard.

Three formations are of Early Devonian age. Pelitic schist and metasandstone of the Carrabassett formation make up the central third of the Franklin County soil survey area. Interbeds of metagraywacke and calc-silicate rock of the Hildriths formation are found from Weld to Freeman Township. Interbedded pelitic schist and graded metasandstone of the Seboomook formation are centered in the south-central part of the area.

Eight plutons are associated with the Devonian aged Acadian Orogeny. Granite plutons are the Mooselookmeguntic pluton south of Mooselookmeguntic Lake, and the North Jay and two related plutons near Chesterville and New Sharon along the southern county boundary. Granodiorite plutons include the Phillips pluton near Phillips and Weld, and the Redington pluton near Redington. Mafic plutons include the Sugarloaf gabbro/ultramafic igneous complex near Sugarloaf Mountain and the Flagstaff gabbro/ultramafic/diorite igneous complex between Rangely and Eustis.

Part of Somerset County Soil Survey Area

The Attean quartz monzonite pluton in the western and southwestern part of the Jackman area was emplaced during igneous activity associated with the Taconic Orogeny of Middle Ordovician time.

An unnamed pelite of Ordovician through Devonian age occurs along the northern border of Moose River township.

The remaining formations are of Devonian age. Pelite of the Ironbound Mountain formation underlies most of the rest of Moose River township. Feldspathic sandstone of the Tarratine formation occurs in the

southern corner of Jackman. Interbedded pelite and sandstone outcrops in the central part of the soil survey area.

The small Hog Island granite pluton is located in the northwest corner of Jackman. It was emplaced during the Devonian aged Acadian Orogeny.

SEISMICITY - Much of the soil survey area is either in or near areas with significant recent or historical seismic activity *(Ebel, 1989)*. Several mild earthquakes have originated within this area. Although people generally have felt them, they have produced only minor, localized structural damage. Overall seismic risk in the area is low. One of the 11 New England Seismic Network stations operated by Western Observatory in Maine is located in Jackman.

SURFICIAL GEOLOGY - The slow, but persistent, process of erosion removed a significant amount of bedrock in the over 350 million years that followed the last igneous or depositional activity *(Thompson and Borns, 1985)*. However, the present day landscape of this area is a result mainly of the events of the Pleistocene Epoch, which began about 1.6 million years ago. Continental ice sheets advanced and retreated over this area perhaps as many as four times during that epoch. Primarily, evidence remains only of the last major glaciation, known as the Wisconsinan stage.

When global climate cooled, the Laurentide Ice Sheet began to form east of James Bay, Quebec, several hundred miles north of western Maine. Over 50,000 years before present (B.P.) alpine (valley) glaciers were active in the area's highest mountains. Large cirques, deep U-shaped valleys and other landforms are still very much in evidence there. By about 25,000 B.P. Laurentide ice had spread southward over New England toward the continental shelf and had buried the area's highest mountains. As it advanced, the glacier ground up the rocks beneath it and deposited this newly eroded material under the ice sheet. This formed a compact blanket of glacial till, a mixture of rock fragments ranging from clay-sized material to boulders. Marlow and Dixfield soils are examples of soils developed in this dense, basal till that can be found overlying bedrock throughout the county, even on mountaintops.

The sheer weight of a massive sheet of ice thousands of feet thick depressed the land surface probably hundreds of feet, but the extent of this depression in this area is not fully known. The great quantities of moisture locked up in glacial ice resulted in a general worldwide lowering of sea level by about 300 to 350 feet. The climate began to warm and by about 20,000 B.P. the rate of melting exceeded the rate of advance, resulting in a net northward retreat of the glacial margin. The ice margin had melted back to the present Maine coastline by about 13,500 B.P., and had probably melted from this soil survey area by 12,000 B.P.

Earlier stages of deglaciation resulted from removal of active ice by calving in response to marine transgression. The large amounts of meltwater carried and eventually deposited sand and gravel as flat-topped, marine ice-contact deltas at areas where the glacier was grounded on the shore. Adams soils are an example of soils formed in these marine deltas. These deposits are found only along Seven-mile Stream in North Jay and along the Sandy River valley near Farmington and Chesterville.

Later in deglaciation, the sands and gravels were deposited as terraces, kames, deltas, and eskers in contact with the stagnating ice remaining in the valleys. An extensive area of ice-contact deposits occurs along Route 142 between Phillips and Kingfield. Long eskers are found southeast of Stratton along Route 27 and south along Ridge Road in Chesterville. Sand was sometimes deposited in front of the ice margin as outwash plains and valley fill. Good examples of outwash deltas and plains are found around the western end of Flagstaff Lake in Eustis. Adams and Croghan soils are examples of soils formed in ice-contact deposits and outwash plains. These deposits typically yield large quantities of good ground water to private and municipal wells.

Lowlands and valleys were flooded by rising seas until about 11,300 years ago. Sea levels were as much as 230 feet higher than at present. Large quantities of clay- and silt-sized sediment were deposited in these low-lying areas, forming the familiar "blue-clays" most prevalent in the coastal zone and major river valleys. In this soil survey area, only minor amounts of these deposits occur in the Sandy River valley around Farmington and New Sharon. Boothbay and Swanville soils are examples of soils developed on these marine sediments.

Ice and glacial debris sometimes dammed drainageways in lowlands and valleys, creating temporary lakes that trapped large quantities of silt-sized sediment. The only large glaciolacustrine deposit in this area is southwest of Stratton along the South Branch of the Dead River. Boothbay, Nicholville, and Swanville soils are examples of soils developed on these glaciolacustrine sediments.

When meltwater quantities decreased, not all eroded material in the stagnating ice could be transported. Some remained to form a thin cover of till on some of the upland ridges and slopes. Hermon and Berkshire soils are examples of soils formed on this ablation till.

Many lakes, ponds, and other wetlands formed during the last stages of deglaciation. Some still exist, but lacustrine sediments and organic materials filled others. Bucksport and Markey soils are examples of soils formed on the surface layer of organic materials.

The process of erosion, sedimentation, and landscape alteration is still active. Soils continue to form in 'modern' (postglacial) materials. Alluvial soils, such as Fryeburg and Lovewell soils, formed in river and streambottom deposits. Udorthents are a product of man's cut and fill and grading operations.

ECONOMIC GEOLOGY - The area's bedrock contains a few old metallic mineral prospects and small mines, but mining was never very important *(Doyle, 1959)*. Future mineral exploration is likely to be concentrated in areas of volcanic rocks and in igneous plutons, geologic environments similar to those where recent discoveries have been made in other parts of Maine *(Rand, 1958)*.

Granite for dimension stone was quarried from three quarries in the North Jay pluton in the southwest corner of Franklin County. Use of the area's intrusive rocks for building and decorative stone, monuments, and construction stone is not likely to expand significantly.

Limestone once was quarried from the limestone member of the Sangerville formation in Jay.

Peat resources are limited and their future use as fuel or soil conditioner is unlikely.

The mining of glacial ice-contact and outwash deposits for sand and gravel for use in the construction industry continues to be of economic importance.

References

(1) American Association of State Highway and Transportation Officials. 1986. Standard specifications for highway materials and methods of sampling and testing. Ed. 14, 2 vols.

(2) American Society for Testing and Materials. 1993. Standard classification of soils for engineering purposes. ASTM Stand. D 2487

(3) Buol, S.W., F.D. Hole, and R.J. McCracken. 1980. Soil genesis and classification. 3d ed.

(4) Denny, Charles S., 1982. Geomorphology of New England. Geological Survey Professional Paper 1208. U.S. Department of the Interior, Geological Survey, Washington, DC.

(5) Doyle, Robert G., 1959. Mineral Resources Reference Map, Lewiston Sheet, MRRM-2. Department of Economic Development, Maine Geological Survey, Augusta, ME.

(6) Ebel, John E., 1989. 'The Seismicity of Maine' in Neotectonics of Maine - Studies in Seismicity, Crustal Warping, and Sea-Level Change. Maine Department of Conservation, Maine Geological Survey, Augusta, ME.

(7) Grant, Walter J. and Eliot Epstein, 1962. Physical properties and moisture relationships of some representative soil types. The University of Maine Agricultural Experiment Station, Bulletin T2 Technical Series.

(8) Loiselle, Marc and Woodrow Thompson, 1987. 'The Geology of Maine' in Rocks and Minerals, Volume 62, Number 6.

(9) Osberg, Philip H., A. M. Hussey II, and G. M. Boone, Editors, 1985. Bedrock geologic map of Maine. Maine Department of Conservation, Maine Geological Survey, Augusta, ME.

(10) Powell, Douglas S. and David R. Dixon, 1971 & 1982. Forest statistics for Maine. United States Department of Agriculture, Forest Service, Northeast Station, Resource Bulletin Northeast No. 81.

(11) Rand, John R., 1958. Maine Granite Quarries and Prospects, Mineral Resources Index No. 2. Department of Economic Development, Maine Geological Survey, Augusta, ME.

(12) Rourke, Robert V., 1990. Chemical and physical properties of the Aurelie, Burnham, Easton, Lille, Linneus, Monadnock, Nicholville, and Tunbridge soil map units. University of Maine, Maine Agricultural Experiment Station, Technical Bulletin 137.

(13) Rourke, Robert V., 1991. Chemical and physical properties of the Fryeburg, Lovewell, Cornish, and Charles soil map units. University of Maine, Maine Agricultural Experiment Station, Technical Bulletin 145.

(14) Rourke, Robert V., 1994. Chemical and physical properties of the Chesuncook, Colonel, Dixfield, and Telos soil map units. University of Maine, Maine Agricultural and Forest Experiment Station, Technical Bulletin 155.

(15) Rourke, Robert V. and C. Beek, 1968. Soil-water, chemical and physical characteristics of eight soil series in Maine. University of Maine, Maine Agricultural Experiment Station, Technical Bulletin 29.

(16) Rourke, Robert V. and D. C. Bull, 1982. Chemical and physical properties of the Becket, Colton, Finch, Lyman, Masardis, Naumburg, and Skerry soil mapping units. University of Maine, Maine Agricultural Experiment Station, Technical Bulletin 108.

(17) Rourke, Robert V. and K. A. Schmidt, 1979. Chemical and physical properties of the Boothbay, Brayton, Croghan, Monarda, Plaisted, Scantic, and Swanville soil mapping units. University of Maine, Life Sciences and Agricultural Experiment Station, Technical Bulletin 94.

(18) Thompson, Woodrow B. and Harold W. Borns, Editors, 1985. Surficial Geology Map of Maine. Maine Department of Conservation, Maine Geological Survey, Augusta, ME.

(19) United States Department of Agriculture, Soil Conservation Service. 1975. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. U.S. Dep. Agric. Handb. 436.

(20) United States Department of Agriculture, Soil Conservation Service. 1992. Keys to soil taxonomy. 5th ed. Soil Surv. Staff, Soil Manage. Support Serv. Tech. Monogr.19.

(21) United States Department of Agriculture, Soil Conservation Service. 1993. Soil Survey manual. Soil Surv. Staff, U.S. Dep. Agric. Handb. 18.

(22) United States Department of Commerce, 1994. 1992 Census of Agriculture, Maine state and county data. Franklin County, Maine.

Glossary

ABC soil. A soil having an A, a B, and a C horizon.

Ablation till. Loose, permeable till deposited during the final downwasting of glacial ice. Lenses of crudely sorted sand and gravel are common.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well-aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 40-inch profile or to a limiting layer is expressed as:

Very low	0 to 2.4
Low	2.4 to 3.2
Moderate	3.2 to 5.2
High	more than 5.2

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Basal till. Compact glacial till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope. A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Cement rock. Shaly limestone used in the manufacture of cement.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Cirque. A semicircular, concave, bowllike area that has steep faces primarily resulting from glacial ice and snow abrasion.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Compact substratum. The dense zone underlying the solum.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conglomerate. A coarse grained, clastic rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is nearly flat and fan shaped; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Draw. A small stream valley that generally is more open and has broader bottom land than a ravine or gulch.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and

includes everything from the litter on the surface to underlying pure humus.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion pavement. A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Esker. A narrow, winding ridge of stratified gravelly and sandy drift deposited by a stream flowing in a tunnel beneath a glacier.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and

backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Glacial drift. Pulverized and other rock material transported by glacial ice and then deposited. Also, the sorted and unsorted material deposited by streams flowing from glaciers.

Glacial outwash. Gravel, sand, and silt, commonly stratified, deposited by glacial meltwater.

Glacial till. Unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur as kames, eskers, deltas, and outwash plains.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are interbedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Head slope. A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent

subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.
A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.
E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.
B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.
C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.
Cr horizon.—Soft, consolidated bedrock beneath the soil.
R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. An elevated area between two drainageways that sheds water to those drainageways.

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Kame. An irregular, short ridge or hill of stratified glacial drift.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Low strength. The soil is not strong enough to support loads.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Moraine. An accumulation of earth, stones, and other debris deposited by a glacier. Some types are terminal, lateral, medial, and ground.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size

measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nose slope. A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Paleoterrace. An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment. A thin layer of alluvial material that mantles an erosion surface and has been transported to its present position from higher lying areas of the erosion surface.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of

moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for simple slopes are as follows:

Nearly level	0 to 3 percent
Gently sloping	3 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 25 percent
Steep	25 to 45 percent
Very steep	45 percent and higher

Classes for complex slopes are as follows:

Nearly level	0 to 3 percent
Undulating	3 to 8 percent
Rolling	8 to 15 percent
Hilly	15 to 25 percent
Steep	25 to 45 percent
Very steep	45 percent and higher

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. A belt of thick glacial drift that generally marks the termination of important glacial advances.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Water table. The upper limit of the soil or underlying rock material that is wholly saturated with water.

Water table, apparent. A thick zone of free water in the soil. An apparent water table is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil.

Water table, perched. A water table standing above an unsaturated zone. In places, an upper or perched water table is separated from a lower one by a dry zone.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.--Temperature and Precipitation Data

(Recorded in the period 1951-81 at Farmington, ME)

Month	Temperature: Average Daily Maximum	Temperature: Average Minimum	Temperature: Average	Temperature: 2 years in 10 will have-- Maximum temperature higher than--	Temperature: 2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days*	Precipitation: Average	Precipitation: 2 years in 10 will have-- Less than--	Precipitation: 2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average Snowfall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January	26.5	3.1	14.8	50	-27	0	3.24	1.49	4.74	7	20.8
February	30.0	4.6	17.3	51	-24	0	3.49	1.81	4.96	6	20.8
March	38.9	17.1	20.0	62	-12	13	3.75	1.86	5.38	7	16.1
April	51.4	29.2	40.3	77	9	84	3.79	2.42	5.02	8	6.2
May	65.6	39.2	52.4	91	24	390	3.57	1.98	4.96	8	.4
June	74.8	48.8	61.8	91	31	654	3.99	2.45	5.37	9	.0
July	79.7	53.9	66.8	94	39	831	3.69	2.09	5.09	8	.0
August	77.6	51.3	64.5	92	36	760	3.69	2.10	5.09	8	.0
September	69.2	42.8	56.0	88	26	480	3.54	2.01	4.90	7	.0
October	57.6	33.4	45.5	79	17	200	4.11	2.54	5.51	7	1.1
November	43.5	25.1	34.3	68	6	22	4.57	2.93	6.05	8	5.8
December	30.1	10.1	20.1	53	-17	9	4.55	2.24	6.55	8	19.9
Yearly:											
Average--	53.7	29.9	41.8	---	---	---	---	---	---	---	---
Extreme--	---	---	---	95	-29	---	---	---	---	---	---
Total----	---	---	---	---	---	3,443	45.98	38.87	52.78	91	91.9

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40° F).

Table 2.--Freeze Dates in Spring or Fall

(Recorded in the Period 1951-81 at Farmington, ME)

	Temperature		
	24° F or lower	28° F or lower	32° F or lower
Last freezing Temperature In Spring:			
1 year in 10 later than--	May 12	May 28	June 12
2 years in 10 later than--	May 6	May 22	June 6
5 years in 10 later than--	April 24	May 11	May 26
First Freezing Temperature In Fall:			
1 year in 10 earlier than--	September 29	September 16	August 26
2 years in 10 earlier than--	October 4	September 20	September 1
5 years in 10 earlier than--	October 13	September 28	September 14

Table 3.--Growing Season Length

(Recorded in the period 1951-81 at Farmington, ME)

Probability	Daily Minimum Temperature During Growing Season		
	Higher Than 24° F	Higher Than 28° F	Higher Than 32° F
	Days	Days	Days
9 Years in 10	148	119	83
8 Years in 10	156	126	92
5 Years in 10	172	140	110
2 Years in 10	188	154	127
1 Year in 10	196	161	136

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AdB	Adams loamy sand, 0 to 8 percent slopes	3,989	0.5
AdC	Adams loamy sand, 8 to 15 percent slopes	2,091	0.3
AdD	Adams loamy sand, 15 to 25 percent slopes	963	0.1
AED	Adams-Colton association, steep	1,831	0.2
AFC	Adams-Croghan association, strongly sloping	8,191	1.1
AgA	Allagash fine sandy loam, 0 to 3 percent slopes	280	*
AgB	Allagash fine sandy loam, 3 to 8 percent slopes	1,221	0.2
AgC	Allagash fine sandy loam, 8 to 15 percent slopes	350	*
BeB	Berkshire fine sandy loam, 3 to 8 percent slopes	269	*
BeC	Berkshire fine sandy loam, 8 to 15 percent slopes	644	*
BkC	Berkshire fine sandy loam, 8 to 15 percent slopes, very stony	1,388	0.2
BkD	Berkshire fine sandy loam, 15 to 25 percent slopes, very stony	530	*
BoB	Boothbay silt loam, 3 to 8 percent slopes	1,003	0.1
BoC	Boothbay silt loam, 8 to 15 percent slopes	557	*
BpB	Brayton fine sandy loam, 0 to 8 percent slopes	726	*
BrB	Brayton fine sandy loam, 0 to 8 percent slopes, very stony	5,823	0.8
BrC	Brayton fine sandy loam, 8 to 15 percent slopes, very stony	313	*
BSB	Brayton-colonel association, gently sloping, very stony	35,490	4.6
BTB	Brayton-Peacham-Markey association, gently sloping, very stony	32,867	4.3
BW	Bucksport and Markey soils	9,809	1.3
Ca	Charles silt loam	3,008	0.4
CG	Charles-Medomak-Cornish association	5,529	0.7
ChB	Chesuncook silt loam, 3 to 8 percent slopes	1,192	0.2
ChC	Chesuncook silt loam, 8 to 15 percent slopes	842	0.1
ChD	Chesuncook silt loam, 15 to 25 percent slopes	220	*
CkB	Chesuncook silt loam, 3 to 8 percent slopes, very stony	727	*
CkC	Chesuncook silt loam, 8 to 15 percent slopes, very stony	1,637	0.2
CkD	Chesuncook silt loam, 15 to 25 percent slopes, very stony	707	*
CLD	Chesuncook-Telos association, moderately steep, very stony	4,799	0.6
CnB	Colonel fine sandy loam, 3 to 8 percent slopes	1,694	0.2
CnC	Colonel fine sandy loam, 8 to 15 percent slopes	371	*
CoB	Colonel fine sandy loam, 3 to 8 percent slopes, very stony	1,595	0.2
CoC	Colonel fine sandy loam, 8 to 15 percent slopes, very stony	362	*
CPC	Colonel-Dixfield association, strongly sloping, very stony	125,381	16.2
CsB	Colton gravelly fine sandy loam, 0 to 8 percent slopes	1,904	0.2
CsC	Colton gravelly fine sandy loam, 8 to 15 percent slopes	614	*
CsD	Colton gravelly fine sandy loam, 15 to 45 percent slopes	516	*
CTC	Colton-Sheepscot association, rolling	5,461	0.7
CuB	Croghan loamy sand, 0 to 8 percent slopes	2,496	0.3
DfB	Dixfield fine sandy loam, 3 to 8 percent slopes	9,446	1.2
DfC	Dixfield fine sandy loam, 8 to 15 percent slopes	5,034	0.7
DfD	Dixfield fine sandy loam, 15 to 25 percent slopes	237	*
DgB	Dixfield fine sandy loam, 3 to 8 percent slopes, very stony	5,339	0.7
DgC	Dixfield fine sandy loam, 8 to 15 percent slopes, very stony	6,425	0.8
DgD	Dixfield fine sandy loam, 15 to 25 percent slopes, very stony	823	0.1
DMC	Dixfield-Marlow association, strongly sloping, very stony	62,164	8.0
DTC	Dixfield-Colonel association, strongly sloping	2	*
DUD	Dixfield-Colonel association, moderately steep, very stony	17	*
ECC	Elliottsville-Chesuncook-Telos association, strongly sloping, very stony	8,113	1.0
EMC	Elliottsville-Monson complex, rolling, very stony	4,276	0.6
EME	Elliottsville-Monson complex, steep, very stony	5,103	0.7
EtB	Elliottsville-Thorndike complex, 3 to 8 percent slopes	780	0.1
EtC	Elliottsville-Thorndike complex, 8 to 15 percent slopes	1,734	0.2
EtD	Elliottsville-Thorndike complex, 15 to 25 percent slopes	329	*
Fr	Fryeburg silt loam	1,554	0.2
HeC	Hermon fine sandy loam, 3 to 15 percent slopes, very stony	1,357	0.2
HeD	Hermon fine sandy loam, 15 to 25 percent slopes, very stony	199	*
HMC	Hermon-Monadnock association, rolling, very stony	8,852	1.1
HME	Hermon-Monadnock association, steep, very stony	5,597	0.7
Lc	Lovewell-Cornish complex, occasionally flooded	2,214	0.3
Ld	Lovewell-Cornish complex, frequently flooded	654	*

See footnote at end of table.

Table 4.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
LmE	Lyman-Rock outcrop-Tunbridge complex, 15 to 45 percent slopes, very stony	973	0.1
LNC	Lyman-Tunbridge-Abram complex, rolling, very stony	22,150	2.9
LNE	Lyman-Tunbridge-Abram complex, steep, very stony	36,300	4.7
LyC	Lyman-Tunbridge-Rock outcrop complex, 3 to 15 percent slopes, very stony	2,396	0.3
MaB	Madawaska fine sandy loam, 0 to 8 percent slopes	3,361	0.4
MDB	Madawaska-Allagash association, gently sloping	2,675	0.3
MeB	Marlow fine sandy loam, 3 to 8 percent slopes	849	0.1
MeC	Marlow fine sandy loam, 8 to 15 percent slopes	3,242	0.4
MeD	Marlow fine sandy loam, 15 to 25 percent slopes	1,302	0.2
MfB	Marlow fine sandy loam, 3 to 8 percent slopes, very stony	276	*
MfC	Marlow fine sandy loam, 8 to 15 percent slopes, very stony	3,007	0.4
MfD	Marlow fine sandy loam, 15 to 25 percent slopes, very stony	2,437	0.3
MGD	Marlow-Dixfield association, moderately steep, very stony	68,123	8.8
MhB	Masardis fine sandy loam, 0 to 8 percent slopes	1,924	0.2
MhC	Masardis fine sandy loam, 8 to 15 percent slopes	333	*
MhD	Masardis fine sandy loam, 15 to 45 percent slopes	347	*
MKE	Masardis-Adams association, steep	1,034	0.1
MLC	Masardis-Sheepscot association, strongly sloping	3,954	0.5
Mm	Medomak silt loam	1,562	0.2
MNC	Monadnock-Berkshire complex, rolling, very stony	9,441	1.2
MNE	Monadnock-Berkshire complex, steep, very stony	5,262	0.7
MrB	Monarda silt loam, 0 to 8 percent slopes	405	*
MsB	Monarda extremely flaggy silt loam, 0 to 8 percent slopes, very stony	1,920	0.2
MTB	Monarda-Burnham-Bucksport association, gently sloping, very stony	5,858	0.8
MUB	Monarda-Telos association, gently sloping, very stony	22,404	2.9
MVC	Monson-Elliottsville-Telos complex, rolling, very stony	6,876	0.9
Nb	Naumburg loamy sand	2,215	0.3
NS	Naumburg-Searsport association	6,077	0.8
NvB	Nicholville silt loam, 3 to 8 percent slopes	1,694	0.2
NvC	Nicholville silt loam, 8 to 15 percent slopes	184	*
PeB	Peacham-Brayton complex, 0 to 8 percent slopes, very stony	285	*
Pr	Pits, quarry	115	*
Ps	Pits, sand and gravel	856	0.1
RRE	Ricker-Rock outcrop complex, very steep	3,398	0.4
RSE	Ricker-Saddleback association, very steep	16,653	2.2
RYE	Rock outcrop-Abram-Lyman complex, very steep, very stony	1,092	0.1
SAE	Saddleback-Mahoosuc-Sisk association, very steep, very stony	10,946	1.4
SKD	Sisk-Surplus association, moderately steep, very stony	13,944	1.8
Sn	Sunday loamy fine sand	788	0.1
SRC	Surplus-Bemis association, strongly sloping, very stony	674	*
SSC	Surplus-Saddleback-Ricker association, strongly sloping, very stony	2,675	0.3
SVC	Surplus-Sisk association, strongly sloping, very stony	5,051	0.7
Sw	Swanville silt loam	4,066	0.5
SYB	Swanville-Boothbay association, gently sloping	4,607	0.6
TeB	Telos silt loam, 3 to 8 percent slopes	655	*
TeC	Telos silt loam, 8 to 15 percent slopes	192	*
TfB	Telos silt loam, 3 to 8 percent slopes, very stony	3,198	0.4
TfC	Telos silt loam, 8 to 15 percent slopes, very stony	1,167	0.2
THC	Telos-Chesuncook association, strongly sloping, very stony	27,971	3.6
TLB	Telos-Monarda association, gently sloping, rubbly	766	*
TMB	Telos-Monarda-Monson association, undulating, very stony	4,099	0.5
TOC	Thorndike-Elliottsville complex, rolling, very stony	2,923	0.4
TOE	Thorndike-Elliottsville complex, steep, very stony	624	*
TRC	Tunbridge-Berkshire-Dixfield association, rolling, very stony	18,800	2.4
TuB	Tunbridge-Lyman complex, 3 to 8 percent slopes	1,731	0.2
TuC	Tunbridge-Lyman complex, 8 to 15 percent slopes	1,627	0.2
Ud	Udorthents-Urban land complex	1,429	0.2
W	Water	26,613	3.4
	Total	773,165	100.0

* Less than 0.1 percent.

Table 5.--Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of non-irrigated management by component. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
AdB:								
Adams	3s	---	---	16.0	4.5	4.0	4.5	---
AdC:								
Adams	4e	---	---	16.0	4.5	4.0	4.5	---
AdD:								
Adams	6e	---	---	---	---	---	---	---
AED:								
Adams	7e	---	---	---	---	---	---	---
Colton	7e	---	---	---	---	---	---	---
AFC:								
Adams	4e	---	---	---	---	---	---	---
Croghan	2w	---	---	---	---	---	---	---
AgA:								
Allagash	1	5.0	750	22.0	3.5	4.5	8.5	360
AgB:								
Allagash	2e	5.0	750	22.0	3.5	4.5	8.5	360
AgC:								
Allagash	3e	4.5	750	20.0	3.5	4.0	7.5	360
BeB:								
Berkshire	2e	4.5	800	22.0	4.0	4.0	7.8	330
BeC:								
Berkshire	3e	4.0	800	20.0	4.0	3.5	7.2	300
BkC:								
Berkshire	6s	---	---	---	---	---	---	---
BkD:								
Berkshire	6s	---	---	---	---	---	---	---
BoB:								
Boothbay	2w	4.0	600	22.0	4.5	4.0	7.7	270
BoC:								
Boothbay	3e	3.5	600	20.0	4.5	3.5	6.5	270
BpB:								
Brayton	4w	---	---	---	---	---	3.4	---
BrB:								
Brayton	7s	---	---	---	---	---	2.7	---
BrC:								
Brayton	7s	---	---	---	---	---	2.7	---
BSB:								
Brayton	7s	---	---	---	---	---	---	---
Colonel	6s	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
BTB:								
Brayton	7s	---	---	---	---	---	---	---
Peacham	5s	---	---	---	---	---	---	---
Markey	5w	---	---	---	---	---	---	---
BW:								
Bucksport	7w	---	---	---	---	---	---	---
Markey	5w	---	---	---	---	---	---	---
Ca:								
Charles	4w	---	---	---	3.0	2.5	4.8	---
CG:								
Charles	4w	---	---	---	---	---	---	---
Medomak	6w	---	---	---	---	---	---	---
Cornish	3w	---	---	---	---	---	---	---
ChB:								
Chesuncook	2w	4.5	600	18.0	4.0	4.0	7.5	290
ChC:								
Chesuncook	3e	4.0	550	16.0	3.5	3.5	7.0	260
ChD:								
Chesuncook	4e	4.0	500	---	3.5	3.5	6.5	---
CkB:								
Chesuncook	6s	---	---	---	---	---	---	---
CkC:								
Chesuncook	6s	---	---	---	---	---	---	---
CkD:								
Chesuncook	6s	---	---	---	---	---	---	---
CLD:								
Chesuncook	6s	---	---	---	---	---	---	---
Telos	6s	---	---	---	---	---	---	---
CnB:								
Colonel	3w	3.0	---	16.0	3.0	3.0	5.5	---
CnC:								
Colonel	3e	3.0	---	14.0	3.0	3.0	5.5	---
CoB:								
Colonel	6s	---	---	---	---	---	---	---
CoC:								
Colonel	6s	---	---	---	---	---	---	---
CPC:								
Colonel	6s	---	---	---	---	---	---	---
Dixfield	6s	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
CsB:								
Colton----------	3s	2.5	---	12.0	2.0	2.0	5.0	---
CsC:								
Colton----------	4e	2.5	---	---	2.0	2.0	5.0	---
CsD:								
Colton----------	7e	---	---	---	---	---	---	---
CTC:								
Colton----------	4e	---	---	---	---	---	---	---
Sheepscot-------	2e	---	---	---	---	---	---	---
CuB:								
Croghan---------	2w	3.0	---	14.0	---	3.0	5.5	---
DfB:								
Dixfield--------	2w	4.0	600	20.0	4.0	4.0	8.0	270
DfC:								
Dixfield--------	3e	4.0	550	18.0	4.0	4.0	8.0	240
DfD:								
Dixfield--------	4e	3.5	500	16.0	3.5	3.5	7.0	---
DgB:								
Dixfield--------	6s	---	---	---	---	---	---	---
DgC:								
Dixfield--------	6s	---	---	---	---	---	---	---
DgD:								
Dixfield--------	6s	---	---	---	---	---	---	---
DMC:								
Dixfield--------	6s	---	---	---	---	---	---	---
Marlow----------	6s	---	---	---	---	---	---	---
DTC:								
Dixfield--------	3e	---	---	---	---	---	---	---
Colonel---------	3w	---	---	---	---	---	---	---
DUD:								
Dixfield--------	6s	---	---	---	---	---	---	---
Colonel---------	6s	---	---	---	---	---	---	---
ECC:								
Elliottsville---	6s	---	---	---	---	---	---	---
Chesuncook------	6s	---	---	---	---	---	---	---
Telos-----------	6s	---	---	---	---	---	---	---
EMC:								
Elliottsville---	6s	---	---	---	---	---	---	---
Monson----------	6s	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
EME:								
Elliottsville---	6s	---	---	---	---	---	---	---
Monson----------	6s	---	---	---	---	---	---	---
EtB:								
Elliottsville---	2e	4.0	600	20.0	3.5	3.5	4.2	275
Thorndike-------	2s	4.0	500	16.0	3.0	3.0	5.7	270
EtC:								
Elliottsville---	3e	4.0	550	18.0	3.5	3.5	4.2	225
Thorndike-------	3e	3.5	450	14.0	2.5	2.5	5.7	240
EtD:								
Elliottsville---	4e	3.5	500	16.0	3.0	3.0	3.6	175
Thorndike-------	4e	2.5	400	---	2.5	2.5	4.7	---
Fr:								
Fryeburg--------	1	---	---	26.0	4.5	4.5	8.5	330
HeC:								
Hermon----------	6s	---	---	---	---	---	---	---
HeD:								
Hermon----------	6s	---	---	---	---	---	---	---
HMC:								
Hermon----------	6s	---	---	---	---	---	---	---
Monadnock-------	6s	---	---	---	---	---	---	---
HME:								
Hermon----------	7s	---	---	---	---	---	---	---
Monadnock-------	7s	---	---	---	---	---	---	
Lc:								
Lovewell--------	2w	---	---	25.0	4.5	4.5	8.5	310
Cornish---------	3w	---	---	18.0	3.5	3.5	7.0	250
Ld:								
Lovewell--------	2w	---	---	23.0	4.0	4.0	8.5	290
Cornish---------	3w	---	---	18.0	3.5	3.5	7.0	250
LmE:								
Lyman-----------	7s	---	---	---	---	---	---	---
Rock outcrop----	8s	---	---	---	---	---	---	---
Tunbridge-------	7s	---	---	---	---	---	---	---
LNC:								
Lyman-----------	6s	---	---	---	---	---	---	---
Tunbridge-------	6s	---	---	---	---	---	---	---
Abram-----------	7s	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
LNE:								
Lyman	7s	---	---	---	---	---	---	---
Tunbridge	7s	---	---	---	---	---	---	---
Abram	7s	---	---	---	---	---	---	---
LyC:								
Lyman	6s	---	---	---	---	---	---	---
Tunbridge	6s	---	---	---	---	---	3.1	---
Rock outcrop	8s	---	---	---	---	---	---	---
MaB:								
Madawaska	2w	4.5	650	22.0	4.0	3.5	6.7	270
MDB:								
Madawaska	2w	---	---	---	---	---	---	
Allagash	2e	---	---	---	---	---	---	
MeB:								
Marlow	2e	4.5	1000	22.0	4.0	4.0	7.8	330
MeC:								
Marlow	3e	4.5	1000	20.0	4.0	4.0	7.8	300
MeD:								
Marlow	4e	4.0	700	18.0	3.5	3.5	6.8	---
MfB:								
Marlow	6s	---	---	---	---	---	---	---
MfC:								
MARLOW	6s	---	---	---	---	---	---	---
MfD:								
Marlow	6s	---	---	---	---	---	---	---
MGD:								
Marlow	6s	---	---	---	---	---	---	---
Dixfield	6s	---	---	---	---	---	---	---
MhB:								
Masardis	3s	3.5	---	14.0	2.5	3.0	5.7	250
MhC:								
Masardis	4s	3.0	---	12.0	2.5	2.5	4.8	230
MhD:								
Masardis	7s	---	---	---	---	---	---	---
MKE:								
Masardis	7s	---	---	---	---	---	---	---
Adams	7e	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
MLC:								
Masardis	3s	---	---	---	---	---	---	---
Sheepscot	2e	---	---	---	---	---	---	---
Mm:								
Medomak	6w	---	---	---	---	---	---	---
MNC:								
Monadnock	6s	---	---	---	---	---	---	---
Berkshire	6s	---	---	---	---	---	---	---
MNE:								
Monadnock	7s	---	---	---	---	---	---	---
Berkshire	7s	---	---	---	---	---	---	---
MrB:								
Monarda	4w	---	---	---	2.0	---	4.5	---
MsB:								
Monarda	7s	---	---	---	---	---	---	---
MTB:								
Monarda	7s	---	---	---	---	---	---	---
Burnham	7s	---	---	---	---	---	---	---
Bucksport	7w	---	---	---	---	---	---	---
MUB:								
Monarda	7s	---	---	---	---	---	---	---
Telos	6s	---	---	---	---	---	---	---
MVC:								
Monson	6s	---	---	---	---	---	---	---
Elliottsville	6s	---	---	---	---	---	---	---
Telos	6s	---	---	---	---	---	---	---
Nb:								
Naumburg	4w	---	---	---	---	---	---	---
NS:								
Naumburg	4w	---	---	---	---	---	---	---
Searsport	5w	---	---	---	---	---	---	---
NvB:								
Nicholville	2e	4.5	---	20.0	4.5	4.0	7.5	270
NvC:								
Nicholville	3e	4.0	---	16.0	4.0	3.5	6.5	240
PeB:								
Peacham	5s	---	---	---	---	---	1.8	---
Brayton	7s	---	---	---	---	---	2.7	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
Pr:								
Pits	8s	---	---	---	---	---	---	---
Ps:								
Pits	8s	---	---	---	---	---	---	---
RRE:								
Ricker	7s	---	---	---	---	---	---	---
Rock outcrop	8s	---	---	---	---	---	---	---
RSE:								
Ricker	7s	---	---	---	---	---	---	---
Saddleback	7s	---	---	---	---	---	---	---
RYE:								
Rock outcrop	8s	---	---	---	---	---	---	---
Abram	7s	---	---	---	---	---	---	---
Lyman	7s	---	---	---	---	---	---	---
SAE:								
Saddleback	7s	---	---	---	---	---	---	---
Mahoosuc	8s	---	---	---	---	---	---	---
Sisk	7s	---	---	---	---	---	---	---
SKD:								
Sisk	7s	---	---	---	---	---	---	---
Surplus	7s	---	---	---	---	---	---	---
Sn:								
Sunday	3s	2.5	---	12.0	2.0	2.0	3.6	230
SRC:								
Surplus	7s	---	---	---	---	---	---	---
Bemis	7s	---	---	---	---	---	---	---
SSC:								
Surplus	7s	---	---	---	---	---	---	---
Saddleback	7s	---	---	---	---	---	---	---
Ricker	7s	---	---	---	---	---	---	---
SVC:								
Surplus	7s	---	---	---	---	---	---	---
Sisk	7s	---	---	---	---	---	---	---
Sw:								
Swanville	4w	---	---	---	3.0	---	5.0	---
SYB:								
Swanville	4w	---	---	---	---	---	---	---
Boothbay	2w	---	---	---	---	---	---	---

Table 5.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land Capability	Alfalfa hay	Apples	Corn silage	Grass hay	Grass-legume hay	Pasture	Potatoes Irish
		Tons	Bu	Tons	Tons	Tons	AUM	Bu
TeB:								
Telos----------	3w	---	---	18.0	4.0	4.0	7.5	---
TeC:								
Telos----------	3e	---	---	14.0	3.0	3.0	7.0	---
TfB:								
Telos----------	6s	---	---	---	---	---	---	---
TfC:								
Telos----------	6s	---	---	---	---	---	---	---
THC:								
Telos----------	6s	---	---	---	---	---	---	---
Chesuncook------	6s	---	---	---	---	---	---	---
TLB:								
Telos----------	8s	---	---	---	---	---	---	---
Monarda---------	8s	---	---	---	---	---	---	---
TMB:								
Telos----------	6s	---	---	---	---	---	---	---
Monarda---------	7s	---	---	---	---	---	---	---
Monson----------	6s	---	---	---	---	---	---	---
TOC:								
Thorndike-------	6s	---	---	---	---	---	---	---
Elliottsville---	6s	---	---	---	---	---	---	---
TOE:								
Thorndike-------	7s	---	---	---	---	---	---	---
Elliottsville---	7s	---	---	---	---	---	---	---
TRC:								
Tunbridge-------	6s	---	---	---	---	---	---	---
Berkshire-------	6s	---	---	---	---	---	---	---
Dixfield--------	6s	---	---	---	---	---	---	---
TuB:								
Tunbridge-------	2e	4.0	550	20.0	3.5	3.5	5.7	275
Lyman----------	3e	---	---	14.0	2.0	2.5	---	225
TuC:								
Tunbridge-------	3e	4.0	550	18.0	3.5	3.5	5.7	225
Lyman----------	4e	---	---	12.0	2.0	2.5	---	200
Ud:								
Udorthents------	---	---	---	---	---	---	---	---
Urban land------	8s	---	---	---	---	---	---	---
W:								
Water----------	---	---	---	---	---	---	---	---

Table 6.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name.)

Map symbol	Soil name
AgA	Allagash fine sandy loam, 0 to 3 percent slopes
AgB	Allagash fine sandy loam, 3 to 8 percent slopes
BeB	Berkshire fine sandy loam, 3 to 8 percent slopes
ChB	Chesuncook silt loam, 3 to 8 percent slopes
DfB	Dixfield fine sandy loam, 3 to 8 percent slopes
EtB	Elliottsville-Thorndike complex, 3 to 8 percent slopes
Fr	Fryeburg silt loam
Lc	Lovewell-Cornish complex, occassionaly flooded
MaB	Madawaska fine sandy loam, 0 to 8 percent slopes
MDB	Madawaska-Allagash association, gently sloping
MeB	Marlow fine sandy loam, 3 to 8 percent slopes
TuB	Tunbridge-Lyman complex, 3 to 8 percent slopes

Table 7.--Forestland Management and Productivity

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
AdB:										
Adams	8S	Slight	Slight	Severe	Slight	Slight	eastern white pine	66	114	European larch, eastern white pine, red pine
							American beech	---	---	
							eastern hemlock	---	---	
							red maple	---	---	
							sugar maple	61	43	
AdC:										
Adams	8S	Slight	Slight	Severe	Slight	Slight	eastern white pine	66	114	European larch, eastern white pine, red pine
							American beech	---	---	
							eastern hemlock	---	---	
							red maple	---	---	
							sugar maple	61	43	
AdD:										
Adams	8S	Moderate	Moderate	Severe	Slight	Slight	eastern white pine	66	114	European larch, eastern white pine, red pine
							American beech	---	---	
							eastern hemlock	---	---	
							red maple	---	---	
							sugar maple	61	43	
AED:										
Adams	8S	Moderate	Moderate	Severe	Slight	Slight	eastern white pine	66	114	European larch, eastern white pine, red pine
							American beech	---	---	
							eastern hemlock	---	---	
							red maple	---	---	
							sugar maple	61	43	
Colton	7S	Moderate	Moderate	Severe	Slight	Slight	eastern white pine	62	114	European larch, eastern white pine, red pine
							red pine	52	86	
							red spruce	39	86	
							sugar maple	61	43	
							white spruce	52	114	
AFC:										
Adams	8S	Slight	Slight	Severe	Slight	Slight	eastern white pine	66	114	European larch, eastern white pine, red pine
							American beech	---	---	
							eastern hemlock	---	---	
							red maple	---	---	
							sugar maple	61	43	
Croghan	10S	Slight	Slight	Moderate	Slight	Moderate	eastern white pine	65	143	European larch, Norway spruce, eastern white pine
							red maple	---	---	
							sugar maple	55	29	
AgA:										
Allagash	10A	Slight	Slight	Slight	Slight	Slight	eastern white pine	85	143	European larch, Scotch pine, eastern white pine, red pine, white spruce
							American beech	---	---	
							balsam fir	---	---	
							eastern hemlock	---	---	
							paper birch	---	---	
							red maple	---	---	
							red pine	71	129	
							red spruce	---	---	
							white spruce	52	114	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
AgB:										
Allagash-----	10A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	85	143	European larch,
							American beech------	---	---	Scotch pine,
							balsam fir----------	---	---	eastern white
							eastern hemlock-----	---	---	pine, red pine,
							paper birch---------	---	---	white spruce
							red maple----------	---	---	
							red pine----------	71	129	
							red spruce----------	---	---	
							white spruce--------	52	114	
AgC:										
Allagash-----	10A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	85	143	European larch,
							American beech------	---	---	Scotch pine,
							balsam fir----------	---	---	eastern white
							eastern hemlock-----	---	---	pine, red pine,
							paper birch---------	---	---	white spruce
							red maple----------	---	---	
							red pine----------	71	129	
							red spruce----------	---	---	
							white spruce--------	52	114	
BeB:										
Berkshire----	9A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	72	129	Douglas fir,
							balsam fir----------	60	114	balsam, fir,
							paper birch---------	60	57	eastern white
							red pine----------	65	114	pine, red pine,
							red spruce----------	50	114	white spruce
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
BeC:										
Berkshire----	9A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	72	129	Douglas fir,
							balsam fir----------	60	114	balsam fir,
							paper birch---------	60	57	eastern white
							red pine----------	65	114	pine, red pine,
							red spruce----------	50	114	white spruce
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
BkC:										
Berkshire----	9A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	72	129	balsam fir,
							balsam fir----------	60	114	eastern white
							paper birch---------	60	57	pine, red pine,
							red pine----------	65	114	white spruce
							red spruce----------	50	114	
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
BkD:										
Berkshire----	9R	Moderate	Moderate	Slight	Slight	Slight	eastern white pine--	72	129	balsam fir,
							eastern white pine--	60	114	eastern white
							paper birch---------	60	57	pine, red pine,
							red pine----------	65	114	white spruce
							red spruce----------	50	114	
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
BoB:										
Boothbay-----	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	62	114	eastern white
							balsam fir----------	55	114	pine, white
							eastern hemlock-----	---	---	spruce
							paper birch---------	56	57	
							red maple----------	56	29	
							red spruce----------	---	---	
							white spruce--------	55	129	
BoC:										
Boothbay-----	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	62	114	eastern white
							balsam fir----------	55	114	pine, white
							eastern hemlock-----	---	---	spruce
							paper birch---------	56	57	
							red maple----------	56	29	
							red spruce----------	---	---	
							white spruce--------	55	129	
BpB:										
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	68	129	spruce, tamarack
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	
BrB:										
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	68	129	spruce, tamarack
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	
BrC:										
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	68	129	spruce, tamarack
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
BSB:										
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red spruce, tamarack
							balsam fir----------	68	129	
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch, black spruce, eastern white pine, tamarack
							balsam fir----------	54	100	
							paper birch---------	55	57	
							red maple----------	64	43	
							red spruce----------	45	100	
BTB:										
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red spruce, tamarack
							balsam fir----------	68	129	
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	
Peacham------	7W	Slight	Severe	Severe	Severe	Severe	eastern white pine--	57	100	---
							black spruce--------	---	---	
							eastern arborvitae--	---	---	
							European alder------	---	---	
							red maple----------	60	43	
							red spruce----------	---	---	
							tamarack----------	---	---	
Markey-------	2W	Slight	Severe	Severe	Severe	Severe	black spruce--------	20	29	---
							balsam fir----------	---	---	
							black ash----------	---	---	
							eastern arborvitae--	---	---	
							paper birch---------	---	---	
							quaking aspen-------	45	29	
							red maple----------	---	---	
							tamarack----------	---	---	
							white spruce--------	---	---	
BW:										
Bucksport----	2W	Slight	Severe	Severe	Severe	Severe	black spruce--------	25	29	---
							balsam fir----------	30	57	
							eastern arborvitae--	---	---	
							gray birch----------	---	---	
							red maple----------	---	---	
							tamarack----------	---	---	
Markey-------	2W	Slight	Severe	Severe	Severe	Severe	black spruce--------	20	29	---
							balsam fir----------	---	---	
							black ash----------	---	---	
							eastern arborvitae--	---	---	
							paper birch---------	---	---	
							quaking aspen-------	45	29	
							red maple----------	---	---	
							tamarack----------	---	---	
							white spruce--------	---	---	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
Ca:										
Charles------	7W	Slight	Severe	Moderate	Moderate	Severe	eastern white pine--	60	100	European larch,
							balsam fir----------	50	100	black spruce,
							black spruce--------	50	43	red spruce,
							red maple----------	55	29	tamarack
							red spruce----------	40	86	
							tamarack----------	---	---	
CG:										
Charles------	7W	Slight	Severe	Moderate	Moderate	Severe	eastern white pine--	60	100	European larch,
							balsam fir----------	50	100	black spruce,
							black spruce--------	50	43	red spruce,
							red maple----------	55	29	tamarack
							red spruce----------	40	86	
							tamarack----------	---	---	
Medomak------	6W	Slight	Severe	Severe	Severe	Severe	eastern white pine--	55	86	black spruce
							black spruce--------	---	---	
							gray birch----------	---	---	
							red maple----------	47	29	
							tamarack----------	---	---	
Cornish------	8W	Slight	Moderate	Slight	Moderate	Moderate	eastern white pine--	65	114	European larch,
							American elm--------	---	---	black spruce,
							balsam fir----------	55	114	red spruce,
							gray birch----------	---	---	tamarack
							red maple----------	57	29	
							red spruce----------	45	100	
ChB:										
Chesuncook---	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce----------	47	100	spruce
							sugar maple---------	55	29	
ChC:										
Chesuncook---	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce----------	47	100	spruce
							sugar maple---------	55	29	
ChD:										
Chesuncook---	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce----------	47	100	spruce
							sugar maple---------	55	29	
CkB:										
Chesuncook---	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce----------	47	100	spruce
							sugar maple---------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
CkC:										
Chesuncook---	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce---------	47	100	
							sugar maple---------	55	29	
CkD:										
Chesuncook---	9R	Moderate	Moderate	Slight	Moderate	Severe	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce---------	47	100	spruce
							sugar maple---------	55	29	
CLD:										
Chesuncook---	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce---------	47	100	spruce
							sugar maple---------	55	29	
Telos--------	8R	Slight	Moderate	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	53	100	spruce, white
							red maple----------	55	29	spruce
							red spruce---------	44	86	
							white spruce--------	55	129	
CnB:										
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch,
							balsam fir----------	54	100	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce---------	45	100	
CnC:										
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch,
							balsam fir----------	54	100	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce---------	45	100	
CoB:										
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch,
							balsam fir----------	54	100	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce---------	45	100	
CoC:										
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch,
							balsam fir----------	54	100	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce---------	45	100	
CPC:										
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	114	European larch,
							balsam fir----------	54	100	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce---------	45	100	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
CPC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch, black spruce, eastern white pine
							balsam fir----------	64	129	
							paper birch---------	62	72	
							red spruce----------	54	114	
							sugar maple---------	62	43	
CsB:										
Colton-------	7S	Slight	Slight	Severe	Slight	Slight	eastern white pine--	58	100	European larch, eastern white pine, red pine
							red pine----------	52	86	
							red spruce----------	39	86	
							sugar maple---------	61	43	
							white spruce--------	52	114	
CsC:										
Colton-------	7S	Slight	Slight	Severe	Slight	---	eastern white pine--	58	100	European larch, eastern white pine, red pine
							red pine----------	52	86	
							red spruce----------	39	86	
							sugar maple---------	61	43	
							white spruce--------	52	114	
CsD:										
Colton-------	7S	Moderate	Moderate	Severe	Slight	Slight	eastern white pine--	62	100	European larch, eastern white pine, red pine
							red pine----------	52	86	
							red spruce----------	39	86	
							sugar maple---------	61	43	
							white spruce--------	52	114	
CTC:										
Colton-------	7S	Slight	Slight	Severe	Slight	Slight	eastern white pine--	62	100	European larch, eastern white pine, red pine
							red pine----------	52	86	
							red spruce----------	39	86	
							sugar maple---------	61	43	
							white spruce--------	52	114	
Sheepscot----	8A	Slight	Slight	Moderate	Slight	Moderate	eastern white pine--	68	114	European larch, eastern white pine, tamarack, white spruce
							American beech------	55	29	
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							eastern hemlock-----	---	---	
							paper birch---------	55	57	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	55	129	
							yellow birch--------	55	29	
CuB:										
Croghan------	10S	Slight	Slight	Moderate	Slight	Moderate	eastern white pine--	65	143	European larch, Norway spruce, eastern white pine
							red maple----------	---	---	
							sugar maple---------	55	29	
DfB:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch, black spruce, eastern white pine
							balsam fir----------	64	129	
							paper birch---------	62	72	
							red spruce----------	54	114	
							sugar maple---------	62	43	
							white spruce--------	64	143	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
DfC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
							white spruce--------	64	143	
DfD:										
Dixfield-----	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							eastern white pine--	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
							white spruce--------	64	143	
DgB:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
DgC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
DgD:										
Dixfield-----	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
DMC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	70	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
Marlow-------	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	60	114	eastern white
							American beech------	60	43	pine, red pine,
							balsam fir----------	66	114	white spruce
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
DTC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	74	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
							white spruce--------	64	143	
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	100	European larch,
							balsam fir----------	54	114	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce----------	45	100	
DUD:										
Dixfield-----	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	74	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
Colonel------	8W	Slight	Moderate	Slight	Severe	Severe	eastern white pine--	64	100	European larch,
							balsam fir----------	54	114	black spruce,
							paper birch---------	55	57	eastern white
							red maple----------	64	43	pine, tamarack
							red spruce----------	45	100	
ECC:										
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
Chesuncook---	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	69	129	eastern white
							balsam fir----------	55	114	pine, red
							red maple----------	55	29	spruce, white
							red spruce----------	47	100	spruce
							sugar maple---------	55	29	
Telos--------	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	53	100	spruce, white
							red maple----------	55	29	spruce
							red spruce----------	44	86	
							white spruce--------	55	129	
EMC:										
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	69	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
EMC:										
Monson-------	8D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	65	114	eastern white
							balsam fir----------	52	100	pine, red
							red spruce----------	40	86	spruce, white
							white spruce--------	58	129	spruce
EME:										
Elliottsville	10R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
Monson-------	8R	Moderate	Moderate	Moderate	Severe	Slight	eastern white pine--	65	114	eastern white
							balsam fir----------	52	100	pine, red
							red spruce----------	40	86	spruce, white
							white spruce--------	58	129	spruce
EtB:										
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	67	143	
							yellow birch--------	55	29	
Thorndike----	8D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	62	114	eastern white
							paper birch---------	56	57	pine, white
							red spruce----------	46	100	spruce
							white spruce--------	56	129	
EtC:										
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	67	143	
							yellow birch--------	55	29	
Thorndike----	8D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	62	114	eastern white
							paper birch---------	56	57	pine, white
							red spruce----------	46	100	spruce
							white spruce--------	56	129	
EtD:										
Elliottsville	10R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	67	143	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
									cu ft/ac	
EtD:										
Thorndike----	8D	Moderate	Moderate	Moderate	Severe	Slight	eastern white pine--	62	114	eastern white pine, white spruce
							paper birch---------	56	57	
							red spruce----------	46	100	
							white spruce--------	56	129	
Fr:										
Fryeburg-----	10A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	75	143	European larch, Japanese larch, eastern white pine, red spruce, tamarack, white spruce
							American elm--------	---	---	
							balsam fir----------	65	129	
							gray birch----------	---	---	
							northern red oak----	---	---	
							red maple----------	62	43	
							red spruce----------	55	129	
							white spruce--------	65	143	
HeC:										
Hermon-------	7S	Slight	Slight	Moderate	Slight	Slight	eastern white pine--	59	100	European larch, eastern white pine, red pine
							red pine----------	59	100	
							red spruce----------	46	100	
							sugar maple---------	55	29	
							white spruce--------	45	100	
HeD:										
Hermon-------	7R	Moderate	Moderate	Moderate	Slight	Slight	eastern white pine--	59	100	European larch, eastern white pine, red pine
							red pine----------	59	100	
							red spruce----------	46	100	
							sugar maple---------	55	29	
							white spruce--------	45	100	
HMC:										
Hermon-------	7S	Slight	Slight	Moderate	Slight	Slight	eastern white pine--	59	100	European larch, eastern white pine, red pine
							red pine----------	59	100	
							red spruce----------	46	100	
							sugar maple---------	55	29	
							white spruce--------	45	100	
Monadnock----	8A	Slight	Slight	Slight	Slight	Moderate	eastern white pine--	63	114	eastern white pine, red pine, white spruce
							northern red oak----	55	43	
							red pine----------	60	100	
							white spruce--------	55	129	
HME:										
Hermon-------	7R	Moderate	Moderate	Moderate	Slight	Slight	eastern white pine--	59	100	European larch, eastern white pine, red pine
							red pine----------	59	100	
							red spruce----------	46	100	
							sugar maple---------	55	29	
							white spruce--------	45	100	
Monadnock----	8R	Moderate	Moderate	Slight	Slight	Moderate	eastern white pine--	63	114	eastern white pine, red pine, white spruce
							northern red oak----	55	43	
							red pine----------	60	100	
							white spruce--------	55	129	
Lc:										
Lovewell-----	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	75	143	European larch, eastern white pine, red spruce, white spruce
							American elm--------	---	---	
							balsam fir----------	65	129	
							red maple----------	62	43	
							red spruce----------	55	129	
							white spruce--------	65	143	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
Lc:										
Cornish------	8W	Slight	Moderate	Slight	Moderate	Moderate	eastern white pine--	65	114	European larch,
							American elm--------	---	---	black spruce,
							balsam fir----------	55	114	red spruce,
							gray birch----------	---	---	tamarack
							red maple----------	57	29	
							red spruce----------	45	100	
Ld:										
Lovewell-----	10A	Slight	Slight	Severe	Moderate	Moderate	eastern white pine--	75	143	European larch,
							American elm--------	---	---	eastern white
							balsam fir----------	65	129	pine, red
							red maple----------	62	43	spruce, white
							red spruce----------	55	129	spruce
							white spruce--------	65	143	
Cornish------	8W	Slight	Moderate	Severe	Moderate	Moderate	eastern white pine--	65	114	European larch,
							American elm--------	---	---	black spruce,
							balsam fir----------	55	114	red spruce,
							gray birch----------	---	---	tamarack
							red maple----------	57	29	
							red spruce----------	45	100	
LmE:										
Lyman--------	2D	Moderate	Moderate	Moderate	Severe	Moderate	eastern white pine--	56	100	balsam fir,
							balsam fir----------	60	114	eastern white
							red spruce----------	40	86	pine, red pine,
							sugar maple---------	50	29	white spruce
							white spruce--------	55	129	
Rock Outcrop-	---	---	---	---	---	---	---	---	---	---
Tunbridge----	8R	Moderate	Moderate	Slight	Moderate	Slight	eastern white pine--	68	114	Scotch pine,
							balsam fir----------	---	---	balsam fir,
							northern red oak----	---	---	eastern white
							paper birch---------	---	---	pine, red spruce
							red spruce----------	50	114	tamarack, white
							sugar maple---------	60	43	spruce
							white ash-----------	65	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
LNC:										
Lyman--------	7D	Slight	Slight	Moderate	Severe	Moderate	eastern white pine--	56	100	balsam fir,
							balsam fir----------	60	114	eastern white
							red spruce----------	40	86	pine, red pine,
							sugar maple---------	50	29	white spruce
							white spruce	55	129	
Tunbridge----	8A	Slight	Slight	Slight	Moderate	Slight	eastern white pine--	68	114	Scotch pine,
							balsam fir----------	50	86	balsam fir,
							northern red oak----	---	---	eastern white
							paper birch---------	---	---	pine, red
							red spruce----------	50	114	spruce,
							sugar maple---------	60	43	tamarack, white
							white ash-----------	65	43	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
LNC:										
Abram--------	5D	Slight	Slight	Severe	Severe	Slight	eastern white pine--	48	72	jack pine
							balsam fir----------	33	57	
							eastern hemlock-----	---	---	
							eastern hophornbeam-	---	---	
							gray birch----------	---	---	
							jack pine----------	---	---	
							paper birch---------	40	43	
							red spruce----------	34	57	
							scarlet oak---------	40	29	
							white spruce--------	37	72	
LNE:										
Lyman--------	7D	Moderate	Moderate	Moderate	Severe	Moderate	eastern white pine--	56	100	balsam fir,
							balsam fir----------	60	114	eastern white
							red spruce----------	40	86	pine, red pine,
							sugar maple---------	50	29	white spruce
							white spruce	55	129	
Tunbridge----	8R	Moderate	Moderate	Slight	Moderate	Slight	eastern white pine--	68	114	Scotch pine,
							balsam fir----------	---	---	balsam fir,
							northern red oak----	---	---	eastern white
							paper birch---------	---	---	pine, red
							red spruce----------	50	114	spruce,
							sugar maple---------	60	43	tamarack, white
							white ash----------	65	43	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
Abram--------	5D	Moderate	Moderate	Severe	Severe	Slight	eastern white pine--	48	72	jack pine
							balsam fir----------	33	57	
							eastern hemlock-----	---	---	
							eastern hophornbeam-	48	72	
							gray birch----------	---	---	
							jack pine----------	---	---	
							paper birch---------	40	43	
							red spruce----------	34	57	
							scarlet oak---------	40	29	
							white spruce--------	37	72	
LyC:										
Lyman--------	7D	Slight	Slight	Moderate	Severe	Moderate	eastern white pine--	56	100	balsam fir,
							balsam fir----------	60	114	eastern white
							red spruce----------	40	86	pine, red pine,
							sugar maple---------	50	29	white spruce
							white spruce--------	55	129	
Tunbridge----	8A	Slight	Slight	Slight	Moderate	Slight	eastern white pine--	50	86	Scotch pine,
							balsam fir----------	---	---	balsam fir,
							northern red oak----	---	---	eastern white
							paper birch---------	---	---	pine, red
							red spruce----------	50	114	spruce,
							sugar maple---------	60	43	tamarack, white
							white ash----------	65	43	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
Rock Outcrop--	---	---	---	---	---	---	---	---	---	---

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
MaB:										
Madawaska----	8A	Slight	Slight	Slight	Slight	Moderate	eastern white pine--	68	114	European larch,
							balsam fir----------	51	100	balsam fir,
							paper birch---------	58	57	eastern white
							red spruce----------	49	100	pine, white
							sugar maple---------	63	43	spruce
							white spruce--------	51	114	
MDB:										
Madawaska----	8A	Slight	Slight	Slight	Slight	Moderate	eastern white pine--	68	114	European larch,
							balsam fir----------	51	100	balsam fir,
							paper birch---------	58	57	eastern white
							red spruce----------	49	100	pine, white
							sugar maple---------	63	43	spruce
							white spruce--------	51	114	
Allagash-----	10A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	85	143	European larch,
							American beech------	---	---	Scotch pine,
							balsam fir----------	---	---	eastern white
							eastern hemlock-----	---	---	pine, red pine,
							paper birch---------	---	---	white spruce
							red maple----------	---	---	
							red pine----------	71	129	
							red spruce----------	---	---	
							white spruce--------	52	114	
MeB:										
Marlow-------	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white
							American beech------	60	43	pine, red pine,
							balsam fir----------	58	114	white spruce
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
MeC:										
Marlow-------	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white
							American beech------	60	43	pine, red pine,
							balsam fir----------	58	114	white spruce
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
MeD:										
Marlow-------	8R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white
							American beech------	60	43	pine, red pine,
							balsam fir----------	58	114	white spruce
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
MfB:										
Marlow-------	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white pine, red pine, white spruce
							American beech------	60	43	
							balsam fir----------	58	114	
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
MfC:										
Marlow-------	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white pine, red pine, white spruce
							American beech------	60	43	
							balsam fir----------	58	114	
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
MfD:										
Marlow-------	8R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white pine, red pine, white spruce
							American beech------	60	43	
							balsam fir----------	58	114	
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
MGD:										
Marlow-------	8R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	66	114	eastern white pine, red pine, white spruce
							American beech------	60	43	
							balsam fir----------	58	114	
							paper birch---------	65	72	
							red pine----------	65	114	
							red spruce----------	48	100	
							sugar maple---------	60	43	
							white ash----------	67	43	
							white spruce--------	60	143	
							yellow birch--------	60	43	
Dixfield-----	9R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	74	129	European larch, black spruce, eastern white pine
							balsam fir----------	64	129	
							paper birch---------	62	72	
							red spruce----------	54	114	
							sugar maple---------	62	43	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
MhB:										
Masardis-----	7S	Slight	Slight	Moderate	Slight	Slight	eastern white pine--	60	100	eastern white pine, red pine, white spruce
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							paper birch---------	55	57	
							red pine----------	52	86	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	48	100	
							yellow birch--------	55	29	
MhC:										
Masardis-----	7S	Slight	Slight	Moderate	Slight	Slight	eastern white pine--	60	100	eastern white pine, red pine, white spruce
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							paper birch---------	55	57	
							red pine----------	52	86	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	48	100	
							yellow birch--------	55	29	
MhD:										
Masardis-----	7R	Moderate	Moderate	Moderate	Slight	Slight	eastern white pine--	60	100	eastern white pine, red pine, white spruce
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							paper birch---------	55	57	
							red pine----------	52	86	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	48	100	
							yellow birch--------	55	29	
MKE:										
Masardis-----	7R	Moderate	Moderate	Moderate	Slight	Slight	eastern white pine--	60	100	eastern white pine, red pine, white spruce
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							paper birch---------	55	57	
							red pine----------	52	86	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	48	100	
							yellow birch--------	55	29	
Adams--------	3S	Moderate	Moderate	Severe	Slight	Slight	eastern white pine--	66	114	European larch, eastern white pine, red pine
							American beech------	---	---	
							eastern hemlock-----	---	---	
							red maple----------	---	---	
							sugar maple---------	61	43	
MLC:										
Masardis-----	7S	Slight	Slight	Moderate	Slight	Moderate	eastern white pine--	60	100	eastern white pine, red pine, white spruce
							balsam fir----------	55	114	
							eastern arborvitae--	55	86	
							paper birch---------	55	57	
							red pine----------	52	86	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	48	100	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
									cu ft/ac	
MLC:										
Sheepscot----	8A	Slight	Slight	Moderate	Slight	Moderate	eastern white pine--	68	114	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, tamarack,
							eastern arborvitae--	55	86	white spruce
							eastern hemlock-----	---	---	
							paper birch---------	55	57	
							red spruce----------	45	100	
							sugar maple---------	55	29	
							white spruce--------	55	129	
							yellow birch--------	55	29	
Mm:										
Medomak------	6W	Slight	Severe	Severe	Severe	Severe	eastern white pine--	55	86	black spruce
							black spruce--------	---	---	
							gray birch----------	---	---	
							red maple----------	47	29	
							tamarack----------	---	---	
MNC:										
Monadnock----	8A	Slight	Slight	Slight	Slight	Moderate	eastern white pine--	63	114	eastern white
							northern red oak----	55	43	pine, red pine,
							red pine----------	60	100	white spruce
							white spruce--------	55	129	
Berkshire----	9A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	72	129	balsam fir,
							balsam fir------- --	60	114	eastern white
							paper birch---------	60	57	pine, red pine,
							red pine----------	65	114	white spruce
							red spruce----------	50	114	
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
MNE:										
Monadnock----	8R	Moderate	Moderate	Slight	Slight	Moderate	eastern white pine--	63	114	eastern white
							northern red oak----	55	43	pine, red pine,
							red pine----------	60	100	white spruce
							white spruce--------	55	129	
Berkshire-----	9R	Moderate	Moderate	Slight	Slight	Slight	eastern white pine--	72	129	balsam fir,
							balsam fir----------	60	114	eastern white
							paper birch---------	60	57	pine, red pine,
							red pine----------	65	114	white spruce
							red spruce----------	50	114	
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	
MrB:										
Monarda------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	66	114	balsam fir, black
							balsam fir----------	45	86	spruce, eastern
							black spruce--------	44	43	white pine,
							eastern arborvitae--	---	---	tamarack, white
							paper birch---------	60	57	spruce
							quaking aspen-------	---	---	
							red maple----------	---	---	
							red spruce----------	40	86	
							sugar maple---------	55	29	
							white spruce--------	53	114	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
MsB:										
Monarda------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	66	114	balsam fir, black
							balsam fir----------	45	86	spruce, eastern
							black spruce--------	44	43	white pine,
							eastern arborvitae--	---	---	tamarack, white
							paper birch---------	60	57	spruce
							quaking aspen-------	---	---	
							red maple----------	---	---	
							red spruce----------	40	86	
							sugar maple---------	55	29	
							white spruce--------	53	114	
MTB:										
Monarda------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	66	114	balsam fir, black
							balsam fir----------	45	86	spruce, eastern
							black spruce--------	44	43	white pine,
							eastern arborvitae--	---	---	tamarack, white
							paper birch---------	60	57	spruce
							quaking aspen-------	---	---	
							red maple----------	---	---	
							red spruce----------	40	86	
							sugar maple---------	55	29	
							white spruce--------	53	114	
Burnham------	7W	Slight	Severe	Severe	Severe	Severe	eastern white pine--	57	100	black spruce
							American elm--------	48	---	
							eastern arborvitae--	44	72	
							red maple----------	54	29	
							white spruce--------	44	86	
Bucksport----	2W	Slight	Severe	Severe	Severe	Severe	black spruce--------	25	29	---
							balsam fir----------	30	57	
							eastern arborvitae--	---	---	
							gray birch----------	---	---	
							red maple----------	---	---	
							tamarack----------	---	---	
MUB:										
Monarda------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	66	114	balsam fir, black
							balsam fir----------	45	86	spruce, eastern
							black spruce--------	44	43	white pine,
							eastern arborvitae--	---	---	tamarack, white
							paper birch---------	60	57	spruce
							quaking aspen-------	---	---	
							red maple----------	---	---	
							red spruce----------	40	86	
							sugar maple---------	55	29	
							white spruce--------	53	114	
Telos--------	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red
							balsam fir----------	53	100	spruce, white
							red maple----------	55	29	spruce
							red spruce----------	44	86	
							white spruce--------	55	129	
MVC:										
Monson-------	8D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	65	114	eastern white
							balsam fir----------	52	100	pine, red
							red spruce----------	40	86	spruce, white
							white spruce--------	58	129	spruce

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
MVC:										
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine	76	143	European larch, eastern white pine, red spruce, tamarack, white spruce
							American beech	55	29	
							balsam fir	55	114	
							paper birch	55	57	
							red spruce	47	100	
							sugar maple	55	29	
							white spruce	55	129	
							yellow birch	55	29	
Telos	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
Nb:										
Naumburg	7W	Slight	Moderate	Severe	Moderate	Severe	eastern white pine	60	100	Norway spruce, eastern hemlock, eastern white pine, white spruce
							American elm	---	---	
							black ash	---	---	
							eastern hemlock	---	---	
							green ash	---	---	
							paper birch	---	---	
							red maple	60	43	
							sugar maple	55	29	
							white spruce	50	114	
							yellow birch	---	---	
NS:										
Naumburg	7W	Slight	Moderate	Severe	Moderate	Severe	eastern white pine	60	100	Norway spruce, eastern hemlock, eastern white pine, white spruce
							American elm	---	---	
							black ash	---	---	
							eastern hemlock	---	---	
							green ash	---	---	
							paper birch	---	---	
							red maple	60	43	
							sugar maple	55	29	
							white spruce	50	114	
							yellow birch	---	---	
Searsport	6W	Slight	Severe	Severe	Severe	Severe	eastern white pine	55	86	European larch, eastern arborvitae
							European larch	---	---	
							balsam fir	53	100	
							black spruce	---	---	
							eastern arborvitae	45	72	
							red maple	55	29	
							tamarack	---	---	
NvB:										
Nicholville	3A	Slight	Slight	Slight	Slight	Moderate	eastern white pine	75	172	European larch, Norway spruce, eastern white pine, white spruce
							northern red oak	70	57	
							sugar maple	65	43	
NvC:										
Nicholville	3R	Moderate	Slight	Slight	Slight	Moderate	eastern white pine	75	172	European larch, Norway spruce, eastern white pine, white spruce
							northern red oak	70	57	
							sugar maple	65	43	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
PeB:										
Peacham------	7W	Slight	Severe	Severe	Severe	Severe	eastern white pine--	57	86	---
							European alder------	---	---	
							black spruce--------	---	---	
							eastern arborvitae--	---	---	
							red maple----------	60	43	
							red spruce----------	---	---	
							tamarack----------	---	---	
Brayton------	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red spruce, tamarack
							balsam fir----------	68	129	
							black spruce--------	---	---	
							paper birch---------	60	57	
							red maple----------	65	43	
							red spruce----------	50	114	
							tamarack----------	60	57	
							white spruce--------	48	100	
Pr:										
Pits---------	---	---	---	---	---	---	---	---	---	---
Ps:										
Pits---------	---	---	---	---	---	---	---	---	---	---
RRE:										
Ricker-------	4R	Severe	Severe	Severe	Severe	Slight	balsam fir----------	20	57	---
							Arizona mountainash-	---	---	
							paper birch---------	---	---	
							red spruce----------	20	29	
							yellow birch--------	---	---	
Rock Outcrop-	---	---	---	---	---	---	---	---	---	---
RSE:										
Ricker-------	4R	Severe	Severe	Severe	Severe	Slight	balsam fir----------	20	57	---
							Arizona mountainash-	---	---	
							paper birch---------	---	---	
							red spruce----------	20	29	
							yellow birch--------	---	---	
Saddleback---	4R	Severe	Severe	Moderate	Severe	Moderate	balsam fir----------	36	57	red spruce, white spruce
							Arizona mountainash-	---	---	
							mountain maple------	---	---	
							paper birch---------	45	43	
							red spruce----------	35	72	
							striped maple-------	---	---	
							yellow birch--------	45	29	
RYE:										
Rock Outcrop-	---	---	---	---	---	---	---	---	---	---
Abram--------	5R	Severe	Severe	Severe	Severe	Slight	balsam fir----------	33	57	jack pine
							eastern hemlock-----	---	---	
							eastern hophornbeam-	---	---	
							eastern white pine--	48	72	
							gray birch----------	---	---	
							jack pine----------	---	---	
							paper birch---------	40	43	
							red spruce----------	34	57	
							scarlet oak---------	40	29	
							white spruce--------	37	72	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
									cu ft/ac	
RYE:										
Lyman	7R	Severe	Severe	Moderate	Severe	Moderate	eastern white pine	56	100	balsam fir, eastern white pine, red pine, white spruce
							balsam fir	60	114	
							red spruce	40	86	
							sugar maple	50	29	
							white spruce	55	129	
SAE:										
Saddleback	4R	Severe	Severe	Moderate	Severe	Moderate	balsam fir	36	57	red spruce, white spruce
							American mountainash	---	---	
							mountain maple	---	---	
							paper birch	45	43	
							red spruce	35	72	
							striped maple	---	---	
							yellow birch	45	29	
Mahoosuc	4R	Moderate	Severe	Severe	Severe	Slight	balsam fir	25	57	---
							American mountainash	---	---	
							paper birch	---	---	
							red spruce	24	29	
Sisk	4R	Severe	Severe	Slight	Moderate	Slight	balsam fir	35	57	red spruce
							American mountainash	---	---	
							paper birch	---	---	
							red spruce	35	72	
SKD:										
Sisk	4R	Moderate	Moderate	Slight	Moderate	Slight	balsam fir	35	57	red spruce
							American mountainash	---	---	
							paper birch	---	---	
							red spruce	35	72	
Surplus	4R	Moderate	Moderate	Slight	Moderate	Severe	American mountainash	---	---	red spruce
							balsam fir	30	57	
							paper birch	---	---	
							red spruce	30	57	
Sn:										
Sunday	6S	Slight	Slight	Severe	Slight	Slight	eastern white pine	55	86	European larch, eastern white pine, red pine
							balsam poplar	55	---	
							northern red oak	50	29	
							red maple	---	---	
							sugar maple	48	29	
SRC:										
Surplus	4W	Slight	Moderate	Slight	Moderate	Severe	balsam fir	30	57	red spruce
							American mountainash	---	---	
							paper birch	---	---	
							red spruce	30	57	
Bemis	4W	Slight	Severe	Moderate	Severe	Severe	balsam fir	31	57	---
							paper birch	---	---	
							red spruce	28	57	
							yellow birch	---	---	
SSC:										
Surplus	4W	Slight	Moderate	Slight	Moderate	Severe	balsam fir	30	57	red spruce
							American mountainash	---	---	
							paper birch	---	---	
							red spruce	30	57	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
SSC:										
Saddleback---	4D	Slight	Slight	Moderate	Severe	Moderate	balsam fir----------	36	57	red spruce, white spruce
							Arizona mountainash-	---	---	
							mountain maple------	---	---	
							paper birch---------	45	43	
							red spruce----------	35	72	
							striped maple-------	---	---	
							yellow birch--------	45	29	
Ricker-------	4D	Slight	Slight	Moderate	Severe	Moderate	balsam fir----------	20	57	---
							Arizona mountainash-	---	---	
							paper birch---------	---	---	
							red spruce----------	20	29	
							yellow birch--------	---	---	
SVC:										
Surplus------	4W	Slight	Moderate	Slight	Moderate	Severe	balsam fir----------	30	57	red spruce
							American mountainash	---	---	
							paper birch---------	---	---	
							red spruce----------	30	57	
Sisk---------	4A	Slight	Slight	Slight	Moderate	Slight	balsam fir----------	35	57	red spruce
							American mountainash	---	---	
							paper birch---------	---	---	
							red spruce----------	35	72	
Sw:										
Swanville----	7W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	58	100	eastern arborvitae, eastern white pine, red spruce
							red spruce----------	40	86	
							sugar maple---------	50	29	
							white spruce--------	50	114	
SYB:										
Swanville----	7W	Slight	Severe	Moderate	Severe	Severe	eastern white pine--	58	100	eastern arborvitae, eastern white pine, red spruce
							red spruce----------	40	86	
							sugar maple---------	50	29	
							white spruce--------	50	114	
Boothbay-----	8A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	65	114	eastern white pine, white spruce
							balsam fir----------	55	114	
							eastern hemlock-----	---	---	
							paper birch---------	56	57	
							red maple-----------	56	29	
							red spruce----------	---	---	
							white spruce--------	55	129	
TeB:										
Telos--------	8W	Slight	Moderate	Moderate	Severe	Severe	balsam fir----------	53	100	black spruce, red spruce, white spruce
							eastern white pine--	67	114	
							red maple-----------	55	29	
							red spruce----------	44	86	
							white spruce--------	55	129	
TeC:										
Telos--------	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine--	67	114	black spruce, red spruce, white spruce
							balsam fir----------	53	100	
							red maple-----------	55	29	
							red spruce----------	44	86	
							white spruce--------	55	129	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
TfB:										
Telos	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
TfC:										
Telos	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
THC:										
Telos	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
Chesuncook	9A	Slight	Slight	Slight	Moderate	Severe	eastern white pine	69	129	eastern white pine, red spruce, white spruce
							balsam fir	55	114	
							red maple	55	29	
							red spruce	47	100	
							sugar maple	55	29	
TLB:										
Telos	8X	Slight	Severe	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
Monarda	8X	Slight	Severe	Moderate	Severe	Severe	eastern white pine	66	114	balsam fir, black spruce, eastern white pine, tamarack, white spruce
							balsam fir	45	86	
							black spruce	44	43	
							eastern arborvitae	---	---	
							paper birch	60	57	
							quaking aspen	---	---	
							red maple	---	---	
							red spruce	40	86	
							sugar maple	55	29	
							white spruce	53	114	
TMB:										
Telos	8W	Slight	Moderate	Moderate	Severe	Severe	eastern white pine	67	114	black spruce, red spruce, white spruce
							balsam fir	53	100	
							red maple	55	29	
							red spruce	44	86	
							white spruce	55	129	
Monarda	8W	Slight	Severe	Moderate	Severe	Severe	eastern white pine	66	114	balsam fir, black spruce, eastern white pine, tamarack, white spruce
							balsam fir	45	86	
							black spruce	44	43	
							eastern arborvitae	---	---	
							paper birch	60	57	
							quaking aspen	---	---	
							red maple	---	---	
							red spruce	40	86	
							sugar maple	55	29	
							white spruce	53	114	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
									cu ft/ac	
TMB:										
Monson-------	7D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	65	100	eastern white
							balsam fir----------	52	100	pine, red
							red spruce----------	40	86	spruce, white
							white spruce--------	58	129	spruce
TOC:										
Thorndike----	8D	Slight	Slight	Moderate	Severe	Slight	eastern white pine--	62	114	eastern white
							paper birch---------	56	57	pine
							red spruce----------	46	100	
							white spruce--------	56	129	
Elliottsville	10A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
TOE:										
Thorndike----	8R	Moderate	Moderate	Moderate	Severe	Slight	eastern white pine--	62	114	eastern white
							paper birch---------	56	57	pine
							red spruce----------	46	100	
							white spruce--------	56	129	
Elliottsville	10R	Moderate	Moderate	Slight	Moderate	Moderate	eastern white pine--	76	143	European larch,
							American beech------	55	29	eastern white
							balsam fir----------	55	114	pine, red
							paper birch---------	55	57	spruce,
							red spruce----------	47	100	tamarack, white
							sugar maple---------	55	29	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
TRC:										
Tunbridge----	8X	Slight	Slight	Slight	Moderate	Slight	eastern white pine--	68	86	Scotch pine,
							balsam fir----------	---	---	balsam fir,
							northern red oak----	---	---	eastern white
							paper birch---------	---	---	pine, red
							red spruce----------	50	114	spruce,
							sugar maple---------	60	43	tamarack, white
							white ash----------	65	43	spruce
							white spruce--------	55	129	
							yellow birch--------	55	29	
Berkshire----	9A	Slight	Slight	Slight	Slight	Slight	eastern white pine--	72	129	balsam fir,
							balsam fir----------	60	114	eastern white
							paper birch---------	60	57	pine, red pine,
							red pine----------	65	114	white spruce
							red spruce----------	50	114	
							sugar maple---------	52	29	
							white ash----------	62	43	
							white spruce--------	55	129	
							yellow birch--------	55	29	

Table 7.--Forestland Management and Productivity--Continued

Map symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Volume of wood fiber (cu ft/ac)	Trees to manage
TRC:										
Dixfield-----	9A	Slight	Slight	Slight	Moderate	Moderate	eastern white pine--	74	129	European larch,
							balsam fir----------	64	129	black spruce,
							paper birch---------	62	72	eastern white
							red spruce----------	54	114	pine
							sugar maple---------	62	43	
TuB:										
Tunbridge----	3A	Slight	Slight	Slight	Moderate	Slight	eastern white pine--	68	114	Douglas fir,
							balsam fir----------	---	---	Fraser's fir,
							northern red oak----	68	57	Norway spruce,
							paper birch---------	78	43	balsam fir, blue
							red maple----------	---	---	spruce, eastern
							red spruce----------	45	100	white pine,
							sugar maple---------	60	43	larch, red
							white ash----------	65	43	spruce, white
							white spruce--------	55	129	spruce
							yellow birch--------	60	43	
Lyman--------	2D	Slight	Slight	Moderate	Severe	Moderate	eastern white pine--	56	100	Austrian pine,
							American beech------	---	---	balsam fir,
							balsam fir----------	48	114	eastern white
							eastern hemlock-----	---	---	pine, white
							northern red oak----	54	43	spruce
							paper birch---------	---	---	
							red spruce----------	42	86	
							sugar maple---------	---	---	
							white spruce--------	55	129	
TuC:										
Tunbridge----	3A	Slight	Slight	Slight	Moderate	Slight	eastern white pine--	68	114	Douglas fir,
							balsam fir----------	---	---	Fraser's fir,
							northern red oak----	68	57	Norway spruce,
							paper birch---------	78	43	balsam fir, blue
							red maple----------	---	---	spruce, eastern
							red spruce----------	45	100	white pine,
							sugar maple---------	60	43	larch, red
							white ash----------	65	43	spruce, white
							white spruce--------	55	129	spruce
							yellow birch--------	60	43	
Lyman--------	2D	Slight	Slight	Moderate	Severe	Moderate	eastern white pine--	56	100	Austrian pine,
							American beech------	---	---	balsam fir,
							balsam fir----------	48	114	eastern white
							eastern hemlock-----	---	---	pine, white
							northern red oak----	54	43	spruce
							paper birch---------	---	---	
							red spruce----------	42	86	
							sugar maple---------	---	---	
							white spruce--------	55	129	
Ud:										
Udorthents---	---	---	---	---	---	---	---	---	---	---
Urban Land---	---	---	---	---	---	---	---	---	---	---
W:										
Water--------	---	---	---	---	---	---	---	---	---	---

Table 8.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
AdB:					
Adams	Slight	Slight	Moderate: slope	Slight	Severe: droughty
AdC:					
Adams	Moderate: slope	Moderate: slope	Severe: slope	Slight	Severe: droughty
AdD:					
Adams	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope droughty
AED:					
Adams	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
Colton	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope small stones droughty
AFC:					
Adams	Moderate: slope	Moderate: slope	Severe: slope	Slight	Severe: droughty
Croghan	Moderate: wetness	Moderate: wetness	Moderate: slope wetness	Moderate: wetness	Severe: droughty
AgA:					
Allagash	Slight	Slight	Moderate: small stones	Slight	Moderate: droughty
AgB:					
Allagash	Slight	Slight	Moderate: slope small stones	Slight	Moderate: droughty
AgC:					
Allagash	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope droughty
BeB:					
Berkshire	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Moderate: large stones small stones
BeC:					
Berkshire	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Moderate: large stones slope small stones
BkC:					
Berkshire	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
BkD:					
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
BoB:					
Boothbay	Severe: wetness	Moderate: percs slowly wetness	Severe: wetness	Moderate: wetness	Moderate: wetness
BoC:					
Boothbay	Severe: wetness	Moderate: percs slowly slope wetness	Severe: slope wetness	Moderate: wetness	Moderate: slope wetness
BpB:					
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
BrB:					
Brayton	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
BrC:					
Brayton	Severe: wetness	Severe: wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
BSB:					
Brayton	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
Colonel	Severe: wetness	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones
BTB:					
Brayton	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
Peacham	Severe: percs slowly ponding	Severe: excess humus ponding	Severe: excess humus large stones ponding	Severe: excess humus ponding	Severe: excess humus large stones ponding
Markey	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
BW:					
Bucksport	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
Markey	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
Ca:					
Charles	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness
CG:					
Charles	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness	Severe: wetness	Severe: flooding wetness
Medomak	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding
Cornish	Severe: flooding wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: flooding wetness
ChB:					
Chesuncook	Moderate: wetness	Moderate: wetness	Moderate: slope small stones	Moderate: wetness	Moderate: wetness
ChC:					
Chesuncook	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
ChD:					
Chesuncook	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
CkB:					
Chesuncook	Moderate: large stones small stones	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: small stones
CkC:					
Chesuncook	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: slope small stones
CkD:					
Chesuncook	Severe: percs slowly slope	Severe: percs slowly slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
CLD:					
Chesuncook	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
Telos	Severe: slope wetness	Severe: slope wetness	Severe: large stones slope small stones	Severe: wetness	Severe: slope wetness
CnB:					
Colonel	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: wetness

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
CnC:					
Colonel	Severe: wetness	Moderate: slope wetness	Severe: slope wetness	Moderate: wetness	Moderate: slope wetness
CoB:					
Colonel	Severe: wetness	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones
CoC:					
Colonel	Severe: wetness	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
CPC:					
Colonel	Severe: wetness	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
Dixfield	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
CsB:					
Colton	Moderate: small stones	Moderate: small stones	Severe: small stones	Slight	Severe: small stones droughty
CsC:					
Colton	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Severe: small stones droughty
CsD:					
Colton	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope small stones droughty
CTC:					
Colton	Moderate: slope small stones	Moderate: slope small stones	Severe: slope small stones	Slight	Severe: small stones droughty
Sheepscot	Moderate: wetness	Moderate: wetness	Moderate: slope small stones	Moderate: wetness	Severe: droughty
CuB:					
Croghan	Moderate: wetness	Moderate: wetness	Moderate: slope wetness	Moderate: wetness	Severe: droughty
DfB:					
Dixfield	Moderate: wetness	Moderate: wetness	Moderate: slope small stones	Moderate: wetness	Moderate: wetness

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
DfC:					
Dixfield	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
DfD:					
Dixfield	Severe: slope	Severe: slope	Severe: slope	Moderate: slope wetness	Severe: slope
DgB:					
Dixfield	Moderate: large stones small stones	Moderate: large stones wetness	Severe: large stones small stones	Moderate: wetness	Moderate: large stones small stones
DgC:					
Dixfield	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
DgD:					
Dixfield	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
DMC:					
Dixfield	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
Marlow	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: large stones slope
DTC:					
Dixfield	Moderate: slope wetness	Moderate: slope wetness	Severe: slope	Moderate: wetness	Moderate: slope wetness
Colonel	Severe: wetness	Moderate: wetness	Severe: slope wetness	Moderate: wetness	Moderate: wetness
DUD:					
Dixfield	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
Colonel	Severe: wetness	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
ECC:					
Elliottsville	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
ECC:					
Chesuncook	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: wetness	Moderate: slope small stones
Telos	Severe: wetness	Severe: wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
EMC:					
Elliottsville	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones
Monson	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope small stones	Slight	Severe: depth to rock
EME:					
Elliottsville	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
Monson	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Moderate: slope	Severe: slope depth to rock
EtB:					
Elliottsville	Slight	Slight	Moderate: slope small stones depth to rock	Slight	Moderate: depth to rock
Thorndike	Severe: small stones depth to rock	Severe: small stones depth to rock	Severe: small stones depth to rock	Slight	Severe: small stones depth to rock
EtC:					
Elliottsville	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope depth to rock
Thorndike	Severe: small stones depth to rock	Severe: small stones depth to rock	Severe: slope small stones depth to rock	Slight	Severe: small stones depth to rock
EtD:					
Elliottsville	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
Thorndike	Severe: slope small stones depth to rock	Severe: slope small stones depth to rock	Severe: slope small stones depth to rock	Moderate: slope	Severe: slope small stones depth to rock

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
Fr:					
Fryeburg	Severe: flooding	Slight	Slight	Slight	Moderate: flooding
HeC:					
Hermon	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: large stones	Severe: droughty
HeD:					
Hermon	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: large stones slope	Severe: slope droughty
HMC:					
Hermon	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: large stones	Severe: droughty
Monadnock	Moderate: large stones slope	Moderate: large stones slope	Severe: slope small stones	Slight	Moderate: large stones slope
HME:					
Hermon	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope droughty
Monadnock	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope
Lc:					
Lovewell	Severe: flooding	Moderate: wetness	Moderate: flooding wetness	Moderate: wetness	Moderate: flooding wetness
Cornish	Severe: flooding wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: flooding wetness
Ld:					
Lovewell	Severe: flooding	Moderate: flooding wetness	Severe: flooding	Moderate: flooding wetness	Severe: flooding
Cornish	Severe: flooding wetness	Moderate: flooding wetness	Severe: flooding wetness	Moderate: flooding wetness	Severe: flooding
LmE:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: slope	Severe: slope depth to rock
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
LmE:					
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
LNC:					
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope depth to rock	Slight	Severe: depth to rock
Tunbridge	Moderate: slope small stones	Moderate: slope small stones	Severe: large stones slope small stones	Slight	Moderate: large stones small stones droughty
Abram	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope small stones	Slight	Severe: depth to rock
LNE:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: slope	Severe: slope depth to rock
Tunbridge	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Moderate: large stones small stones droughty
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: slope depth to rock
LyC:					
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope depth to rock	Slight	Severe: depth to rock
Tunbridge	Moderate: slope small stones	Moderate: slope small stones	Severe: large stones slope small stones	Slight	Moderate: large stones small stones droughty
Rock Outcrop	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Slight	Severe: depth to rock
MaB:					
Madawaska	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: wetness droughty
MDB:					
Madawaska	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: wetness	Moderate: wetness droughty

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
MDB:					
Allagash	Slight	Slight	Moderate: slope small stones	Slight	Moderate: droughty
MeB:					
Marlow	Moderate: percs slowly	Moderate: percs slowly	Moderate: slope small stones	Slight	Slight
MeC:					
Marlow	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: slope
MeD:					
Marlow	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
MfB:					
Marlow	Moderate: percs slowly	Moderate: percs slowly	Moderate: large stones slope	Slight	Moderate: large stones
MfC:					
Marlow	Moderate: percs slowly slope	Moderate: percs slowly slope	Severe: slope	Slight	Moderate: large stones slope
MfD:					
Marlow	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
MGD:					
Marlow	Severe: slope	Severe: slope	Severe: slope	Moderate: slope	Severe: slope
Dixfield	Severe: slope	Severe: slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope
MhB:					
Masardis	Slight	Slight	Moderate: slope small stones	Slight	Severe: droughty
MhC:					
Masardis	Moderate: slope	Moderate: slope	Severe: slope	Slight	Severe: droughty
MhD:					
Masardis	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
MKE:					
Masardis	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
Adams	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
MLC:					
Masardis	Slight	Slight	Severe: slope	Slight	Severe: droughty
Sheepscot	Moderate: wetness	Moderate: wetness	Severe: slope	Moderate: wetness	Severe: droughty
Mm:					
Medomak	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding	Severe: ponding	Severe: flooding ponding
MNC:					
Monadnock	Moderate: large stones slope	Moderate: large stones slope	Severe: slope small stones	Slight	Moderate: large stones slope
Berkshire	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones
MNE:					
Monadnock	Severe: slope	Severe: slope	Severe: slope small stones	Severe: slope	Severe: slope
Berkshire	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
MrB:					
Monarda	Severe: percs slowly wetness	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness
MsB:					
Monarda	Severe: wetness large stones small stones	Severe: wetness large stones small stones	Severe: large stones small stones	Severe: wetness small stones	Severe: wetness small stones
MTB:					
Monarda	Severe: wetness large stones small stones	Severe: wetness large stones small stones	Severe: large stones small stones	Severe: wetness small stones	Severe: wetness small stones
Burnham	Severe: percs slowly ponding	Severe: excess humus ponding	Severe: excess humus large stones ponding	Severe: excess humus ponding	Severe: excess humus ponding
Bucksport	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding
MUB:					
Monarda	Severe: wetness small stones large stones	Severe: wetness small stones large stones	Severe: large stones small stones	Severe: wetness small stones	Severe: wetness small stones

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
MUB:					
Telos	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
MVC:					
Monson	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope small stones	Slight	Severe: depth to rock
Elliottsville	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones
Telos	Severe: wetness	Severe: wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
Nb:					
Naumburg	Severe: too sandy wetness	Severe: too sandy wetness	Severe: too sandy wetness	Severe: too sandy wetness	Severe: wetness
NS:					
Naumburg	Severe: too sandy wetness	Severe: too sandy wetness	Severe: too sandy wetness	Severe: too sandy wetness	Severe: wetness
Searsport	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding	Severe: excess humus ponding droughty
NvB:					
Nicholville	Slight	Slight	Moderate: slope	Slight	Slight
NvC:					
Nicholville	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope
PeB:					
Peacham	Severe: percs slowly ponding	Severe: excess humus ponding	Severe: excess humus large stones ponding	Severe: excess humus ponding	Severe: excess humus large stones ponding
Brayton	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
Pr:					
Pits	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Slight	Severe: depth to rock
Ps:					
Pits	Severe: small stones too sandy	Severe: small stones too sandy	Severe: small stones too sandy	Severe: small stones too sandy	Severe: small stones droughty

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
RRE:					
Ricker	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope fragile	Severe: excess humus slope thin layer
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock
RSE:					
Ricker	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope fragile	Severe: excess humus slope thin layer
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: slope depth to rock
RYE:					
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope	Severe: depth to rock
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: slope depth to rock
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: slope	Severe: slope depth to rock
SAE:					
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: slope depth to rock
Mahoosuc	Severe: excess humus slope too acid	Severe: excess humus slope too acid	Severe: excess humus slope too acid	Severe: excess humus slope	Severe: excess humus slope too acid
Sisk	Severe: percs slowly slope	Severe: percs slowly slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
SKD:					
Sisk	Severe: percs slowly slope	Severe: percs slowly slope	Severe: large stones slope small stones	Moderate: slope	Severe: slope
Surplus	Severe: slope wetness	Severe: percs slowly slope	Severe: large stones slope small stones	Moderate: slope wetness	Severe: slope

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
Sn:					
Sunday	Severe: flooding	Moderate: too sandy	Moderate: flooding too sandy	Moderate: too sandy	Severe: droughty
SRC:					
Surplus	Severe: wetness	Severe: percs slowly	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
Bemis	Severe: percs slowly wetness	Severe: percs slowly wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
SSC:					
Surplus	Severe: wetness	Severe: percs slowly	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
Saddleback	Severe: depth to rock	Severe: depth to rock	Severe: large stones slope small stones	Slight	Severe: depth to rock
Ricker	Severe: excess humus depth to rock	Severe: excess humus depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus fragile	Severe: excess humus thin layer
SVC:					
Surplus	Severe: wetness	Severe: percs slowly	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
Sisk	Severe: percs slowly	Severe: percs slowly	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones
Sw:					
Swanville	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
SYB:					
Swanville	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
Boothbay	Severe: wetness	Moderate: percs slowly wetness	Severe: wetness	Moderate: wetness	Moderate: wetness
TeB:					
Telos	Severe: percs slowly wetness	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness
TeC:					
Telos	Severe: percs slowly wetness	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
TfB:					
Telos	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
TfC:					
Telos	Severe: wetness	Severe: wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
THC:					
Telos	Severe: wetness	Severe: wetness	Severe: large stones slope small stones	Severe: wetness	Severe: wetness
Chesuncook	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Moderate: wetness	Moderate: slope small stones
TLB:					
Telos	Severe: percs slowly wetness	Severe: percs slowly wetness	Severe: small stones wetness	Severe: wetness	Severe: wetness
Monarda	Severe: percs slowly small stones wetness	Severe: percs slowly small stones wetness	Severe: small stones wetness	Severe: wetness	Severe: small stones wetness
TMB:					
Telos	Severe: wetness	Severe: wetness	Severe: large stones small stones	Severe: wetness	Severe: wetness
Monarda	Severe: wetness large stones small stones	Severe: wetness large stones small stones	Severe: large stones small stones	Severe: wetness	Severe: wetness
Monson	Severe: depth to rock	Severe: depth to rock	Severe: large stones small stones	Slight	Severe: depth to rock
TOC:					
Thorndike	Severe: small stones depth to rock	Severe: small stones depth to rock	Severe: large stones slope small stones	Slight	Severe: small stones depth to rock
Elliottsville	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones slope small stones
TOE:					
Thorndike	Severe: slope small stones depth to rock	Severe: slope small stones depth to rock	Severe: large stones slope small stones	Severe: slope	Severe: slope small stones depth to rock

Table 8.--Recreational Development--Continued

Map symbol and soil name	Camp areas	Picnic areas	Playgrounds	Paths and trails	Golf fairways
TOE:					
Elliottsville	Severe: slope	Severe: slope	Severe: large stones slope small stones	Severe: slope	Severe: slope
TRC:					
Tunbridge	Moderate: slope small stones	Moderate: slope small stones	Severe: large stones slope small stones	Slight	Moderate: large stones small stones droughty
Berkshire	Moderate: large stones slope	Moderate: large stones slope	Severe: large stones slope small stones	Slight	Moderate: large stones small stones
Dixfield	Moderate: large stones slope	Moderate: large stones slope wetness	Severe: large stones slope small stones	Moderate: wetness	Moderate: large stones slope small stones
TuB:					
Tunbridge	Slight	Slight	Moderate: slope small stones	Slight	Moderate: droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: small stones depth to rock	Slight	Severe: depth to rock
TuC:					
Tunbridge	Moderate: slope	Moderate: slope	Severe: slope	Slight	Moderate: slope droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: slope small stones depth to rock	Slight	Severe: depth to rock
Ud:					
Udorthents	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Urban Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
W:					
Water	---	---	---	---	---

Table 9.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
AdB:										
Adams	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
AdC:										
Adams	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
AdD:										
Adams	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
AED:										
Adams	Very poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Colton	Very poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
AFC:										
Adams	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Croghan	Poor	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
AgA:										
Allagash	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
AgB:										
Allagash	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
AgC:										
Allagash	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
BeB:										
Berkshire	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
BeC:										
Berkshire	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
BkC:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
BkD:										
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
BoB:										
Boothbay	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
BoC:										
Boothbay	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
BpB:										
Brayton	Poor	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
BrB:										
Brayton	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
BrC:										
Brayton	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
BSB:										
Brayton	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Colonel	Very poor	Poor	Good	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
BTB:										
Brayton	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Peacham	Very poor	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Fair
Markey	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
BW:										
Bucksport	Very poor	Very poor	Poor	Very poor	Very poor	Good	Good	Very poor	Very poor	Good
Markey	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
Ca:										
Charles	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
CG:										
Charles	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Medomak	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
Cornish	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair
ChB:										
Chesuncook	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
ChC:										
Chesuncook	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
ChD:										
Chesuncook	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
CkB:										
Chesuncook	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
CkC:										
Chesuncook	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
CkD:										
Chesuncook	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
CLD:										
Chesuncook	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Telos	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
CnB:										
Colonel	Fair	Good	Good	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
CnC:										
Colonel	Fair	Good	Good	Fair	Fair	Very poor	Very poor	Good	Fair	Very poor
CoB:										
Colonel	Very poor	Poor	Good	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
CoC:										
Colonel	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
CPC:										
Colonel	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
CsB:										
Colton	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
CsC:										
Colton	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
CsD:										
Colton	Very poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
CTC:										
Colton	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
Sheepscot	Fair	Good	Good	Fair	Fair	Poor	Very poor	Good	Fair	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
CuB:										
Croghan	Poor	Fair	Fair	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor
DfB:										
Dixfield	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
DfC:										
Dixfield	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
DfD:										
Dixfield	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
DgB:										
Dixfield	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
DgC:										
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
DgD:										
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
DMC:										
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Marlow	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
DTC:										
Dixfield	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Colonel	Fair	Good	Good	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
DUD:										
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Colonel	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
ECC:										
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Chesuncook	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Telos	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
EMC:										
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Monson	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
EME:										
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Monson	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
EtB:										
Elliottsville	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Thorndike	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
EtC:										
Elliottsville	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Thorndike	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
EtD:										
Elliottsville	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Thorndike	Poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Fair	Poor	Very poor
Fr:										
Fryeburg	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
HeC:										
Hermon	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
HeD:										
Hermon	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
HMC:										
Hermon	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
HME:										
Hermon	Very poor	Poor	Good	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
Lc:										
Lovewell	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Cornish	Fair	Fair	Good	Good	Good	Fair	Fair	Fair	Good	Fair
Ld:										
Lovewell	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor
Cornish	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair
LmE:										
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
LNC:										
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Abram	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
LNE:										
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Abram	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
LyC:										
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
MaB:										
Madawaska	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MDB:										
Madawaska	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Allagash	Good	Good	Good	Good	Good	Poor	Very	Good	Good	Very

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
MeB:										
Marlow	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
MeC:										
Marlow	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MeD:										
Marlow	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MfB:										
Marlow	Poor	Fair	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor
MfC:										
Marlow	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MfD:										
Marlow	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MGD:										
Marlow	Poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
MhB:										
Masardis	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MhC:										
Masardis	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
MhD:										
Masardis	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor
MKE:										
Masardis	Very poor	Fair	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Adams	Very poor	Fair	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
MLC:										
Masardis	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Sheepscot	Fair	Good	Good	Fair	Fair	Poor	Very poor	Good	Fair	Very poor
Mm:										
Medomak	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
MNC:										
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
MNE:										
Monadnock	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
MrB:										
Monarda	Poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
MsB:										
Monarda	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
MTB:										
Monarda	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Burnham	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
Bucksport	Very poor	Very poor	Poor	Very poor	Very poor	Good	Good poor	Very poor	Very	Good
MUB:										
Monarda	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Telos	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
MVC:										
Monson	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Telos	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Nb:										
Naumburg	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
NS:										
Naumburg	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good
Searsport	Very poor	Poor	Poor	Poor	Poor	Good	Fair	Poor	Poor	Fair
NvB:										
Nicholville	Good	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as habitat for--: Openland wildlife	Woodland wildlife	Wetland wildlife
NvC:										
Nicholville	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
PeB:										
Peacham	Very poor	Poor	Poor	Poor	Poor	Good	Poor	Poor	Poor	Fair
Brayton	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Pr:										
Pits	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Ps:										
Pits	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
RRE:										
Ricker	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
RSE:										
Ricker	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
Saddleback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
RYE:										
Rock Outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Abram	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Lyman	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
SAE:										
Saddleback	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Mahoosuc	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
Sisk	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
SKD:										
Sisk	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Surplus	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor

Table 9.--Wildlife Habitat--Continued

habitat for-- Map symbol and soil name	Potential for habitat elements: Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Potential as: Openland wildlife	Woodland wildlife	Wetland wildlife
Sn:										
Sunday	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
SRC:										
Surplus	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
Bemis	Very poor	Poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
SSC:										
Surplus	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
Saddleback	Poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
Ricker	Very poor	Very poor	Poor	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor
SVC:										
Surplus	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Fair	Fair	Very poor
Sisk	Very poor	Very poor	Good	Good	Good	Very poor	Very poor	Poor	Fair	Very poor
Sw:										
Swanville	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
SYB:										
Swanville	Poor	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair
Boothbay	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
TeB:										
Telos	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
TeC:										
Telos	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
TfB:										
Telos	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
TfC:										
Telos	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
THC:										
Telos	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Chesuncook	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor

Table 9.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
TLB:										
Telos	Very poor	Very poor	Good	Good	Good	Poor	Very poor	Poor	Fair	Very poor
Monarda	Very poor	Very poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
TMB:										
Telos	Very poor	Poor	Good	Good	Good	Poor	Very poor	Poor	Good	Very poor
Monarda	Very poor	Very poor	Fair	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor
Monson	Very poor	Poor	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
TOC:										
Thorndike	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
TOE:										
Thorndike	Very poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Elliottsville	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
TRC:										
Tunbridge	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Berkshire	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
Dixfield	Very poor	Poor	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor
TuB:										
Tunbridge	Fair	Good	Good	Good	Good	Poor	Very poor	Good	Good	Very poor
Lyman	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
TuC:										
Tunbridge	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor
Lyman	Poor	Poor	Fair	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor
Ud:										
Udorthents	---	---	---	---	---	---	---	---	---	---
Urban Land	---	---	---	---	---	---	---	---	---	---
W:										
Water	---	---	---	---	---	---	---	---	---	---

Table 10.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
AdB:						
Adams	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Severe: droughty
AdC:						
Adams	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
AdD:						
Adams	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
AED:						
Adams	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
Colton	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope small stones droughty
AFC:						
Adams	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
Croghan	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: frost action wetness	Severe: droughty
AgA:						
Allagash	Severe: cutbanks cave	Slight	Slight	Slight	Moderate: frost action	Moderate: droughty
AgB:						
Allagash	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: droughty
AgC:						
Allagash	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: slope droughty
BeB:						
Berkshire	Slight	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: large stones small stones
BeC:						
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones slope small stones
BkC:						
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones small stones

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
BkD:						
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
BoB:						
Boothbay	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
BoC:						
Boothbay	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: slope wetness
BpB:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
BrB:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
BrC:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
BSB:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: large stones small stones
BTB:						
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Peacham	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action ponding	Severe: excess humus large stones ponding
Markey	Severe: excess humus ponding cutbanks cave	Severe: low strength subsides ponding	Severe: subsides ponding	Severe: low strength subsides ponding	Severe: frost action subsides ponding	Severe: excess humus ponding
BW:						
Bucksport	Severe: excess humus ponding	Severe: low strength ponding	Severe: low strength ponding	Severe: low strength ponding	Severe: frost action ponding	Severe: excess humus ponding
Markey	Severe: excess humus ponding cutbanks cave	Severe: low strength subsides ponding	Severe: subsides ponding	Severe: low strength subsides ponding	Severe: frost action subsides ponding	Severe: excess humus ponding

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
Ca:						
Charles	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action wetness	Severe: flooding wetness
CG:						
Charles	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action wetness	Severe: flooding wetness
Medomak	Severe: ponding cutbanks cave	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding frost action ponding	Severe: flooding ponding
Cornish	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action	Moderate: flooding wetness
ChB:						
Chesuncook	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: frost action wetness	Moderate: wetness
ChC:						
Chesuncook	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: slope wetness
ChD:						
Chesuncook	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: slope	Severe: slope
CkB:						
Chesuncook	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: frost action wetness	Moderate: small stones
CkC:						
Chesuncook	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: slope small stones
CkD:						
Chesuncook	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: slope	Severe: slope
CLD:						
Chesuncook	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: slope	Severe: slope
Telos	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: frost action slope wetness	Severe: slope wetness
CnB:						
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
CnC:						
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: slope wetness
CoB:						
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: large stones small stones
CoC:						
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
CPC:						
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope small stones
CsB:						
Colton	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Severe: small stones droughty
CsC:						
Colton	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: small stones droughty
CsD:						
Colton	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope small stones droughty
CTC:						
Colton	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: small stones droughty
Sheepscot	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: wetness	Severe: droughty
CuB:						
Croghan	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: frost action wetness	Severe: droughty
DfB:						
Dixfield	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: wetness
DfC:						
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope wetness

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
DfD:						
Dixfield	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
DgB:						
Dixfield	Severe: wetness	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Severe: frost action	Moderate: large stones small stones
DgC:						
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope small stones
DgD:						
Dixfield	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
DMC:						
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope small stones
DMC:						
Marlow	Moderate: slope wetness dense layer	Moderate: slope	Moderate: slope wetness	Severe: slope	Moderate: frost action slope	Moderate: large stones slope
DTC:						
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: slope wetness
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
DUD:						
Dixfield	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
Colonel	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
ECC:						
Elliottsville	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones slope small stones
Chesuncook	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: slope small stones
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
EMC:						
Elliottsville	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones slope small stones
Monson	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
EME:						
Elliottsville	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
Monson	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
EtB:						
Elliottsville	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: slope depth to rock	Moderate: frost action depth to rock	Moderate: depth to rock
Thorndike	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: small stones depth to rock
EtC:						
Elliottsville	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: slope depth to rock
Thorndike	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: small stones depth to rock
EtD:						
Elliottsville	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
Thorndike	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope small stones depth to rock
Fr:						
Fryeburg	Severe: cutbanks cave	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding frost action	Moderate: flooding
HeC:						
Hermon	Severe: cutbanks cave	Moderate: large stones slope	Moderate: large stones slope	Severe: slope	Moderate: large stones slope	Severe: droughty
HeD:						
Hermon	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
HMC:						
Hermon	Severe: cutbanks cave	Moderate: large stones slope	Moderate: large stones slope	Severe: slope	Moderate: large stones slope	Severe: droughty
Monadnock	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: large stones slope
HME:						
Hermon	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
HME:						
Monadnock	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Lc:						
Lovewell	Severe: wetness cutbanks cave	Severe: flooding	Severe: flooding wetness	Severe: flooding	Severe: flooding frost action	Moderate: flooding wetness
Cornish	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action	Moderate: flooding wetness
Ld:						
Lovewell	Severe: wetness cutbanks cave	Severe: flooding	Severe: flooding wetness	Severe: flooding	Severe: flooding frost action	Severe: flooding
Cornish	Severe: wetness cutbanks cave	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding frost action	Severe: flooding
LmE:						
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
LNC:						
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones small stones droughty
Abram	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
LNE:						
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Tunbridge	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Moderate: large stones small stones droughty
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
LyC:						
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones small stones droughty
Rock Outcrop	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
MaB:						
Madawaska	Severe: wetness cutbanks cave	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action wetness	Moderate: wetness droughty
MDB:						
Madawaska	Severe: wetness cutbanks cave	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: frost action wetness	Moderate: wetness droughty
Allagash	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Moderate: frost action	Moderate: droughty
MeB:						
Marlow	Moderate: dense layer	Slight	Moderate: wetness	Moderate: slope	Moderate: frost action	Slight
MeC:						
Marlow	Moderate: slope dense layer	Moderate: slope	Moderate: slope wetness	Severe: slope	Moderate: frost action	Moderate: slope
MeD:						
Marlow	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MfB:						
Marlow	Moderate: wetness dense layer	Slight	Moderate: wetness	Moderate: slope	Moderate: frost action	Moderate: large stones

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
MfC:						
Marlow	Moderate: slope wetness dense layer	Moderate: slope	Moderate: slope wetness	Severe: slope	Moderate: frost action slope	Moderate: large stones slope
MfD:						
Marlow	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MGD:						
Marlow	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Dixfield	Severe: slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Severe: frost action slope	Severe: slope
MhB:						
Masardis	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Severe: droughty
MhC:						
Masardis	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Severe: droughty
MhD:						
Masardis	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
MKE:						
Masardis	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
Adams	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope droughty
MLC:						
Masardis	Severe: cutbanks cave	Slight	Slight	Moderate: slope	Slight	Severe: droughty
Sheepscot	Severe: wetness cutbanks cave	Moderate: wetness	Severe: wetness	Moderate: slope wetness	Moderate: wetness	Severe: droughty
Mm:						
Medomak	Severe: ponding cutbanks cave	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding frost action ponding	Severe: flooding ponding
MNC:						
Monadnock	Severe: cutbanks cave	Moderate: slope	Moderate: slope	Severe: slope	Moderate: slope	Moderate: large stones slope
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones small stones

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
MNE:						
Monadnock	Severe: slope cutbanks cave	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Berkshire	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
MrB:						
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
MsB:						
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
MTB:						
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Burnham	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action ponding	Severe: excess humus ponding
Bucksport	Severe: excess humus ponding	Severe: low strength ponding	Severe: low strength ponding	Severe: low strength ponding	Severe: frost action ponding	Severe: excess humus ponding
MUB:						
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
MVC:						
Monson	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
MVC:						
Elliottsville	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones slope small stones
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
Nb:						
Naumburg	Severe: wetness cutbanks cave	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
NS:						
Naumburg	Severe: wetness cutbanks cave	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness
Searsport	Severe: ponding cutbanks cave	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: excess humus ponding droughty
NvB:						
Nicholville	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action	Severe: frost action	Slight
NvC:						
Nicholville	Severe: wetness	Severe: frost action	Severe: wetness	Severe: frost action slope	Severe: frost action	Moderate: slope
PeB:						
Peacham	Severe: ponding	Severe: ponding	Severe: ponding	Severe: ponding	Severe: frost action ponding	Severe: excess humus large stones ponding
Brayton	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Pr:						
Pits	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
Ps:						
Pits	Severe: cutbanks cave	Slight	Slight	Slight	Slight	Severe: small stones droughty
RRE:						
Ricker	Severe: excess humus slope depth to rock	Severe: low strength slope depth to rock	Severe: slope depth to rock	Severe: low strength slope depth to rock	Severe: slope depth to rock	Severe: excess humus slope thin layer
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock
RSE:						
Ricker	Severe: excess humus slope depth to rock	Severe: low strength slope depth to rock	Severe: slope depth to rock	Severe: low strength slope depth to rock	Severe: slope depth to rock	Severe: excess humus slope thin layer
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
RYE:						
Rock Outcrop	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: depth to rock

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
RYE:						
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
SAE:						
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock
Mahoosuc	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: excess humus slope too acid
Sisk	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
SKD:						
Sisk	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope	Severe: slope
Surplus	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: frost action slope	Severe: slope
Sn:						
Sunday	Severe: cutbanks cave	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding	Severe: droughty
SRC:						
Surplus	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
Bemis	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
SSC:						
Surplus	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
SSC:						
Saddleback	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock
Ricker	Severe: excess humus depth to rock	Severe: low strength depth to rock	Severe: depth to rock	Severe: low strength slope depth to rock	Severe: depth to rock	Severe: excess humus thin layer

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
SVC:						
Surplus	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action	Moderate: large stones slope small stones
Sisk	Moderate: slope dense layer	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones slope small stones
Sw:						
Swanville	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
SYB:						
Swanville	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Boothbay	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action	Moderate: wetness
TeB:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
TeC:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
TfB:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
TfC:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
THC:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: slope wetness	Severe: frost action wetness	Severe: wetness
Chesuncook	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Moderate: frost action slope wetness	Moderate: slope small stones
TLB:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: small stones wetness

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
TMB:						
Telos	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Monarda	Severe: wetness	Severe: wetness	Severe: wetness	Severe: wetness	Severe: frost action wetness	Severe: wetness
Monson	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
TOC:						
Thorndike	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: small stones depth to rock
Elliottsville	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones slope small stones
TOE:						
Thorndike	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope small stones depth to rock
Elliottsville	Severe: slope depth to rock	Severe: slope	Severe: slope depth to rock	Severe: slope	Severe: slope	Severe: slope
TRC:						
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: large stones small stones droughty
Berkshire	Moderate: slope	Moderate: slope	Moderate: slope	Severe: slope	Moderate: frost action slope	Moderate: large stones small stones
Dixfield	Severe: wetness	Moderate: slope wetness	Severe: wetness	Severe: slope	Severe: frost action	Moderate: large stones slope small stones
TuB:						
Tunbridge	Severe: depth to rock	Moderate: depth to rock	Severe: depth to rock	Moderate: slope depth to rock	Moderate: frost action depth to rock	Moderate: droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock
TuC:						
Tunbridge	Severe: depth to rock	Moderate: slope depth to rock	Severe: depth to rock	Severe: slope	Moderate: frost action slope depth to rock	Moderate: slope droughty
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock

Table 10.--Building Site Development--Continued

Map symbol and soil name	Shallow excavations	Dwellings without basements	Dwellings with basements	Small commercial buildings	Local roads and streets	Lawns and landscaping
Ud:						
Udorthents	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Urban Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
W:						
Water	---	---	---	---	---	---

Table 11.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
AdB:					
Adams	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage too sandy
AdC:					
Adams	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage too sandy
AdD:					
Adams	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage slope too sandy
AED:					
Adams	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage slope too sandy
Colton	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
AFC:					
Adams	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage too sandy
Croghan	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy
AgA:					
Allagash	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
AgB:					
Allagash	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
AgC:					
Allagash	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
BeC:					
Berkshire	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Poor: small stones

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
BkC:					
Berkshire	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
BkD:					
Berkshire	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope
BoB:					
Boothbay	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
BoC:					
Boothbay	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness
BpB:					
Brayton	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
BrB:					
Brayton	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
BrC:					
Brayton	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
BSB:					
Brayton	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Colonel	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
BTB:					
Brayton	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Peacham	Severe: percs slowly ponding	Severe: excess humus ponding	Severe: ponding	Severe: ponding	Poor: ponding
BTB:					
Markey	Severe: percs slowly subsides ponding	Severe: excess humus seepage ponding	Severe: seepage too sandy ponding	Severe: seepage ponding	Poor: seepage too sandy ponding
BW:					
Bucksport	Severe: percs slowly ponding	Severe: excess humus seepage ponding	Severe: excess humus seepage ponding	Severe: seepage ponding	Poor: excess humus ponding

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
BW:					
Markey	Severe: percs slowly subsides ponding	Severe: excess humus seepage ponding	Severe: seepage too sandy ponding	Severe: seepage ponding	Poor: seepage too sandy ponding
Ca:					
Charles	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness
CG:					
Charles	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness
Medomak	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Poor: ponding
Cornish	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness
ChB:					
Chesuncook	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
ChC:					
Chesuncook	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
ChD:					
Chesuncook	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope
CkB:					
Chesuncook	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Moderate: wetness	Fair: small stones wetness
CkC:					
Chesuncook	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
CkD:					
Chesuncook	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
CLD:					
Chesuncook	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope	Poor: slope
Telos	Severe: percs slowly slope wetness	Severe: slope	Severe: slope wetness	Severe: slope wetness	Poor: slope wetness
CnB:					
Colonel	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
CnC:					
Colonel	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness
CoB:					
Colonel	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
CoC:					
Colonel	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness
CPC:					
Colonel	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
CsB:					
Colton	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
CsC:					
Colton	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
CsD:					
Colton	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
CTC:					
Colton	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
CTC:					
Sheepscot	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage small stones too sandy
CuB:					
Croghan	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy
DfB:					
Dixfield	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Fair: small stones wetness
DfC:					
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
DfD:					
Dixfield	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope
DgB:					
Dixfield	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Poor: small stones
DgC:					
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
DgD:					
Dixfield	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope small stones
DMC:					
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
Marlow	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Fair: slope small stones
DTC:					
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
Colonel	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
DUD:					
Dixfield	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope small stones
Colonel	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: wetness
ECC:					
Elliottsville	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Chesuncook	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
Telos	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: wetness
EMC:					
Elliottsville	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Monson	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
EME:					
Elliottsville	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock
Monson	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock
EtB:					
Elliottsville	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Thorndike	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: seepage small stones depth to rock
EtC:					
Elliottsville	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Thorndike	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: seepage small stones depth to rock

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
EtD:					
Elliottsville	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock
Thorndike	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: seepage small stones depth to rock
Fr:					
Fryeburg	Severe: flooding	Severe: flooding	Severe: flooding	Severe: flooding	Good
HeC:					
Hermon	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
HeD:					
Hermon	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
HMC:					
Hermon	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
Monadnock	Moderate: slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Poor: seepage
HME:					
Hermon	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
Monadnock	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: seepage slope
Lc:					
Lovewell	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Fair: wetness
Cornish	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness
Ld:					
Lovewell	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Severe: flooding wetness	Fair: wetness

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
Ld:					
Cornish	Severe: flooding wetness	Severe: flooding seepage wetness	Severe: flooding seepage wetness	Severe: flooding wetness	Poor: wetness
LmE:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Poor: slope depth to rock
Rock Outcrop	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
LmE:					
Tunbridge	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
LNC:					
Lyman	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: seepage depth to rock	Poor: depth to rock
Tunbridge	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim
Abram	Severe: depth to rock	Severe: slope depth to rock	Severe: seepage depth to rock	Severe: depth to rock	Poor: depth to rock
LNE:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Poor: slope depth to rock
Tunbridge	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Severe: seepage slope depth to rock	Poor: area reclaim slope
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock
LyC:					
Lyman	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: seepage depth to rock	Poor: depth to rock
Tunbridge	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
LyC:					
Rock Outcrop	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
MaB:					
Madawaska	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy wetness
MDB:					
Madawaska	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy wetness
Allagash	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
MeB:					
Marlow	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Fair: small stones wetness
MeC:					
Marlow	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope wetness	Fair: slope small stones wetness
MeD:					
Marlow	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope
MfB:					
Marlow	Severe: percs slowly	Moderate: seepage slope	Slight	Slight	Fair: small stones
MfC:					
Marlow	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Fair: slope small stones
MfD:					
Marlow	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope
MGD:					
Marlow	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope
Dixfield	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope	Poor: slope small stones

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
MhB:					
Masardis	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
MhC:					
Masardis	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
MhD:					
Masardis	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
MKE:					
Masardis	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage small stones too sandy
Adams	Severe: slope poor filter	Severe: seepage slope	Severe: seepage slope too sandy	Severe: seepage slope	Poor: seepage slope too sandy
MLC:					
Masardis	Severe: poor filter	Severe: seepage slope	Severe: seepage too sandy	Severe: seepage	Poor: seepage small stones too sandy
Sheepscot	Severe: wetness poor filter	Severe: seepage slope wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage small stones too sandy
Mm:					
Medomak	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Severe: flooding ponding	Poor: ponding
MNC:					
Monadnock	Moderate: slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Poor: seepage
Berkshire	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
MNE:					
Monadnock	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: seepage slope
Berkshire	Severe: slope	Severe: seepage slope	Severe: seepage slope	Severe: seepage slope	Poor: slope

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
MrB:					
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
MsB:					
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
MTB:					
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
Burnham	Severe: percs slowly ponding	Severe: excess humus seepage ponding	Severe: ponding	Severe: ponding	Poor: small stones ponding
Bucksport	Severe: percs slowly ponding	Severe: excess humus seepage ponding	Severe: excess humus seepage ponding	Severe: seepage ponding	Poor: excess humus ponding
MUB:					
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
Telos	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: wetness
MVC:					
Monson	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Elliottsville	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Telos	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: wetness
Nb:					
Naumburg	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy wetness
NS:					
Naumburg	Severe: wetness poor filter	Severe: seepage wetness	Severe: seepage too sandy wetness	Severe: seepage wetness	Poor: seepage too sandy wetness

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
NS:					
Searsport	Severe: ponding poor filter	Severe: excess humus seepage ponding	Severe: seepage too sandy ponding	Severe: seepage ponding	Poor: seepage too sandy ponding
NvB:					
Nicholville	Severe: wetness	Severe: wetness	Severe: wetness	Moderate: wetness	Good
NvC:					
Nicholville	Severe: wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Fair: slope
PeB:					
Peacham	Severe: percs slowly ponding	Severe: excess humus ponding	Severe: ponding	Severe: ponding	Poor: ponding
Brayton	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Pr:					
Pits	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
Ps:					
Pits	Severe: poor filter	Severe: seepage	Severe: seepage too sandy	Slight	Poor: seepage small stones too sandy
RRE:					
Ricker	Severe: slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: slope depth to rock	Poor: area reclaim excess humus slope
Rock Outcrop	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
RSE:					
Ricker	Severe: slope depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus slope depth to rock	Severe: slope depth to rock	Poor: area reclaim excess humus slope
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope small stones depth to rock
RYE:					
Rock Outcrop	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: slope depth to rock
Abram	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
RYE:					
Lyman	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: seepage slope depth to rock	Poor: slope depth to rock
SAE:					
Saddleback	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope small stones depth to rock
Mahoosuc	Severe: slope poor filter	Severe: excess humus seepage slope	Severe: seepage slope depth to rock	Severe: seepage slope	Poor: seepage slope small stones
Sisk	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
SKD:					
Sisk	Severe: percs slowly slope	Severe: slope	Severe: slope	Severe: slope	Poor: slope small stones
Surplus	Severe: percs slowly slope wetness	Severe: slope wetness	Severe: slope wetness	Severe: slope wetness	Poor: slope small stones wetness
Sn:					
Sunday	Severe: flooding poor filter	Severe: flooding seepage	Severe: flooding seepage too sandy	Severe: flooding seepage	Poor: seepage too sandy
SRC:					
Surplus	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Bemis	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
SSC:					
Surplus	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Saddleback	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: small stones depth to rock
Ricker	Severe: depth to rock	Severe: excess humus slope depth to rock	Severe: excess humus depth to rock	Severe: depth to rock	Poor: area reclaim excess humus

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
SVC:					
Surplus	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Severe: wetness	Poor: small stones wetness
Sisk	Severe: percs slowly	Severe: slope	Moderate: slope	Moderate: slope	Poor: small stones
Sw:					
Swanville	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
SYB:					
Swanville	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
Boothbay	Severe: percs slowly wetness	Severe: wetness	Severe: wetness	Severe: wetness	Poor: wetness
TeB:					
Telos	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: wetness
TeC:					
Telos	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: wetness
TfB:					
Telos	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: wetness
TfC:					
Telos	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: wetness
THC:					
Telos	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Severe: wetness	Poor: wetness
Chesuncook	Severe: percs slowly wetness	Severe: slope	Severe: wetness	Moderate: slope wetness	Fair: slope small stones wetness
TLB:					
Telos	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: wetness
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
TMB:					
Telos	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: wetness
Monarda	Severe: percs slowly wetness	Moderate: seepage slope	Severe: wetness	Severe: wetness	Poor: small stones wetness
Monson	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
TOC:					
Thorndike	Severe: depth to rock	Severe: large stones slope depth to rock	Severe: large stones depth to rock	Severe: depth to rock	Poor: seepage small stones depth to rock
Elliottsville	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: depth to rock	Poor: depth to rock
TOE:					
Thorndike	Severe: slope depth to rock	Severe: large stones slope depth to rock	Severe: large stones slope depth to rock	Severe: slope depth to rock	Poor: seepage small stones depth to rock
Elliottsville	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Severe: slope depth to rock	Poor: slope depth to rock
TRC:					
Tunbridge	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: area reclaim
Berkshire	Moderate: percs slowly slope	Severe: seepage slope	Severe: seepage	Severe: seepage	Fair: slope small stones
Dixfield	Severe: percs slowly wetness	Severe: slope wetness	Severe: wetness	Moderate: slope wetness	Poor: small stones
TuB:					
Tunbridge	Severe: depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: small stones depth to rock
Lyman	Severe: depth to rock	Severe: depth to rock	Severe: depth to rock	Severe: seepage depth to rock	Poor: small stones depth to rock
TuC:					
Tunbridge	Severe: depth to rock	Severe: seepage slope depth to rock	Severe: seepage depth to rock	Severe: seepage depth to rock	Poor: small stones depth to rock

Table 11.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
TuC:					
Lyman	Severe: depth to rock	Severe: slope depth to rock	Severe: depth to rock	Severe: seepage depth to rock	Poor: small stones depth to rock
Ud:					
Udorthents	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Urban Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
W:					
Water	---	---	---	---	---

Table 12.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
AdB:				
Adams	Good	Probable	Improbable: too sandy	Poor: too sandy
AdC:				
Adams	Good	Probable	Improbable: too sandy	Poor: too sandy
AdD:				
Adams	Fair: slope	Probable	Improbable: too sandy	Poor: slope too sandy
AED:				
Adams	Poor: slope	Probable	Improbable: too sandy	Poor: slope too sandy
Colton	Poor: slope	Probable	Probable	Poor: slope small stones too sandy
AFC:				
Adams	Good	Probable	Improbable: too sandy	Poor: too sandy
Croghan	Fair: wetness	Probable	Improbable: too sandy	Fair: small stones too sandy
AgA:				
Allagash	Good	Probable	Probable	Poor: area reclaim
AgB:				
Allagash	Good	Probable	Probable	Poor: area reclaim
AgC:				
Allagash	Good	Probable	Probable	Poor: area reclaim
BeB:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
BeC:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
BkC:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
BkD:				
Berkshire	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
BoB:				
Boothbay	Fair: low strength wetness	Improbable: excess fines	Improbable: excess fines	Fair: area reclaim
BoC:				
Boothbay	Fair: low strength wetness	Improbable: excess fines	Improbable: excess fines	Fair: area reclaim slope
BpB:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
BrB:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
BrC:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
BSB:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
BTB:				
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Peacham	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim excess humus small stones
Markey	Poor: wetness	Probable	Improbable: too sandy	Poor: excess humus wetness
BW:				
Bucksport	Poor: wetness	Improbable: excess humus	Improbable: excess humus	Poor: excess humus wetness

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
BW:				
Markey	Poor: wetness	Probable	Improbable: too sandy	Poor: excess humus wetness
Ca:				
Charles	Poor: wetness	Probable	Improbable: too sandy	Poor: wetness
CG:				
Charles	Poor: wetness	Probable	Improbable: too sandy	Poor: wetness
Medomak	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
Cornish	Fair: wetness	Probable	Improbable: too sandy	Good
ChB:				
Chesuncook	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
ChC:				
Chesuncook	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
ChD:				
Chesuncook	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
CkB:				
Chesuncook	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
CkC:				
Chesuncook	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
CkD:				
Chesuncook	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
CLD:				
Chesuncook	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
CnB:				
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
CuB:				
Croghan	Fair: wetness	Probable	Improbable: too sandy	Fair: small stones too sandy

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
DfB:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
CnC:				
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
CoB:				
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
CoC:				
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
CPC:				
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
CsB:				
Colton	Good	Probable	Probable	Poor: small stones too sandy
CsC:				
Colton	Good	Probable	Probable	Poor: small stones too sandy
CsD:				
Colton	Poor: slope	Probable	Probable	Poor: slope small stones too sandy
CTC:				
Colton	Good	Probable	Probable	Poor: small stones too sandy
Sheepscot	Fair: wetness	Probable	Probable	Poor: area reclaim small stones too sandy
DfC:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
DfD:				
Dixfield	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
DgB:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
DgC:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
DgD:				
Dixfield	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
DMC:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Marlow	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
DTC:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
DUD:				
Dixfield	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones
Colonel	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
ECC:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Chesuncook	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
EMC:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Monson	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
EME:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Monson	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
EtB:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Thorndike	Poor: depth to rock	Improbable: thin layer	Improbable: thin layer	Poor: small stones depth to rock
EtC:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Thorndike	Poor: depth to rock	Improbable: thin layer	Improbable: thin layer	Poor: small stones depth to rock
EtD:				
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Thorndike	Poor: depth to rock	Improbable: thin layer	Improbable: thin layer	Poor: slope small stones depth to rock
Fr:				
Fryeburg	Good	Improbable: excess fines	Improbable: excess fines	Fair: too sandy
HeC:				
Hermon	Fair: large stones	Probable	Probable	Poor: area reclaim small stones too sandy
HeD:				
Hermon	Fair: large stones slope	Probable	Probable	Poor: area reclaim small stones too sandy
HMC:				
Hermon	Fair: large stones	Probable	Probable	Poor: area reclaim small stones too sandy
Monadnock	Good	Probable	Improbable: too sandy	Poor: small stones
HME:				
Hermon	Poor: slope	Probable	Probable	Poor: area reclaim small stones too sandy

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
HME:				
Monadnock	Poor: slope	Probable	Improbable: too sandy	Poor: slope small stones
Lc:				
Lovewell	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Fair: too sandy
Cornish	Fair: wetness	Probable	Improbable: too sandy	Good
Ld:				
Lovewell	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Fair: too sandy
Cornish	Fair: wetness	Probable	Improbable: too sandy	Good
LmE:				
Lyman	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
Rock Outcrop	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
Tunbridge	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
LNC:				
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Abram	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
LNE:				
Lyman	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
Tunbridge	Poor: area reclaim slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Abram	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
LyC:				
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Rock Outcrop	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: depth to rock
MaB:				
Madawaska	Fair: wetness	Probable	Improbable: too sandy	Fair: small stones thin layer
MDB:				
Madawaska	Fair: wetness	Probable	Improbable: too sandy	Fair: small stones thin layer
Allagash	Good	Probable	Probable	Poor: area reclaim
MeB:				
Marlow	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MeC:				
Marlow	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MeD:				
Marlow	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
MfB:				
Marlow	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MfC:				
Marlow	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MfD:				
Marlow	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
MGD:				
Marlow	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
Dixfield	Fair: slope wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim slope small stones

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
MhB:				
Masardis	Good	Probable	Probable	Poor: area reclaim small stones too sandy
MhC:				
Masardis	Good	Probable	Probable	Poor: area reclaim small stones too sandy
MhD:				
Masardis	Poor: slope	Probable	Probable	Poor: area reclaim small stones too sandy
MKE:				
Masardis	Poor: slope	Probable	Probable	Poor: area reclaim small stones too sandy
Adams	Poor: slope	Probable	Improbable: too sandy	Poor: slope too sandy
MLC:				
Masardis	Good	Probable	Probable	Poor: area reclaim small stones too sandy
Sheepscot	Fair: wetness	Probable	Probable	Poor: area reclaim small stones too sandy
Mm:				
Medomak	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
MNC:				
Monadnock	Good	Probable	Improbable: too sandy	Poor: small stones
MNC:				
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MNE:				
Monadnock	Poor: slope	Probable	Improbable: too sandy	Poor: slope small stones
Berkshire	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
MrB:				
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
MsB:				
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
MTB:				
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Burnham	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Bucksport	Poor: wetness	Improbable: excess humus	Improbable: excess humus	Poor: excess humus wetness
MUB:				
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
MVC:				
Monson	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
MVC:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Nb:				
Naumburg	Poor: wetness	Probable	Improbable: too sandy	Poor: too sandy wetness
NS:				
Naumburg	Poor: wetness	Probable	Improbable: too sandy	Poor: too sandy wetness
Searsport	Poor: wetness	Probable	Probable	Poor: area reclaim too sandy wetness

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
NvB:				
Nicholville	Poor: frost action	Improbable: excess fines	Improbable: excess fines	Good
NvC:				
Nicholville	Poor: frost action	Improbable: excess fines	Improbable: excess fines	Fair: slope
PeB:				
Peacham	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim excess humus small stones
Brayton	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Pr:				
Pits	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: depth to rock
Ps:				
Pits	Good	Probable	Probable	Poor: area reclaim small stones too sandy
RRE:				
Ricker	Poor: area reclaim slope thin layer	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim excess humus slope
Rock Outcrop	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
RSE:				
Ricker	Poor: area reclaim slope thin layer	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim excess humus slope
Saddleback	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
RYE:				
Rock Outcrop	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope depth to rock
Abram	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock
Lyman	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones depth to rock

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
SAE:				
Saddleback	Poor: slope, depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope, small stones, depth to rock
Mahoosuc	Poor: slope	Improbable: large stones, small stones	Improbable: large stones	Poor: area reclaim, slope, small stones
Sisk	Poor: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, slope, small stones
SKD:				
Sisk	Fair: slope	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, slope, small stones
Surplus	Fair: slope, wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, slope, small stones
Sn:				
Sunday	Good	Probable	Improbable: too sandy	Poor: too sandy
SRC:				
Surplus	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, small stones
Bemis	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, small stones, wetness
SSC:				
Surplus	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, small stones
Saddleback	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones, depth to rock
Ricker	Poor: area reclaim, thin layer	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, excess humus
SSC:				
Surplus	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, small stones
Saddleback	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones, depth to rock
Ricker	Poor: area reclaim, thin layer	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim, excess humus

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
SVC:				
Surplus	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Sisk	Good	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
Sw:				
Swanville	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
SYB:				
Swanville	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: wetness
Boothbay	Fair: low strength wetness	Improbable: excess fines	Improbable: excess fines	Fair: area reclaim
TeB:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
TeC:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
TfB:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
TfC:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
TLB:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
TMB:				
Telos	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness
Monarda	Poor: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones wetness

Table 12.--Construction Materials--Continued

Map symbol and soil name	Roadfill	Sand	Gravel	Topsoil
TMB:				
Monson	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones depth to rock
TOC:				
Thorndike	Poor: depth to rock	Improbable: thin layer	Improbable: thin layer	Poor: small stones depth to rock
Elliottsville	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
TOE:				
Thorndike	Poor: slope depth to rock	Improbable: thin layer	Improbable: thin layer	Poor: slope small stones depth to rock
Elliottsville	Poor: slope depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: slope small stones
TRC:				
Tunbridge	Poor: area reclaim	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Berkshire	Good	Improbable: excess fines	Improbable: excess fines	Poor: small stones
TRC:				
Dixfield	Fair: wetness	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones
TuB:				
Tunbridge	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones depth to rock
TuC:				
Tunbridge	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: small stones
Lyman	Poor: depth to rock	Improbable: excess fines	Improbable: excess fines	Poor: area reclaim small stones depth to rock
Ud:				
Udorthents	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Urban Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
W:				
Water	---	---	---	---

Table 13.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
AdB:							
Adams	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: too sandy soil blowing	Limitation: droughty
AdC:							
Adams	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
AdD:							
Adams	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
AED:							
Adams	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
Colton	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
AFC:							
Adams	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
Croghan	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: slope cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness	Limitation: droughty
AgA:							
Allagash	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: too sandy	Limitation: droughty
AgB:							
Allagash	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: too sandy	Limitation: droughty
AgC:							
Allagash	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: slope too sandy	Limitation: slope droughty

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
BeB:							
Berkshire----	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing	Limitation: large stones soil blowing	Limitation: large stones
BeC:							
Berkshire----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing	Limitation: large stones slope soil blowing	Limitation: large stones slope
BkC:							
Berkshire----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
BkD:							
Berkshire----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
BoB:							
Boothbay-----	Moderate: slope	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
BoC:							
Boothbay-----	Severe: slope	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily slope wetness	Limitation: erodes easily slope wetness
BpB:							
Brayton------	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
BrB:							
Brayton------	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly wetness	Limitation: wetness
BrC:							
Brayton------	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly slope wetness	Limitation: slope wetness
BTB:							
Brayton------	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly wetness	Limitation: wetness
Peacham------	Slight	Severe: piping ponding	Severe: slow refill	Limitation: frost action percs slowly ponding	Limitation: ponding droughty	Limitation: large stones rooting depth ponding	Limitation: large stones wetness droughty

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
BSB:							
Brayton	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly wetness	Limitation: wetness
Colonel	Moderate: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
Markey	Severe: seepage	Severe: seepage piping ponding	Severe: slow refill cutbanks cave	Limitation: frost action subsides ponding	Limitation: soil blowing ponding	Limitation: too sandy soil blowing ponding	Limitation: wetness
BW:							
Bucksport	Severe: seepage	Severe: excess humus ponding	Severe: slow refill	Limitation: frost action ponding	Limitation: ponding	Limitation: ponding	Limitation: wetness
Markey	Severe: seepage	Severe: seepage piping ponding	Severe: slow refill cutbanks cave	Limitation: frost action subsides ponding	Limitation: soil blowing ponding	Limitation: too sandy soil blowing ponding	Limitation: wetness
Ca:							
Charles	Severe: seepage	Severe: piping wetness	Severe: cutbanks cave	Limitation: flooding frost action cutbanks cave	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
CG:							
Charles	Severe: seepage	Severe: piping wetness	Severe: cutbanks cave	Limitation: flooding frost action cutbanks cave	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
Medomak	Moderate: seepage	Severe: piping ponding	Severe: cutbanks cave	Limitation: flooding frost action ponding	Limitation: flooding ponding	Limitation: erodes easily ponding	Limitation: erodes easily wetness
Cornish	Severe: seepage	Severe: piping wetness	Moderate: slow refill cutbanks cave	Limitation: flooding frost action	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
ChB:							
Chesuncook	Moderate: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth
ChC:							
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
ChD:							
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
CkB:							
Chesuncook	Moderate: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth
CkC:							
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
CkD:							
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
CLD:							
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
CnB:							
Colonel	Moderate: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
CnC:							
Colonel	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
CoB:							
Colonel	Moderate: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
CoC:							
Colonel	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
CPC:							
Colonel	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
CsB:							
Colton-------	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones too sandy	Limitation: large stones droughty
CsC:							
Colton-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
CsD:							
Colton-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
CTC:							
Colton-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
Sheepscot----	Severe: seepage	Severe: seepage wetness	Severe: cutbanks cave	Limitation: large stones slope cutbanks cave	Limitation: slope wetness droughty	Limitation: large stones wetness	Limitation: large stones droughty
CuB:							
Croghan------	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: slope cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness	Limitation: droughty
DfB:							
Dixfield-----	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth
DfC:							
Dixfield-----	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
DfD:							
Dixfield-----	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
DgB:							
Dixfield-----	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: percs slowly rooting depth
DgC:							
Dixfield-----	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
DgD:							
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
DMC:							
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
Marlow	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope
DTC:							
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
DTC:							
Colonel	Moderate: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
DUD:							
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
Colonel	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
ECC:							
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
EMC:							
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Monson	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
EME:							
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Monson-------	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
EtB:							
Elliottsville	Moderate: seepage slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
EtB:							
Thorndike----	Severe: depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones depth to rock	Limitation: large stones depth to rock
EtC:							
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Thorndike----	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
EtD:							
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Thorndike----	Severe: slope depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Fr:							
Fryeburg-----	Moderate: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: flooding	Limitation: erodes easily	Limitation: erodes easily
HeC:							
Hermon-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
HeD:							
Hermon-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
HMC:							
Hermon-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
HMC:							
Monadnock----	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
HME:							
Hermon-------	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
HME:							
Monadnock----	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
Lc:							
Lovewell-----	Moderate: seepage	Severe: piping wetness	Severe: cutbanks cave	Limitation: flooding frost action cutbanks cave	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily
Cornish------	Severe: seepage	Severe: piping wetness	Moderate: slow refill cutbanks cave	Limitation: flooding frost action	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
Ld:							
Lovewell-----	Moderate: seepage	Severe: piping wetness	Severe: cutbanks cave	Limitation: flooding frost action cutbanks cave	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily
Cornish------	Severe: seepage	Severe: piping wetness	Moderate: slow refill cutbanks cave	Limitation: flooding frost action	Limitation: flooding wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
LmE:							
Lyman--------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Rock Outcrop-	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Tunbridge----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
LNC:							
Lyman--------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Tunbridge----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Abram--------	Severe: slope depth to rock	Severe: thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
LNE:							
Lyman--------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Tunbridge----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Abram--------	Severe: slope depth to rock	Severe: thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
LyC:							
Lyman--------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Tunbridge----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Rock Outcrop-	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
MaB:							
Madawaska----	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: slope cutbanks cave	Limitation: slope wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
MDB:							
Madawaska----	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: slope cutbanks cave	Limitation: slope wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
Allagash-----	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: too sandy	Limitation: droughty
MeB:							
Marlow-------	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly	Limitation: percs slowly rooting depth
MeC:							
Marlow-------	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope
MeD:							
Marlow-------	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
MfB:							
Marlow	Moderate: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly	Limitation: percs slowly rooting depth
MfC:							
Marlow	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope
MfD:							
Marlow	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope
MGD:							
Marlow	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: percs slowly slope	Limitation: percs slowly rooting depth slope
Dixfield	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
MhB:							
Masardis	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones too sandy	Limitation: large stones droughty
MhC:							
Masardis	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
MhD:							
Masardis	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
MKE:							
Masardis	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope too sandy	Limitation: large stones slope droughty
Adams	Severe: seepage slope	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake slope droughty	Limitation: slope too sandy soil blowing	Limitation: slope droughty
MLC:							
Masardis	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones too sandy	Limitation: large stones droughty

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
MLC:							
Sheepscot	Severe: seepage	Severe: seepage wetness	Severe: cutbanks cave	Limitation: large stones slope cutbanks cave	Limitation: slope wetness droughty	Limitation: large stones wetness	Limitation: large stones droughty
Mm:							
Medomak	Moderate: seepage	Severe: piping ponding	Severe: cutbanks cave	Limitation: flooding frost action ponding	Limitation: flooding ponding	Limitation: erodes easily ponding	Limitation: erodes easily wetness
MNC:							
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
MNE:							
Monadnock	Severe: seepage slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope too sandy	Limitation: slope
Berkshire	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
MrB:							
Monarda	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
MsB:							
Monarda	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
MTB:							
Monarda	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
Burnham	Slight	Severe: piping ponding	Severe: slow refill	Limitation: frost action percs slowly ponding	Limitation: percs slowly rooting depth ponding	Limitation: percs slowly ponding	Limitation: rooting depth wetness
Bucksport	Severe: seepage	Severe: excess humus ponding	Severe: slow refill	Limitation: frost action ponding	Limitation: ponding	Limitation: ponding	Limitation: wetness

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
MUB:							
Monarda	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
Telos	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
MVC:							
Monson	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Elliottsville	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
Nb:							
Naumburg	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
NS:							
Naumburg	Severe: seepage	Severe: seepage piping wetness	Severe: cutbanks cave	Limitation: cutbanks cave	Limitation: fast intake wetness droughty	Limitation: too sandy wetness	Limitation: wetness droughty
Searsport	Severe: seepage	Severe: seepage piping ponding	Severe: cutbanks cave	Limitation: ponding cutbanks cave	Limitation: ponding	Limitation: too sandy ponding	Limitation: wetness
NvB:							
Nicholville	Moderate: seepage slope	Severe: piping	Severe: no water	Limitation: cutbanks cave	Limitation: erodes easily	Limitation: erodes easily	Limitation: erodes easily
NvC:							
Nicholville	Severe: slope	Severe: piping	Severe: no water	Limitation: slope cutbanks cave	Limitation: erodes easily slope	Limitation: erodes easily	Limitation: erodes easily slope
PeB:							
Peacham	Slight	Severe: piping ponding	Severe: slow refill	Limitation: frost action percs slowly ponding	Limitation: ponding droughty	Limitation: large stones rooting depth ponding	Limitation: large stones wetness droughty
Brayton	Moderate: seepage slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness droughty	Limitation: percs slowly wetness	Limitation: wetness

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
Pr:							
Pits---------	Severe: depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: depth to rock	Limitation: depth to rock	Limitation: depth to rock
Ps:							
Pits---------	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: fast intake droughty	Limitation: large stones too sandy	Limitation: large stones droughty
RRE:							
Ricker-------	Severe: slope depth to rock	Severe: thin layer	Severe: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Rock Outcrop-	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
RSE:							
Ricker-------	Severe: slope depth to rock	Severe: thin layer	Severe: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
Saddleback---	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
RYE:							
Rock Outcrop-	Severe: slope depth to rock	Slight	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Abram--------	Severe: slope depth to rock	Severe: thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
Lyman--------	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
SAE:							
Saddleback---	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Mahoosuc-----	Severe: seepage slope	Severe: large stones seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
Sisk---------	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: large stones percs slowly slope	Limitation: large stones rooting depth slope

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
SKD:							
Sisk----------	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: large stones percs slowly slope	Limitation: large stones rooting depth slope
Surplus-------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness	Limitation: slope wetness
Sn:							
Sunday--------	Severe: seepage	Severe: seepage piping	Severe: no water	Limitation: deep to water	Limitation: fast intake flooding droughty	Limitation: too sandy	Limitation: droughty
SRC:							
Surplus-------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness	Limitation: slope wetness
Bemis---------	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly slope wetness	Limitation: slope wetness
SSC:							
Surplus-------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness	Limitation: slope wetness
Saddleback----	Severe: slope depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: large stones slope depth to rock	Limitation: large stones slope depth to rock
Ricker--------	Severe: slope depth to rock	Severe: thin layer	Severe: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: erodes easily slope depth to rock	Limitation: erodes easily slope depth to rock
SVC:							
Surplus-------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: slope wetness	Limitation: slope wetness
Sisk----------	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly rooting depth slope	Limitation: large stones percs slowly slope	Limitation: large stones rooting depth slope
Sw:							
Swanville-----	Slight	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily rooting depth wetness

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
SYB:							
Swanville	Slight	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly	Limitation: percs slowly wetness	Limitation: erodes easily percs slowly wetness	Limitation: erodes easily rooting depth wetness
Boothbay	Moderate: slope	Severe: piping wetness	Severe: slow refill	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: erodes easily wetness	Limitation: erodes easily wetness
TeB:							
Telos	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
TeC:							
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
TfB:							
Telos	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
TfC:							
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
THC:							
Telos	Severe: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: rooting depth slope wetness
Chesuncook	Severe: slope	Severe: piping	Severe: no water	Limitation: percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
TLB:							
Telos	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness
Monarda	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
TMB:							
Telos	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly wetness	Limitation: rooting depth wetness

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
TMB:							
Monarda-------	Moderate: slope	Severe: piping wetness	Severe: no water	Limitation: frost action percs slowly slope	Limitation: slope wetness	Limitation: percs slowly wetness	Limitation: wetness
Monson--------	Severe: depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: depth to rock	Limitation: depth to rock
TOC:							
Thorndike-----	Severe: slope depth to rock	Severe: large stones seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Elliottsville-	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
TOE:							
Thorndike-----	Severe: slope depth to rock	Severe: large stones seepage	Severe: no water	Limitation: deep to water	Limitation: large stones slope droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Elliottsville-	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock	Limitation: slope depth to rock	Limitation: slope depth to rock
TRC:							
Tunbridge-----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: large stones slope depth to rock	Limitation: large stones slope droughty
Berkshire-----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope droughty	Limitation: large stones slope	Limitation: large stones slope droughty
Dixfield------	Severe: slope	Severe: piping	Severe: no water	Limitation: frost action percs slowly slope	Limitation: percs slowly slope wetness	Limitation: percs slowly slope wetness	Limitation: percs slowly rooting depth slope
TuB:							
Tunbridge-----	Severe: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing droughty	Limitation: soil blowing depth to rock	Limitation: depth to rock droughty
Lyman---------	Severe: depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: depth to rock	Limitation: depth to rock droughty
TuC:							
Tunbridge-----	Severe: seepage slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope soil blowing droughty	Limitation: slope soil blowing depth to rock	Limitation: slope depth to rock droughty

Table 13.--Water Management--Continued

Map symbol and soil name	Limitations for-- Pond reservoir areas	Embankments, dikes, and levees	Aquifer-fed excavated ponds	Features affecting-- Drainage	Irrigation	Terraces and diversions	Grassed waterways
TuC:							
Lyman	Severe: slope depth to rock	Severe: piping thin layer	Severe: no water	Limitation: deep to water	Limitation: slope depth to rock droughty	Limitation: slope depth to rock	Limitation: slope depth to rock droughty
Ud:							
Udorthents	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
Urban Land	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
W:							
Water	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AdB:												
Adams--------	0-4	Loamy sand	SM, SP-SM	A-2, A-1, A-3, A-4	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-1, A-4	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP-SM, SP, SW-SM	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	0-14	NP
AdC:												
Adams--------	0-4	Loamy sand	SM, SP-SM	A-1, A-4, A-2, A-3	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2, A-4, A-3	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	0-14	NP
AdD:												
Adams--------	0-4	Loamy sand	SM, SP-SM	A-1, A-4, A-2, A-3	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1, A-4, A-2, A-3	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP, SW-SM, SP-SM	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	0-14	NP
AED:												
Adams--------	0-4	Loamy sand	SM, SP-SM	A-2, A-1, A-3, A-4	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1, A-4, A-2, A-3	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP, SP-SM, SW-SM	A-1, A-3, A-2	0	0-1	80-100	70-100	20-90	0-10	0-14	NP
Colton-------	0-5	Gravelly fine sandy loam	GW-GM, GM, SM, SW-SM	A-2, A-1, A-4	0	0-5	35-80	30-75	20-65	10-40	0-10	NP-2
	5-28	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand	GM, SP, GP, SM	A-1	0-2	5-20	30-80	25-75	20-50	2-20	0-14	NP
	28-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand	GW, GP, SP, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
AFC:												
Adams--------	0-4	Loamy sand	SM, SP-SM	A-1, A-2, A-4, A-3	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-2, A-3, A-1, A-4	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP, SP-SM, SW-SM	A-1, A-2, A-3	0	0-1	80-100	70-100	20-90	0-10	0-14	NP
Croghan------	0-5	Loamy sand	SM, SP-SM, SW-SM	A-1, A-4, A-2, A-3	0	0	95-100	95-100	45-80	5-40	0-14	NP
	5-34	Sand, loamy sand, loamy fine sand	SP-SM, SM, SW-SM	A-2, A-1, A-3, A-4	0	0	80-100	75-100	45-80	5-40	0-14	NP
	34-65	Fine sand, loamy sand, coarse sand	SP-SM, SM, SW-SM	A-1, A-3, A-2	0	0	80-100	75-100	45-75	5-30	0-14	NP
AgA:												
Allagash-----	0-5	Fine sandy loam	ML, SM	A-4, A-2, A-5	0	0	85-100	80-100	60-95	30-75	15-44	NP-9
	5-21	Fine sandy loam, loam, silt loam	ML, SM	A-2, A-4	0	0	85-100	80-100	60-100	30-90	15-40	NP-7
	21-65	Fine sand, loamy fine sand, sand	SM, SP-SM	A-2, A-1, A-3	0	0	85-100	75-100	35-85	5-35	0-14	NP
AgB:												
Allagash-----	0-5	Fine sandy loam	ML, SM	A-2, A-4, A-5	0	0	85-100	80-100	60-95	30-75	15-44	NP-9
	5-21	Fine sandy loam, loam, silt loam	ML, SM	A-2, A-4	0	0	85-100	80-100	60-100	30-90	15-40	NP-7
	21-65	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-100	35-85	5-35	0-14	NP
AgC:												
Allagash-----	0-5	Fine sandy loam	ML, SM	A-2, A-4, A-5	0	0	85-100	80-100	60-95	30-75	15-44	NP-9
	5-21	Fine sandy loam, loam, silt loam	ML, SM	A-2, A-4	0	0	85-100	80-100	60-100	30-90	15-40	NP-7
	21-65	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-3, A-2	0	0	85-100	75-100	35-85	5-35	0-14	NP
BeB:												
Berkshire----	0-7	Fine sandy loam	ML, SM	A-2, A-4	0	0-10	80-95	70-90	45-90	20-70	15-30	NP-10
	7-30	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-95	65-85	40-85	20-65	15-30	NP-10
	30-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-60	15-20	NP-6

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
BeC:												
Berkshire----	0-7	Fine sandy loam	ML, SM	A-2, A-4	0	0-10	80-95	70-90	45-90	20-70	15-30	NP-10
	7-30	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-95	65-85	40-85	20-65	15-30	NP-10
	30-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-60	15-20	NP-6
BkC:												
Berkshire----	0-4	Fine sandy loam	ML, SM	A-2, A-4, A-5	1-5	15-25	80-95	70-90	45-85	25-65	15-50	NP-10
	4-32	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-5, A-4	0-10	0-20	75-95	65-85	40-75	20-60	15-50	NP-10
	32-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-55	15-20	NP-6
BkD:												
Berkshire----	0-4	Fine sandy loam	ML, SM	A-2, A-5, A-4	1-5	15-25	80-95	70-90	45-85	25-65	15-50	NP-10
	4-32	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-4, A-2, A-5	0-10	0-20	75-95	65-85	40-75	20-60	15-50	NP-10
	32-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-55	15-20	NP-6
BoB:												
Boothbay-----	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	60-90	20-40	3-15
	10-18	Silt loam, silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
	18-65	Silty clay loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
BoC:												
Boothbay-----	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	60-90	20-40	3-15
	10-18	Silt loam, silty clay loam	CL-ML, CL, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
	18-65	Silty clay loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
BpB:												
Brayton------	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-100	80-95	50-85	25-55	15-30	NP-10
	7-14	Fine sandy loam, gravelly sandy loam, silt loam	ML, CL-ML, SC-SM, SM	A-2, A-1, A-4	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam, loam	GM, SM, ML, SC	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
BrB:												
Brayton------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	1-5	1-15	65-95	55-90	35-90	20-80	15-30	NP-10
	6-14	Fine sandy loam, gravelly sandy loam, silt loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	15-30	NP-10
BrC:												
Brayton------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	1-5	1-15	65-95	55-90	35-90	20-80	15-30	NP-10
	6-14	Fine sandy loam, gravelly sandy loam, silt loam	CL-ML, SM, ML, SC-SM	A-2, A-1, A-4	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam, loam	CL-ML, ML, SM, SC-SM	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	15-30	NP-10
BSB:												
Brayton------	0-6	Fine sandy loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	15-30	NP-10
	6-14	Fine sandy loam, gravelly sandy loam, silt loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	65-95	55-90	35-85	20-70	15-30	NP-10
Colonel------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	6-20	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
BTB:												
Brayton------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	15-30	NP-10
	6-14	Fine sandy loam, gravelly sandy loam, silt loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam, loam	CL-ML, ML, SM, SC-SM	A-2, A-1, A-4	0-10	0-10	65-95	55-90	35-85	20-70	15-30	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
BTB:												
Peacham------	0-8	Cobbly muck	PT	A-8	1-5	5-25	---	---	---	---	---	---
	8-20	Silt loam, loam, gravelly sandy loam	ML, SM	A-4, A-2, A-6	0-10	0-15	75-100	65-100	40-100	20-90	15-30	NP-15
	20-65	Silt loam, loam, gravelly sandy loam	ML, SM	A-2, A-4, A-6	0-10	0-15	75-100	65-100	40-100	20-90	15-30	NP-15
Markey-------	0-37	Muck	PT	A-8	0	0	---	---	---	---	---	---
	37-65	Sand, fine sand, gravelly loamy sand	SM, SP, SP-SM	A-1, A-2, A-3	0	0	95-100	60-100	30-75	0-30	0-14	NP
BW:												
Bucksport----	0-3	Muck	PT	A-8	0	0	---	---	---	---	0-14	---
	3-37	Muck, sapric material	PT	A-8	0	0	---	---	---	---	0-14	---
	37-65	Muck, sapric material	PT	A-8	0	0	---	---	---	---	0-14	---
Markey-------	0-37	Muck	PT	A-8	0	0	---	---	---	---	---	---
	37-65	Sand, fine sand, gravelly loamy sand	SM, SP-SM, SP	A-1, A-2, A-3	0	0	95-100	60-100	30-75	0-30	0-14	NP
Ca:												
Charles------	0-4	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	4-58	Silt loam, very fine sandy loam, loamy very fine sand	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	60-95	15-40	NP-15
	58-65	Stratified sand and gravel to silt loam	SM, ML, SP-SM	A-1, A-4, A-2, A-3	0	0	90-100	75-100	40-90	5-80	0-14	NP
CG:												
Charles------	0-4	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	4-58	Silt loam, very fine sandy loam, loamy very fine sand	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	60-95	15-40	NP-15
	58-65	Stratified sand and gravel to silt loam	ML, SM, SP-SM	A-1, A-2, A-4, A-3	0	0	90-100	75-100	40-90	5-80	0-14	NP
Medomak------	0-11	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	95-100	90-100	85-100	80-95	15-40	NP-15
	11-36	Silt loam, very fine sandy loam, loamy very fine sand	ML	A-4	0	0	95-100	90-100	85-100	60-95	15-40	NP-10
	36-65	Silt loam, very fine sandy loam, loamy very fine sand	CL-ML, ML, SM, SC-SM	A-4	0	0	95-100	90-100	80-100	35-95	15-25	NP-5

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CG:												
Cornish------	0-8	Very fine sandy loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	8-62	Very fine sandy loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	62-65	Stratified sand and gravel to silt loam	ML, SW-SM, SM, SP-SM	A-2, A-3, A-4	0	0	95-100	90-100	50-95	5-85	0-14	NP
ChB:												
Chesuncook---	0-7	Silt loam	ML, SM	A-2, A-4	0-1	0-5	85-95	75-90	50-90	30-80	15-40	NP-10
	7-20	Silt loam, gravelly fine sandy loam, gravelly loam	ML, SM	A-2, A-4	0-5	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
ChC:												
Chesuncook---	0-7	Silt loam	ML, SM	A-2, A-4	0-1	0-5	85-95	75-90	50-90	30-80	15-40	NP-10
	7-20	Silt loam, gravelly fine sandy loam, gravelly loam	ML, SM	A-2, A-4	0-5	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	20-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
ChD:												
Chesuncook---	0-7	Silt loam	ML, SM	A-2, A-4	0-1	0-5	85-95	75-90	50-90	30-80	15-40	NP-10
	7-20	Silt loam, gravelly fine sandy loam, gravelly loam	ML, SM	A-2, A-4	0-5	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
CkB:												
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	ML, SC-SM, CL-ML, SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CkC:												
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, ML, SM, SC-SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
CkD:												
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
CLD:												
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, SM, ML, SC-SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
CnB:												
Colonel------	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-16	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-5	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	16-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CnC:												
Colonel------	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-16	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-5	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	16-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-1, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
CoB:												
Colonel------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	6-20	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-2, A-1, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
CoC:												
Colonel------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	6-20	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-2, A-1, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
CPC:												
Colonel------	0-6	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-1, A-4, A-2	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	6-20	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	20-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
Dixfield-----	0-4	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-1, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CsB:												
Colton-------	0-5	Gravelly fine sandy loam	GW-GM, GM, SM, SW-SM	A-2, A-1, A-4	0	0-5	35-80	30-75	20-65	10-40	0-10	NP-2
	5-28	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand	GP, GM, SM, SP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	0-14	NP
	28-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand	GW, GP, SP, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	0-14	NP
CsC:												
Colton-------	0-5	Gravelly fine sandy loam	GM, SW-SM, GW-GM, SM	A-1, A-2, A-4	0	0-5	35-80	30-75	20-65	10-40	0-10	NP-2
	5-28	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand	GP, GM, SM, SP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	0-14	NP
	28-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand	GP, SW, GW, SP	A-1	0-5	10-45	20-55	15-50	10-30	0-5	0-14	NP
CsD:												
Colton-------	0-5	Gravelly fine sandy loam	GM, SW-SM, GW-GM, SM	A-2, A-1, A-4	0	0-5	35-80	30-75	20-65	10-40	0-10	NP-2
	5-28	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand	GP, GM, SM, SP	A-1	0-2	5-20	30-80	25-75	20-50	2-20	0-14	NP
	28-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand	GP, SW, GW, SP	A-1	0-5	10-45	20-55	15-50	10-30	0-5	0-14	NP
CTC:												
Colton-------	0-5	Gravelly fine sandy loam	GM, SW-SM, GW-GM, SM	A-1, A-4, A-2	0	0-5	35-80	30-75	20-65	10-40	0-10	NP-2
	5-28	Gravelly loamy fine sand, very gravelly sand, cobbly coarse sand	GM, SP, GP, SM	A-1	0-2	5-20	30-80	25-75	20-50	2-20	0-14	NP
	28-65	Very gravelly loamy sand, very cobbly sand, extremely gravelly coarse sand	GW, GP, SP, SW	A-1	0-5	10-45	20-55	15-50	10-30	0-5	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
CTC:												
Sheepscot----	0-4	Very fine sandy loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0	0-5	80-95	75-90	45-85	20-60	0-15	NP-5
	4-16	Gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam	GP-GM, GM, SM, SP-SM	A-1, A-2, A-4, A-3	0-1	0-5	40-95	35-90	20-75	5-50	0-15	NP-5
	16-25	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand	GP, GM, SM, SP	A-1	0-1	5-25	20-55	15-50	5-40	1-15	0-14	NP
	25-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand	GM, SP, GP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	0-14	NP
CuB:												
Croghan------	0-5	Loamy sand	SP-SM, SM, SW-SM	A-2, A-1, A-3, A-4	0	0	95-100	95-100	45-80	5-40	0-14	NP
	5-34	Sand, loamy sand, loamy fine sand	SM, SP-SM, SW-SM	A-2, A-3, A-1, A-4	0	0	80-100	75-100	45-80	5-40	0-14	NP
	34-65	Fine sand, loamy sand, coarse sand	SP-SM, SM, SW-SM	A-1, A-2, A-3	0	0	80-100	75-100	45-75	5-30	0-14	NP
DfB:												
Dixfield-----	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-24	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
DfC:												
Dixfield-----	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-24	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
DfD:												
Dixfield-----	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-24	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
DgB:												
Dixfield-----	0-4	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10
DgC:												
Dixfield-----	0-4	Fine sandy loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-1, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10
DgD:												
Dixfield-----	0-4	Fine sandy loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-1, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10
DMC:												
Dixfield-----	0-4	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-1, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	CL-ML, ML, SM, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
DMC:												
Marlow--------	0-6	Fine sandy loam	ML, CL-ML, SC, SM	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	15-30	NP-10
	6-23	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-4, A-2	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	23-65	Fine sandy loam, loam, gravelly sandy loam	CL-ML, SM, ML, SC-SM	A-2, A-1-b, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
DTC:												
Dixfield------	0-7	Fine sandy loam	CL-ML, SM, ML, SC-SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-22	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-2, A-1, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	22-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
Colonel-------	0-7	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-1	0-5	85-95	80-90	50-85	25-70	15-25	NP-10
	7-17	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-5	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	17-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
DUD:												
Dixfield------	0-5	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	5-24	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10
Colonel-------	0-2	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	2-18	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	18-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
ECC:												
Elliottsville	0-3	Loam	ML, GM, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	ML, SC-SM, CL-ML, SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, ML, CL, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
EMC:												
Elliottsville	0-3	Loam	GM, ML, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---
Monson-------	0-2	Loam	GM, ML, SM	A-4	1-5	1-10	65-95	55-90	45-85	35-80	15-40	NP-8
	2-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
EME:												
Elliottsville	0-3	Loam	GM, ML, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	ML, GM, SM	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---
Monson-------	0-2	Loam	GM, ML, SM	A-4	1-5	1-10	65-95	55-90	45-85	35-80	15-40	NP-8
	2-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---
EtB:												
Elliottsville	0-7	Loam	ML, SM	A-4	0-1	0-5	80-95	75-90	65-90	45-80	15-40	NP-8
	7-17	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	17-30	Silt loam, channery loam, very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---
Thorndike----	0-7	Channery loam	GM, ML, SM	A-2, A-4	0-1	0-20	55-90	45-85	40-80	30-70	15-40	NP-8
	7-11	Channery silt loam, extremely channery loam, very channery silt loam	GM, GP-GM, SP-SM, SM	A-2, A-1, A-4	1-5	10-40	30-80	20-70	15-60	10-50	15-40	NP-8
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
EtC:												
Elliottsville	0-7	Loam	ML, SM	A-4	0-1	0-5	80-95	75-90	65-90	45-80	15-40	NP-8
	7-17	Silt loam, channery loam, very fine sandy loam	ML, GM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	17-30	Silt loam, channery loam, very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
EtC:												
Thorndike----	0-7	Channery loam	GM, SM, ML	A-2, A-4	0-1	0-20	55-90	45-85	40-80	30-70	15-40	NP-8
	7-11	Channery silt loam, extremely channery loam, very channery silt loam	GP-GM, GM, SM, SP-SM	A-1, A-4, A-2	1-5	10-40	30-80	20-70	15-60	10-50	15-40	NP-8
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
EtD:												
Elliottsville	0-7	Loam	ML, SM	A-4	0-1	0-5	80-95	75-90	65-90	45-80	15-40	NP-8
	7-17	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	17-30	Silt loam, channery loam, very fine sandy loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---
Thorndike----	0-7	Channery loam	GM, ML, SM	A-2, A-4	0-1	0-20	55-90	45-85	40-80	30-70	15-40	NP-8
	7-11	Channery silt loam, extremely channery loam, very channery silt loam	GM, SP-SM, GP-GM, SM	A-1, A-4, A-2	1-5	10-40	30-80	20-70	15-60	10-50	15-40	NP-8
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
Fr:												
Fryeburg-----	0-10	Silt loam	CL-ML, CL, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	10-35	Very fine sandy loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	35-65	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, CL, ML	A-4, A-6	0	0	95-100	95-100	90-100	60-95	15-40	NP-15
HeC:												
Hermon-------	0-2	Fine sandy loam	GM, SM	A-1, A-2, A-4	1-5	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	2-5	Fine sandy loam, sandy loam, very gravelly coarse sandy loam	GM, SM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	5-19	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam	GP-GM, SM, GM, SP-SM	A-1, A-4, A-2	5-20	10-30	40-80	30-75	15-65	10-40	15-40	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
HeC:												
Hermon-----	19-65	Very gravelly coarse sand, gravelly loamy sand, extremely gravelly sand	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3	5-20	10-30	40-80	35-75	10-55	5-25	0-14	NP
HeD:												
Hermon-------	0-2	Fine sandy loam	GM, SM	A-1, A-2, A-4	1-5	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	2-5	Fine sandy loam, sandy loam, very gravelly coarse sandy loam	GM, SM	A-1, A-4, A-2	0-15	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	5-19	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam	GP-GM, SM, GM, SP-SM	A-1, A-2, A-4	5-20	10-30	40-80	30-75	15-65	10-40	15-40	NP-10
	19-65	Very gravelly coarse sand, gravelly loamy sand, extremely gravelly sand	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3	5-20	10-30	40-80	35-75	10-55	5-25	0-14	NP
HMC:												
Hermon-------	0-2	Fine sandy loam	GM, SM	A-1, A-2, A-4	1-5	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	2-5	Fine sandy loam, sandy loam, very gravelly coarse sandy loam	GM, SM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	5-19	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam	GM, GP-GM, SP-SM, SM	A-1, A-4, A-2	5-20	10-30	40-80	30-75	15-65	10-40	15-40	NP-10
	19-65	Very gravelly coarse sand, gravelly loamy sand, extremely gravelly sand	GP-GM, GM, SM, SP-SM	A-1, A-2, A-3	5-20	10-30	40-80	35-75	10-55	5-25	0-14	NP
Monadnock----	0-5	Fine sandy loam	ML, SM	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	15-18	NP
	5-27	Fine sandy loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	70-90	50-85	30-60	12-15	NP
	27-65	Loamy sand, loamy fine sand, very gravelly loamy sand	SP-SM, SM, SW-SM	A-1, A-2	0-15	0-35	65-85	50-80	20-60	10-35	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
HME:												
Hermon-------	0-2	Fine sandy loam	GM, SM	A-1, A-2, A-4	1-5	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	2-5	Fine sandy loam, sandy loam, very gravelly coarse sandy loam	GM, SM	A-1, A-2, A-4	0-15	5-30	60-95	50-90	30-80	15-45	15-40	NP-10
	5-19	Very gravelly coarse sand, gravelly fine sandy loam, extremely gravelly sandy loam	GM, SP-SM, GP-GM, SM	A-1, A-4, A-2	5-20	10-30	40-80	30-75	15-65	10-40	15-40	NP-10
	19-65	Very gravelly coarse sand, gravelly loamy sand, extremely gravelly sand	GP-GM, SM, GM, SP-SM	A-1, A-3, A-2	5-20	10-30	40-80	35-75	10-55	5-25	0-14	NP
Monadnock----	0-5	Fine sandy loam	ML, SM	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	15-18	NP
	5-27	Fine sandy loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	70-90	50-85	30-60	12-15	NP
	27-65	Loamy sand, loamy fine sand, very gravelly loamy sand	SM, SP-SM, SW-SM	A-1, A-2	0-15	0-35	65-85	50-80	20-60	10-35	0-14	NP
Lc:												
Lovewell-----	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	11-23	Very fine sandy loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	23-65	Very fine sandy loam, silt loam, loamy very fine sand	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	60-95	15-40	NP-15
Cornish------	0-8	Very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	8-62	Very fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	62-65	Stratified sand and gravel to silt loam	SM, ML, SP-SM, SW-SM	A-2, A-4, A-3	0	0	95-100	90-100	50-95	5-85	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
Ld:												
Lovewell-----	0-11	Very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	11-23	Very fine sandy loam, silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	80-95	15-40	NP-15
	23-65	Very fine sandy loam, silt loam, loamy very fine sand	CL-ML, CL, ML	A-4, A-6	0	0	95-100	95-100	90-100	60-95	15-40	NP-15
Cornish------	0-8	Very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	8-62	Very fine sandy loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	100	95-100	80-95	15-40	NP-15
	62-65	Stratified sand and gravel to silt loam	SM, ML, SP-SM, SW-SM	A-2, A-3, A-4	0	0	95-100	90-100	50-95	5-85	0-14	NP
LmE:												
Lyman--------	0-3	Fine sandy loam	GM, ML, SM	A-1, A-4, A-2	1-5	5-20	65-95	60-90	35-80	15-75	15-30	NP-6
	3-15	Loam, gravelly fine sandy loam, silt loam	GM, ML, SM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop-	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Tunbridge----	0-5	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	5-25	55-100	50-95	35-90	20-60	15-20	NP-2
	5-18	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-4, A-5	0-5	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	18-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
LNC:												
Lyman--------	0-3	Fine sandy loam	GM, ML, SM	A-1, A-4, A-2	1-5	5-20	65-95	60-90	35-80	15-75	15-30	NP-6
	3-15	Loam, gravelly fine sandy loam, silt loam	GM, ML, SM	A-2, A-1, A-4	0-10	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
LNC:												
Tunbridge----	0-5	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	5-25	55-100	50-95	35-90	20-60	15-20	NP-2
	5-18	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-4, A-5	0-5	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	18-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Abram--------	0-5	Very fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	60-95	55-95	50-90	30-85	15-35	NP-5
	5-9	Unweathered bedrock			---	---	---	---	---	---	---	---
LNE:												
Lyman--------	0-3	Fine sandy loam	GM, ML, SM	A-1, A-2, A-4	1-5	5-20	65-95	60-90	35-80	15-75	15-30	NP-6
	3-15	Loam, gravelly fine sandy loam, silt loam	GM, ML, SM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Tunbridge----	0-5	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	5-25	55-100	50-95	35-90	20-60	15-20	NP-2
	5-18	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-5, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	18-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Abram--------	0-5	Very fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	60-95	55-95	50-90	30-85	15-35	NP-5
	5-9	Unweathered bedrock			---	---	---	---	---	---	---	---
LyC:												
Lyman--------	0-3	Fine sandy loam	ML, GM, SM	A-1, A-4, A-2	1-5	5-20	65-95	60-90	35-80	15-75	15-30	NP-6
	3-15	Loam, gravelly fine sandy loam, silt loam	GM, ML, SM	A-2, A-1, A-4	0-10	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
LyC:												
Tunbridge----	0-5	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	5-25	55-100	50-95	35-90	20-60	15-20	NP-2
	5-18	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-4, A-5	0-5	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	18-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop-	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
MaB:												
Madawaska----	0-8	Fine sandy loam	ML, SM	A-4	0	0	90-100	85-100	60-95	35-65	15-40	NP-10
	8-24	Fine sandy loam, very fine sandy loam	ML, SM	A-4	0	0	90-100	85-100	60-95	35-65	15-40	NP-10
	24-65	Fine sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2, A-3	0	0	90-100	85-100	40-85	5-35	0-14	NP
MDB:												
Madawaska----	0-8	Fine sandy loam	ML, SM	A-4	0	0	90-100	85-100	60-95	35-65	15-40	NP-10
	8-24	Fine sandy loam, very fine sandy loam	ML, SM	A-4	0	0	90-100	85-100	60-95	35-65	15-40	NP-10
	24-65	Fine sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2, A-3	0	0	90-100	85-100	40-85	5-35	0-14	NP
Allagash-----	0-5	Fine sandy loam	ML, SM	A-2, A-4, A-5	0	0	85-100	80-100	60-95	30-75	15-44	NP-9
	5-21	Fine sandy loam, loam, silt loam	ML, SM	A-2, A-4	0	0	85-100	80-100	60-100	30-90	15-40	NP-7
	21-65	Fine sand, loamy fine sand, sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	75-100	35-85	5-35	0-14	NP
MeB:												
Marlow-------	0-7	Fine sandy loam	ML, CL-ML, SC, SM	A-2, A-4	0-1	0-10	90-100	75-90	50-90	30-80	15-30	NP-10
	7-22	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-2, A-4	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	22-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-4, A-2	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MeC:												
Marlow-------	0-7	Fine sandy loam	ML, CL-ML, SC, SM	A-2, A-4	0-1	0-10	90-100	75-90	50-90	30-80	15-30	NP-10
	7-22	Fine sandy loam, loam, gravelly sandy loam	CL-ML, SM, ML, SC-SM	A-1-b, A-4, A-2	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	22-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-1-b, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
MeD:												
Marlow-------	0-7	Fine sandy loam	CL-ML, SM, ML, SC	A-2, A-4	0-1	0-10	90-100	75-90	50-90	30-80	15-30	NP-10
	7-22	Fine sandy loam, loam, gravelly sandy loam	CL-ML, SM, ML, SC-SM	A-2, A-1-b, A-4	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	22-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-2, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
MfB:												
Marlow-------	0-6	Fine sandy loam	CL-ML, SM, ML, SC	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	15-30	NP-10
	6-23	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-2, A-4	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	23-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-4, A-2	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
MfC:												
Marlow-------	0-6	Fine sandy loam	CL-ML, SM, ML, SC	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	15-30	NP-10
	6-23	Fine sandy loam, loam, gravelly sandy loam	CL-ML, ML, SM, SC-SM	A-1-b, A-2, A-4	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	23-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-2, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
MfD:												
Marlow-------	0-6	Fine sandy loam	CL-ML, SM, ML, SC	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	15-30	NP-10
	6-23	Fine sandy loam, loam, gravelly sandy loam	ML, SC-SM, CL-ML, SM	A-1-b, A-4, A-2	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	23-65	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-1-b, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MGD:												
Marlow-------	0-6	Fine sandy loam	ML, CL-ML, SC, SM	A-2, A-4	1-5	5-15	90-100	75-90	50-90	30-80	15-30	NP-10
	6-23	Fine sandy loam, loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1-b, A-4, A-2	0-10	0-15	75-95	60-90	40-85	20-65	15-30	NP-10
	23-65	Fine sandy loam, loam, gravelly sandy loam	CL-ML, SM, ML, SC-SM	A-1-b, A-2, A-4	0-10	0-15	70-90	60-85	35-80	20-60	15-30	NP-10
Dixfield-----	0-4	Fine sandy loam	ML, SC-SM, CL-ML, SM	A-1, A-4, A-2	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	CL-ML, ML, SM, SC-SM	A-2, A-1, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10
MhB:												
Masardis-----	0-3	Fine sandy loam	ML, SM	A-2, A-4	0	0-5	80-100	75-90	50-90	30-80	15-40	NP-6
	3-14	Gravelly sandy loam, very gravelly coarse sandy loam, silt loam	ML, GP-GM, SM, SP-SM	A-2, A-1, A-3, A-4	0-1	0-10	40-95	30-90	15-90	5-80	0-14	NP
	14-28	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly loamy fine sand	GP, GP-GM, SP, SM	A-1	0-1	5-20	20-55	15-50	5-50	1-15	0-14	NP
	28-65	Extremely gravelly coarse sand, extremely gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP, SP-SM	A-1	0-1	5-20	20-55	15-50	5-40	1-10	0-14	NP
MhC:												
Masardis-----	0-3	Fine sandy loam	ML, SM	A-2, A-4	0	0-5	80-100	75-90	50-90	30-80	15-40	NP-6
	3-14	Gravelly sandy loam, very gravelly coarse sandy loam, silt loam	ML, GP-GM, SM, SP-SM	A-1, A-4, A-2, A-3	0-1	0-10	40-95	30-90	15-90	5-80	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MhC:												
Masardis----	14-28	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly loamy fine sand	GP, SP, GP-GM, SM	A-1	0-1	5-20	20-55	15-50	5-50	1-15	0-14	NP
	28-65	Extremely gravelly coarse sand, extremely gravelly sand, very gravelly loamy coarse sand	GP-GM, SP, GP, SP-SM	A-1	0-1	5-20	20-55	15-50	5-40	1-10	0-14	NP
MhD:												
Masardis-----	0-3	Fine sandy loam	ML, SM	A-2, A-4	0	0-5	80-100	75-90	50-90	30-80	15-40	NP-6
	3-14	Gravelly sandy loam, very gravelly coarse sandy loam, silt loam	ML, GP-GM, SM, SP-SM	A-1, A-2, A-4, A-3	0-1	0-10	40-95	30-90	15-90	5-80	0-14	NP
	14-28	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly loamy fine sand	GP-GM, GP, SM, SP	A-1	0-1	5-20	20-55	15-50	5-50	1-15	0-14	NP
	28-65	Extremely gravelly coarse sand, extremely gravelly sand, very gravelly loamy coarse sand	GP, GP-GM, SP-SM, SP	A-1	0-1	5-20	20-55	15-50	5-40	1-10	0-14	NP
MKE:												
Masardis-----	0-3	Fine sandy loam	ML, SM	A-2, A-4	0	0-5	80-100	75-90	50-90	30-80	15-40	NP-6
	3-14	Gravelly sandy loam, very gravelly coarse sandy loam, silt loam	GP-GM, ML, SP-SM, SM	A-2, A-1, A-3, A-4	0-1	0-10	40-95	30-90	15-90	5-80	0-14	NP
	14-28	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly loamy fine sand	GP-GM, GP, SM, SP	A-1	0-1	5-20	20-55	15-50	5-50	1-15	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MKE:												
Masardis-----	28-65	Extremely gravelly coarse sand, extremely gravelly sand, very gravelly loamy coarse sand	GP, GP-GM, SP-SM, SP	A-1	0-1	5-20	20-55	15-50	5-40	1-10	0-14	NP
Adams--------	0-4	Loamy sand	SM, SP-SM	A-1, A-2, A-4, A-3	0	0	95-100	95-100	45-85	5-40	0-14	NP
	4-28	Loamy sand, sand, loamy fine sand	SM, SP-SM	A-1, A-2, A-4, A-3	0	0	95-100	95-100	35-95	5-40	0-14	NP
	28-65	Fine sand, coarse sand, gravelly sand	SP, SP-SM, SW-SM	A-2, A-1, A-3	---	0-1	80-100	70-100	20-90	0-10	0-14	NP
MLC:												
Masardis-----	0-3	Fine sandy loam	ML, SM	A-2, A-4	0	0-5	80-100	75-90	50-90	30-80	15-40	NP-6
	3-14	Gravelly sandy loam, very gravelly coarse sandy loam, silt loam	ML, GP-GM, SM, SP-SM	A-2, A-1, A-3, A-4	0-1	0-10	40-95	30-90	15-90	5-80	0-14	NP
	14-28	Very gravelly loamy sand, extremely gravelly coarse sand, very gravelly loamy fine sand	GP-GM, GP, SM, SP	A-1	0-1	5-20	20-55	15-50	5-50	1-15	0-14	NP
	28-65	Extremely gravelly coarse sand, extremely gravelly sand, very gravelly loamy coarse sand	GP-GM, GP, SP, SP-SM	A-1	0-1	5-20	20-55	15-50	5-40	1-10	0-14	NP
Sheepscot----	0-4	Very fine sandy loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0	0-5	80-95	75-90	45-85	20-60	0-15	NP-5
	4-16	Gravelly fine sandy loam, fine sandy loam, very gravelly coarse sandy loam	GP-GM, SM, GM, SP-SM	A-2, A-1, A-3, A-4	0-1	0-5	40-95	35-90	20-75	5-50	0-15	NP-5
	16-25	Very gravelly sand, very gravelly loamy sand, extremely gravelly coarse sand	GP, GM, SM, SP	A-1	0-1	5-25	20-55	15-50	5-40	1-15	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MLC:												
Sheepscot----	25-65	Extremely gravelly coarse sand, very gravelly loamy sand, very gravelly sand	GM, GP, SP, SM	A-1	0-1	5-30	20-55	15-50	5-40	1-15	0-14	NP
Mm:												
Medomak------	0-11	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	90-100	85-100	80-95	15-40	NP-15
	11-36	Silt loam, very fine sandy loam, loamy very fine sand	ML	A-4	0	0	95-100	90-100	85-100	60-95	15-40	NP-10
	36-65	Silt loam, very fine sandy loam, loamy very fine sand	ML, CL-ML, SC-SM, SM	A-4	0	0	95-100	90-100	80-100	35-95	15-25	NP-5
MNC:												
Monadnock----	0-5	Fine sandy loam	ML, SM	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	15-18	NP
	5-27	Fine sandy loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	70-90	50-85	30-60	12-15	NP
	27-65	Loamy sand, loamy fine sand, very gravelly loamy sand	SP-SM, SM, SW-SM	A-1, A-2	0-25	0-35	65-85	50-80	20-60	10-35	0-14	NP
Berkshire----	0-4	Fine sandy loam	ML, SM	A-2, A-4, A-5	1-5	15-25	80-95	70-90	45-85	25-65	15-50	NP-10
	4-32	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4, A-5	0-10	0-20	75-95	65-85	40-75	20-60	15-50	NP-10
	32-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-55	15-20	NP-6
MNE:												
Monadnock----	0-5	Fine sandy loam	ML, SM	A-2, A-4	1-5	5-15	80-100	70-90	50-85	30-60	15-18	NP
	5-27	Fine sandy loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	70-90	50-85	30-60	12-15	NP
	27-65	Loamy sand, loamy fine sand, very gravelly loamy sand	SM, SP-SM, SW-SM	A-1, A-2	0-25	0-35	65-85	50-80	20-60	10-35	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MNE:												
Berkshire----	0-4	Fine sandy loam	ML, SM	A-2, A-4, A-5	1-5	15-25	80-95	70-90	45-85	25-65	15-50	NP-10
	4-32	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-5, A-4	0-10	0-20	75-95	65-85	40-75	20-60	15-50	NP-10
	32-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-55	15-20	NP-6
MrB:												
Monarda------	0-7	Silt loam	ML, SM	A-2, A-5, A-4	0-1	0-5	85-95	75-95	55-95	30-85	15-45	NP-10
	7-15	Silt loam, gravelly silt loam, gravelly very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	15-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
MsB:												
Monarda------	0-6	Extremely flaggy silt loam	GM, ML, SM	A-2, A-4, A-1	0-10	10-35	30-95	25-95	20-95	25-70	15-40	NP-10
	6-17	Gravelly silt loam, silt loam, gravelly very fine sandy loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	17-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, SC-SM, CL-ML, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
MTB:												
Monarda------	0-6	Extremely flaggy silt loam	ML, GM, SM	A-2, A-4 A-1	0-10	10-35	30-95	25-95	20-95	15-70	15-40	NP-10
	6-17	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	17-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
Burnham------	0-8	Muck	PT	A-8	1-5	0-10	80-95	75-95	70-90	65-85	0-14	---
	8-16	Channery silt loam, loam, gravelly loam	CL-ML, CL, ML, SM	A-4	0-10	0-15	70-100	60-90	50-90	45-85	15-30	NP-10
	16-65	Channery silt loam, loam, gravelly loam	CL-ML, CL, ML, SM	A-4	0-10	0-15	70-100	60-90	50-90	45-85	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MTB:												
Bucksport----	0-3	Muck	PT	A-8	0	0	---	---	---	---	0-14	---
	3-37	Muck, sapric material	PT	A-8	0	0	---	---	---	---	0-14	---
	37-65	Muck, sapric material	PT	A-8	0	0	---	---	---	---	0-14	---
MUB:												
Monarda------	0-6	Extremely flaggy silt loam	GM, ML, SM	A-2, A-4 A-1	0-10	10-35	30-95	25-95	20-95	15-70	15-40	NP-10
	6-17	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	17-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
MVC:												
Monson-------	0-2	Loam	GM, ML, SM	A-4	1-5	1-10	65-95	55-90	45-85	35-80	15-40	NP-8
	2-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---
Elliottsville	0-3	Loam	GM, ML, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	GM, SM, ML	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	ML, SC-SM, CL-ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
MVC:												
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, ML, CL, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
Nb:												
Naumburg-----	0-7	Loamy sand	SM, SP-SM, SW-SM	A-2, A-3, A-4	0	0	95-100	90-100	50-85	5-45	0-14	NP
	7-25	Loamy fine sand, loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2, A-3	0	0	95-100	90-100	45-85	5-35	0-14	NP
	25-65	Coarse sand, sand, loamy fine sand	SP-SM, SM, SW-SM	A-1, A-3, A-2	0	0	95-100	90-100	45-80	5-35	0-14	NP
NS:												
Naumburg-----	0-7	Loamy sand	SM, SP-SM, SW-SM	A-2, A-3, A-4	0	0	95-100	90-100	50-85	5-45	0-14	NP
	7-25	Loamy fine sand, loamy sand, sand	SP-SM, SM, SW-SM	A-1, A-2, A-3	0	0	95-100	90-100	45-85	5-35	0-14	NP
	25-65	Coarse sand, sand, loamy fine sand	SP-SM, SM, SW-SM	A-2, A-1, A-3	0	0	95-100	90-100	45-80	5-35	0-14	NP
Searsport----	0-10	Mucky peat	PT	A-8	0	0	---	---	---	---	---	---
	10-16	Loamy fine sand, fine sandy loam, mucky sand	SM, OL, SP-SM	A-1, A-4, A-2, A-3	0	0	85-100	75-100	40-85	5-55	15-20	NP
	16-40	Loamy fine sand, coarse sand, loamy sand	SM, SP, SP-SM	A-1, A-4, A-2, A-3	0	0	80-100	75-100	25-80	2-45	0-14	NP
	40-65	Sand, very gravelly coarse sand, gravelly loamy fine sand	GP, GM, SM, SP	A-2, A-1, A-3, A-4	0	0	45-100	40-100	15-80	1-45	0-14	NP
NvB:												
Nicholville--	0-10	Silt loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	60-90	20-40	2-12
	10-21	Silt loam, very fine sandy loam, loamy very fine sand	CL-ML, ML	A-4	0	0	90-100	85-100	75-100	60-90	15-25	NP-5
	21-37	Loamy very fine sand, silt loam, very fine sand	ML, CL-ML, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	65-100	30-90	15-25	NP-5
	37-65	Silt loam, very fine sand, sandy loam	CL-ML, SM, ML, SC-SM	A-2, A-4	0	0	90-100	85-100	50-100	25-90	15-25	NP-5

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
NvC:												
Nicholville--	0-10	Silt loam	CL-ML, ML	A-4, A-6	0	0	90-100	85-100	70-100	60-90	20-40	2-12
	10-21	Silt loam, very fine sandy loam, loamy very fine sand	CL-ML, ML	A-4	0	0	90-100	85-100	75-100	60-90	15-25	NP-5
	21-37	Loamy very fine sand, silt loam, very fine sand	CL-ML, SM, ML, SC-SM	A-2, A-4	0	0	90-100	85-100	65-100	30-90	15-25	NP-5
	37-65	Silt loam, very fine sand, sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-100	25-90	15-25	NP-5
PeB:												
Peacham------	0-8	Cobbly muck	PT	A-8	1-5	5-25	---	---	---	---	---	---
	8-20	Silt loam, loam, gravelly sandy loam	ML, SM	A-2, A-4, A-6	0-10	0-15	75-100	65-100	40-100	20-90	15-30	NP-15
	20-65	Silt loam, loam, gravelly sandy loam	ML, SM	A-2, A-6, A-4	0-10	0-15	75-100	65-100	40-100	20-90	15-30	NP-15
Brayton------	0-6	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	65-95	55-90	35-90	20-80	15-30	NP-10
	6-14	Fine sandy loam, gravelly sandy loam, silt loam	CL-ML, SM, ML, SC-SM	A-1, A-4, A-2	0-10	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	14-65	Fine sandy loam, gravelly sandy loam,	ML, CL-ML, SC-SM, SM	A-1, A-4, A-2	0-10	0-10	65-95	55-90	35-85	20-70	15-30	---
Pr:												
Pits---------	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Ps:												
Pits---------	0-6	Extremely gravelly sand	GP, GW	A-1	---	0-25	10-25	5-25	0-15	0-5	0-14	NP
	6-60	Extremely gravelly sand, extremely gravelly coarse sand, very gravelly coarse sand	GW, GP, SP, SW	A-1	---	0-25	10-55	5-50	0-15	0-5	0-14	NP
RRE:												
Ricker-------	0-2	Peat	PT	A-8	---	---	---	---	---	---	---	---
	2-5	Muck	PT	A-8	---	---	---	---	---	---	---	---
	5-7	Very channery coarse sand, gravelly silt loam, silt loam	ML, GM, SM	A-1, A-2, A-4	0-5	0-35	55-100	50-95	25-95	15-85	---	NP
	7-11	Unweathered bedrock loam			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
RRE:												
Rock Outcrop-	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
RSE:												
Ricker-------	0-2	Peat	PT	A-8	---	---	---	---	---	---	---	---
	2-5	Muck	PT	A-8	---	---	---	---	---	---	---	---
	5-7	Very channery coarse sand, gravelly silt loam, silt loam	GM, SM, ML	A-2, A-1, A-4	0-5	0-35	55-100	50-95	25-95	15-85	---	NP
	7-11	Unweathered bedrock			---	---	---	---	---	---	---	---
Saddleback---	0-5	Fine sandy loam	ML, SM	A-1, A-2, A-4	1-5	0-15	70-95	65-90	40-90	20-80	15-35	NP-6
	5-15	Fine sandy loam, silt loam, gravelly sandy loam	ML, SM	A-1, A-2, A-4	0-1	0-20	70-95	65-90	40-90	20-80	15-30	NP-6
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
RYE:												
Rock Outcrop-	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Abram--------	0-5	Very fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	60-95	55-95	50-90	30-85	15-35	NP-5
	5-9	Unweathered bedrock			---	---	---	---	---	---	---	---
Lyman--------	0-3	Fine sandy loam	GM, ML, SM	A-2, A-1, A-4	1-5	5-20	65-95	60-90	35-80	15-75	15-30	NP-6
	3-15	Loam, gravelly fine sandy loam, silt loam	GM, ML, SM	A-1, A-2, A-4	0-10	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
SAE:												
Saddleback---	0-5	Fine sandy loam	ML, SM	A-1, A-4, A-2	1-5	0-15	70-95	65-90	40-90	20-80	15-35	NP-6
	5-15	Fine sandy loam, silt loam, gravelly sandy loam	ML, SM	A-2, A-1, A-4	0-1	0-20	70-95	65-90	40-90	20-80	15-30	NP-6
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Mahoosuc-----	0-5	Mucky peat	PT	A-8	---	---	---	---	---	---	---	---
	5-65	Fragmental material	GP	A-1	35-65	25-55	0-5	0-1	0-1	0-1	0-14	NP

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
SAE:												
Sisk---------	0-4	Fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	4-24	Silt loam, gravelly sandy loam, stony fine sandy loam	GM, ML, SM	A-2, A-4	0-10	0-25	65-95	60-95	35-90	25-85	15-35	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, SC-SM, CL-ML, SM	A-2, A-4	0-5	5-15	65-95	60-95	35-90	25-70	15-25	NP-8
SKD:												
Sisk---------	0-4	Fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	4-24	Silt loam, gravelly sandy loam, stony fine sandy loam	ML, GM, SM	A-2, A-4	0-10	0-25	65-95	60-95	35-90	25-85	15-35	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-5	5-15	65-95	60-95	35-90	25-70	15-25	NP-8
Surplus------	0-7	Fine sandy loam	GM, SM, ML	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	7-26	Fine sandy loam, silt loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-10	0-15	65-95	60-95	35-90	25-85	15-30	NP-10
	26-65	Sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-4	0-10	0-15	60-95	60-95	35-90	25-70	15-25	NP-8
Sn:												
Sunday-------	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	95-100	60-90	15-50	0-14	NP
	9-65	Loamy fine sand, fine sand, coarse sand	SM, SP-SM	A-1, A-2, A-3	0	0	90-100	85-100	30-85	5-35	0-14	NP
SRC:												
Surplus------	0-7	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	7-26	Fine sandy loam, silt loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-10	0-15	65-95	60-95	35-90	25-85	15-30	NP-10
	26-65	Sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-2, A-4	0-10	0-15	60-95	60-95	35-90	25-70	15-25	NP-8
Bemis--------	0-13	Gravelly fine sandy loam	ML, SC-SM, CL-ML, SM	A-1, A-2, A-4	1-5	0-10	65-95	55-90	35-90	20-80	15-30	NP-10
	13-65	Gravelly loam, silt loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-5	0-10	65-95	55-90	35-85	20-70	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
SSC:												
Surplus------	0-7	Fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	7-26	Fine sandy loam, silt loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-10	0-15	65-95	60-95	35-90	25-85	15-30	NP-10
	26-65	Sandy loam, gravelly sandy loam, loam	ML, SC-SM, CL-ML, SM	A-2, A-4	0-10	0-15	60-95	60-95	35-90	25-70	15-25	NP-8
Saddleback---	0-5	Fine sandy loam	ML, SM	A-1, A-2, A-4	1-5	0-15	70-95	65-90	40-90	20-80	15-35	NP-6
	5-15	Fine sandy loam, silt loam, gravelly sandy loam	ML, SM	A-2, A-1, A-4	0-1	0-20	70-95	65-90	40-90	20-80	15-30	NP-6
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Ricker-------	0-2	Peat	PT	A-8	---	---	---	---	---	---	---	---
	2-5	Muck	PT	A-8	---	---	---	---	---	---	---	---
	5-7	Very channery coarse sand, very channery silt loam, silt loam	GM, ML, SM	A-1, A-2, A-4	0-5	0-35	55-100	50-95	25-95	15-85	---	NP
	7-11	Unweathered bedrock			---	---	---	---	---	---	---	---
SVC:												
Surplus------	0-7	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	7-26	Fine sandy loam, silt loam, gravelly sandy loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-10	0-15	65-95	60-95	35-90	25-85	15-30	NP-10
	26-65	Sandy loam, gravelly sandy loam, loam	CL-ML, ML, SM, SC-SM	A-2, A-4	0-10	0-15	60-95	60-95	35-90	25-70	15-25	NP-8
Sisk---------	0-4	Fine sandy loam	GM, ML, SM	A-2, A-4	1-5	1-15	65-95	60-95	40-90	25-85	15-35	NP-10
	4-24	Silt loam, gravelly sandy loam, stony fine sandy loam	GM, ML, SM	A-2, A-4	0-10	0-25	65-95	60-95	35-90	25-85	15-35	NP-10
	24-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-2, A-4	0-5	5-15	65-95	60-95	35-90	25-70	15-25	NP-8
Sw:												
Swanville----	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-100	60-90	20-40	3-15
	7-24	Silt loam, silty clay loam, very fine sandy loam	CL, ML, CL-ML	A-4, A-6	0	0	95-100	95-100	85-100	60-100	20-40	3-15
	24-65	Silt loam, silty clay loam	CL, ML, CL-ML	A-4, A-6	0	0	95-100	95-100	90-100	65-100	20-40	3-15

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
SYB:												
Swanville----	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-100	60-90	20-40	3-15
	7-24	Silt loam, silty clay loam, very fine sandy loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-100	60-100	20-40	3-15
	24-65	Silt loam, silty clay loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	90-100	65-100	20-40	3-15
Boothbay-----	0-10	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	95-100	85-100	60-90	20-40	3-15
	10-18	Silt loam, silty clay loam	CL-ML, CL, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
	18-65	Silty clay loam, silt loam	CL-ML, CL, ML	A-4, A-6	0	0	100	95-100	90-100	65-100	20-40	3-15
TeB:												
Telos--------	0-7	Silt loam	ML, SM	A-2, A-4	0-1	0-5	80-95	75-90	50-90	30-80	15-40	NP-10
	7-18	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	18-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
TeC:												
Telos--------	0-7	Silt loam	ML, SM	A-2, A-4	0-1	0-5	80-95	75-90	50-90	30-80	15-40	NP-10
	7-18	Silt loam, loam, gravelly fine sandy loam	CL, CL-ML, SM, ML	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	18-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
TfB:												
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
TfC:												
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
THC:												
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL, SM, CL-ML, ML	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
Chesuncook---	0-4	Silt loam	ML, SM	A-2, A-4	1-5	1-5	80-95	65-90	45-90	25-80	15-40	NP-10
	4-18	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-15	0-10	80-95	65-90	45-90	25-80	15-40	NP-10
	18-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, SM, ML, SC-SM	A-4	0-15	0-10	75-85	60-85	50-85	35-75	15-30	NP-8
TLB:												
Telos--------	0-4	Silt loam	GM, ML, SM	A-2, A-4	20-35	5-30	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-40	NP-10
	20-65	Gravelly loam, gravelly silt loam, silt loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-7
Monarda------	0-6	Extremely flaggy silt loam	GM, ML, SM	A-1, A-2, A-4	25-45	5-30	45-95	35-95	25-95	15-70	15-40	NP-10
	6-17	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	17-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
TMB:												
Telos--------	0-4	Silt loam	ML, GM, SM	A-2, A-4	1-5	1-5	65-95	60-90	45-90	25-80	15-40	NP-10
	4-20	Silt loam, loam, gravelly fine sandy loam	CL-ML, CL, ML, SM	A-2, A-4	0-5	0-10	70-95	65-90	45-90	25-80	15-30	NP-8
	20-65	Gravelly loam, gravelly silt loam, silt loam	CL-ML, ML, SM, SC-SM	A-4	0-5	0-10	70-95	65-90	55-90	40-80	15-25	NP-5
Monarda------	0-6	Extremely flaggy silt loam	GM, Ml, SM	A-2, A-4, A-1	0-10	10-35	30-95	25-95	20-95	15-70	15-40	NP-10
	6-17	Gravelly silt loam, silt loam, gravelly very fine sandy loam	CL-ML, SM, ML, SC-SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
	17-65	Gravelly silt loam, silt loam, gravelly very fine sandy loam	ML, SC-SM, CL-ML, SM	A-4	0-5	0-10	65-95	55-95	45-95	35-85	15-30	NP-10
Monson-------	0-2	Loam	GM, ML, SM	A-4	1-5	1-10	65-95	55-90	45-85	35-80	15-40	NP-8
	2-18	Silt loam, channery loam, very fine sandy loam	ML, GM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-40	NP-8
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---
TOC:												
Thorndike----	0-5	Channery loam	GM, ML, SM	A-2, A-4	1-5	1-20	55-90	45-85	40-80	30-70	15-40	NP-8
	5-14	Channery silt loam, very channery silt loam, extremely channery loam	GP-GM, GM, SM, SP-SM	A-1, A-2, A-4	1-5	10-40	30-80	20-70	15-60	10-50	15-40	NP-8
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Elliottsville	0-3	Loam	GM, ML, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	ML, GM, SM	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	ML, CL-ML, SC-SM, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
TOE:												
Thorndike----	0-5	Channery loam	GM, ML, SM	A-2, A-4	1-5	1-20	55-90	45-85	40-80	30-70	15-40	NP-8
	5-14	Channery silt loam, very channery silt loam, extremely channery loam	GP-GM, GM, SM, SP-SM	A-1, A-4, A-2	1-5	10-40	30-80	20-70	15-60	10-50	15-40	NP-8
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Elliottsville	0-3	Loam	GM, ML, SM	A-4	1-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	3-18	Silt loam, channery loam, very fine sandy loam	GM, ML, SM	A-4	0-5	0-10	65-95	55-90	45-90	35-80	15-40	NP-8
	18-31	Silt loam, channery loam, very fine sandy loam	ML, SC-SM, CL-ML, SM	A-4	0-5	0-5	65-95	55-90	45-90	35-80	15-30	NP-8
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---
TRC:												
Tunbridge----	0-5	Fine sandy loam	ML, GM, SM	A-2, A-4	1-5	5-25	55-100	50-95	35-90	20-60	15-20	NP-2
	5-18	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-4, A-5	0-2	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	18-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-5	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Berkshire----	0-2	Fine sandy loam	ML, SM	A-2, A-5, A-4	1-5	15-25	80-95	70-90	45-85	25-65	15-50	NP-10
	2-32	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-4, A-2, A-5	0-10	0-20	75-95	65-85	40-75	20-60	15-50	NP-10
	32-65	Fine sandy loam, sandy loam, gravelly loam	ML, SM	A-2, A-4	0-10	0-20	75-90	65-85	40-80	20-55	15-20	NP-6
Dixfield-----	0-4	Fine sandy loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	1-5	1-15	75-95	60-90	35-85	20-70	15-25	NP-10
	4-25	Fine sandy loam, gravelly sandy loam, loam	CL-ML, SM, ML, SC-SM	A-1, A-2, A-4	0-10	0-10	75-95	60-90	35-85	20-70	15-25	NP-10
	25-65	Gravelly fine sandy loam, gravelly sandy loam, loam	ML, CL-ML, SC-SM, SM	A-1, A-2, A-4	0-10	0-15	75-95	60-90	35-85	20-70	15-25	NP-10

Table 14.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Fragments: >10 inches	Fragments: 3-10 inches	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
	In				Pct	Pct					Pct	
TuB:												
Tunbridge----	0-7	Fine sandy loam	ML, SM	A-2, A-4	0-1	0-5	85-100	80-95	55-95	30-85	15-20	NP-2
	7-16	Loam, gravelly sandy loam, fine sandy loam	ML, SM	A-2, A-4, A-5	0-2	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	16-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-2	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Lyman--------	0-7	Fine sandy loam	ML, SM	A-2, A-1, A-4	0-1	0-15	80-95	70-90	40-85	20-80	15-35	NP-6
	7-13	Loam, gravelly sandy loam, silt loam	GM, ML, SM	A-1, A-2, A-4	0-5	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
TuC:												
Tunbridge----	0-7	Fine sandy loam	ML, SM	A-2, A-4	0-1	0-5	85-100	80-95	55-95	30-85	15-20	NP-2
	7-16	Loam, gravelly sandy loam fine sandy loam	ML, SM	A-2, A-4, A-5	0-2	0-15	70-100	60-95	35-95	20-85	15-50	NP-6
	16-32	Loam, gravelly sandy loam, channery fine sandy loam	ML, SM	A-2, A-4	0-2	0-15	70-100	60-95	35-95	20-85	15-20	NP-2
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Lyman--------	0-7	Fine sandy loam	ML, SM	A-1, A-2, A-4	0-1	0-15	80-95	70-90	40-85	20-80	15-35	NP-6
	7-13	Loam, gravelly sandy loam, silt loam	ML, GM, SM	A-1, A-4, A-2	0-5	0-20	65-95	60-90	35-85	20-80	15-30	NP-4
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
Ud:												
Udorthents---	0-65	Very gravelly sandy loam	GP, GM, ML, SM	A-2, A-1, A-3, A-4	---	0-30	25-100	20-100	10-90	2-80	15-35	NP-10
Urban Land---	0-6	Variable			---	---	---	---	---	---	0-14	---
W:												
Water--------	---	---	---	---	---	---	---	---	---	---	---	---

Table 15.--Physical Properties of the Soils

(Entries under "Erosion factors—T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
AdB:												
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
AdC:												
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
AdD:												
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
AED:												
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
Colton---------	0-5	1-7	1.10-1.40	6-100	0.09-0.12	0.0-2.9	2.0-6.0	.20	.24	5	3	86
	5-28	0-5	1.25-1.55	6-100	0.02-0.05	0.0-2.9	0.0-0.5	.15	.17			
	28-65	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.0	.10	.17			
AFC:												
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
Croghan--------	0-5	0-5	1.10-1.50	6-20	0.05-0.09	0.0-2.9	2.0-9.0	.17	.17	5	2	134
	5-34	0-5	1.20-1.50	20-100	0.03-0.07	0.0-2.9	1.0-3.0	.17	.17			
	34-65	0-5	1.20-1.50	20-100	0.03-0.06	0.0-2.9	0.0-0.5	.17	.17			
AgA:												
Allagash-------	0-5	3-13	0.95-1.25	0.6-2	0.16-0.22	0.0-2.9	0.0-2.0	.28	.28	3	3	86
	5-21	2-12	1.20-1.50	0.6-2	0.10-0.24	0.0-2.9	0.5-4.0	.28	.28			
	21-65	2-5	1.35-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.28	.28			
AgB:												
Allagash-------	0-5	3-13	0.95-1.25	0.6-2	0.16-0.22	0.0-2.9	0.0-2.0	.28	.28	3	3	86
	5-21	2-12	1.20-1.50	0.6-2	0.10-0.24	0.0-2.9	0.5-4.0	.28	.28			
	21-65	2-5	1.35-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.28	.28			
AgC:												
Allagash-------	0-5	3-13	0.95-1.25	0.6-2	0.16-0.22	0.0-2.9	0.0-2.0	.28	.28	3	3	86
	5-21	2-12	1.20-1.50	0.6-2	0.10-0.24	0.0-2.9	0.5-4.0	.28	.28			
	21-65	2-5	1.35-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.28	.28			
BeB:												
Berkshire------	0-7	3-10	1.10-1.15	0.6-6	0.10-0.22	0.0-2.9	2.0-5.0	.24	.24	5	3	86
	7-30	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	—	.32	.37			
	30-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	—	.24	.28			
BeC:												
Berkshire------	0-7	3-10	1.10-1.15	0.6-6	0.10-0.22	0.0-2.9	2.0-5.0	.24	.24	5	3	86
	7-30	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	—	.32	.37			
	30-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	—	.24	.28			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
BkC:												
Berkshire-------	0-4	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24	5	8	0
	4-32	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.32	.37			
	32-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-0.5	.24	.28			
BkD:												
Berkshire-------	0-4	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24	5	8	0
	4-32	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.32	.37			
	32-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-0.5	.24	.28			
BoB:												
Boothbay--------	0-10	10-25	1.00-1.30	0.6-2	0.22-0.30	0.0-2.9	3.0-6.0	.32	.32	2	5	56
	10-18	18-35	1.20-1.50	0.06-0.6	0.14-0.22	0.0-2.9	0.5-2.0	.49	.49			
	18-65	18-35	1.55-2.00	0.06-0.6	0.10-0.20	0.0-2.9	0.0-0.5	.49	.49			
BoC:												
Boothbay--------	0-10	10-25	1.00-1.30	0.6-2	0.22-0.30	0.0-2.9	3.0-6.0	.32	.32	2	5	56
	10-18	18-35	1.20-1.50	0.06-0.6	0.14-0.22	0.0-2.9	0.5-2.0	.49	.49			
	18-65	18-35	1.55-2.00	0.06-0.6	0.10-0.20	0.0-2.9	0.0-0.5	.49	.49			
BpB:												
Brayton---------	0-7	4-10	1.00-1.30	0.6-2	0.18-0.25	0.0-2.9	2.0-8.0	.24	.24	2	3	86
	7-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
BrB:												
Brayton---------	0-6	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28	2	8	0
	6-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
BrC:												
Brayton---------	0-6	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28	2	8	0
	6-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
BSB:												
Brayton---------	0-6	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28	2	8	0
	6-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
Colonel---------	0-6	3-10	0.90-1.20	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	6-20	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.24	.28			
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
BTB:												
Brayton---------	0-6	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28	2	8	0
	6-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
Peacham---------	0-8	0-0	0.30-0.50	0.2-6	0.32-0.42	0.0-2.9	20-60	—	—	3	8	0
	8-20	3-10	1.20-1.40	0.6-2	0.11-0.22	0.0-2.9	0.5-10	.28	.32			
	20-65	3-10	1.80-2.00	0.0015-0.2	0.02-0.06	0.0-2.9	0.0-0.5	.28	.32			
Markey----------	0-37	0-0	0.15-0.45	0.2-6	0.35-0.45	—	55-85	—	—	2	2	134
	37-65	0-10	1.40-1.65	6-20	0.03-0.08	0.0-2.9	0.0-2.0	.10	.15			
BW:												
Bucksport-------	0-3	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-99	—	—	3	8	0
	3-37	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-99	—	—			
	37-65	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-90	—	—			
Markey----------	0-37	0-0	0.15-0.45	0.2-6	0.35-0.45	—	55-85	—	—	2	2	134
	37-65	0-10	1.40-1.65	6-20	0.03-0.08	0.0-2.9	0.0-2.0	.10	.15			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Ca:												
Charles---------	0-4	2-18	0.90-1.35	0.6-2	0.20-0.40	0.0-2.9	5.0-10	.32	.32	5	3	86
	4-58	2-18	1.00-1.50	0.6-2	0.20-0.40	0.0-2.9	1.0-4.0	.49	.49			
	58-65	0-3	1.20-1.50	0.6-100	0.04-0.20	0.0-2.9	0.5-3.0	.20	—			
CG:												
Charles---------	0-4	2-18	0.90-1.35	0.6-2	0.20-0.40	0.0-2.9	5.0-10	.32	.32	5	3	86
	4-58	2-18	1.00-1.50	0.6-2	0.20-0.40	0.0-2.9	1.0-4.0	.49	.49			
	58-65	0-3	1.20-1.50	0.6-100	0.04-0.20	0.0-2.9	0.5-3.0	.20	—			
Medomak---------	0-11	2-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	2.0-10	.32	.28	5	8	0
	11-36	2-10	1.10-1.35	0.6-2	0.20-0.30	0.0-2.9	0.5-2.0	.49	.49			
	36-65	2-10	1.30-1.50	0.6-2	0.20-0.30	0.0-2.9	0.0-2.0	.49	.49			
Cornish---------	0-8	2-17	0.95-1.35	0.6-2	0.20-0.45	0.0-2.9	2.0-8.0	.32	.32	5	3	86
	8-62	2-12	0.95-1.45	0.6-2	0.18-0.45	0.0-2.9	0.5-2.0	.49	.49			
	62-65	1-8	1.10-1.50	0.6-100	0.04-0.25	0.0-2.9	0.0-1.0	.20	—			
ChB:												
Chesuncook------	0-7	5-15	0.70-1.20	0.6-2	0.20-0.40	0.0-2.9	3.0-8.0	.28	.28	3	5	56
	7-20	10-18	0.90-1.60	0.6-2	0.20-0.38	0.0-2.9	0.5-3.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
ChC:												
Chesuncook------	0-7	5-15	0.70-1.20	0.6-2	0.20-0.40	0.0-2.9	3.0-8.0	.28	.28	3	5	56
	7-20	10-18	0.90-1.60	0.6-2	0.20-0.38	0.0-2.9	0.5-3.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
ChD:												
Chesuncook------	0-7	5-15	0.70-1.20	0.6-2	0.20-0.40	0.0-2.9	3.0-8.0	.28	.28	3	5	56
	7-20	10-18	0.90-1.60	0.6-2	0.20-0.38	0.0-2.9	0.5-3.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
CkB:												
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
CkC:												
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
CkD:												
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
CLD:												
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
CnB:												
Colonel---------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	2	3	86
	7-16	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-2.0	.24	.28			
	16-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
CnC:												
Colonel---------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	2	3	86
	7-16	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-2.0	.24	.28			
	16-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
CoB:												
Colonel---------	0-6	3-10	0.90-1.20	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	6-20	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.24	.28			
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
CoC:												
Colonel---------	0-6	3-10	0.90-1.20	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	6-20	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.24	.28			
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
CPC:												
Colonel---------	0-6	3-10	0.90-1.20	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	6-20	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.24	.28			
	20-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
CsB:												
Colton----------	0-5	1-7	1.10-1.40	6-100	0.09-0.12	0.0-2.9	2.0-6.0	.20	.24	5	3	86
	5-28	0-5	1.25-1.55	6-100	0.02-0.05	0.0-2.9	0.0-0.5	.15	.17			
	28-65	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.0	.10	.17			
CsC:												
Colton----------	0-5	1-7	1.10-1.40	6-100	0.09-0.12	0.0-2.9	2.0-6.0	.20	.24	5	3	86
	5-28	0-5	1.25-1.55	6-100	0.02-0.05	0.0-2.9	0.0-0.5	.15	.17			
	28-65	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.0	.10	.17			
CsD:												
Colton----------	0-5	1-7	1.10-1.40	6-100	0.09-0.12	0.0-2.9	2.0-6.0	.20	.24	5	3	86
	5-28	0-5	1.25-1.55	6-100	0.02-0.05	0.0-2.9	0.0-0.5	.15	.17			
	28-65	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.0	.10	.17			
CTC:												
Colton----------	0-5	1-7	1.10-1.40	6-100	0.09-0.12	0.0-2.9	2.0-6.0	.20	.24	5	3	86
	5-28	0-5	1.25-1.55	6-100	0.02-0.05	0.0-2.9	0.0-0.5	.15	.17			
	28-65	0-3	1.45-1.65	20-100	0.01-0.02	0.0-2.9	0.0-0.0	.10	.17			
Sheepscot-------	0-4	3-5	1.00-1.30	0.6-6	0.11-0.21	0.0-2.9	2.0-6.0	.17	.17	2	3	86
	4-16	1-5	1.20-1.50	0.6-6	0.06-0.15	0.0-2.9	0.5-1.0	.10	.15			
	16-25	0-3	1.45-1.70	6-100	0.02-0.09	0.0-2.9	0.5-1.0	.10	.20			
	25-65	0-3	1.45-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
CuB:												
Croghan---------	0-5	0-5	1.10-1.50	6-20	0.05-0.09	0.0-2.9	2.0-9.0	.17	.17	5	2	134
	5-34	0-5	1.20-1.50	20-100	0.03-0.07	0.0-2.9	1.0-3.0	.17	.17			
	34-65	0-5	1.20-1.50	20-100	0.03-0.06	0.0-2.9	0.0-0.5	.17	.17			
DfB:												
Dixfield--------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	3	3	86
	7-24	3-10	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.24	.28			
	24-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
DfC:												
Dixfield--------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	3	3	86
	7-24	3-10	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.24	.28			
	24-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
DfD:												
Dixfield--------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	3	3	86
	7-24	3-10	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.24	.28			
	24-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
DgB:												
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
DgC:												
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
DgD:												
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
DMC:												
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
Marlow----------	0-6	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	0.0-2.0	.20	.24	3	3	86
	6-23	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-1.0	.32	.37			
	23-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
DTC:												
Dixfield--------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	3	3	86
	7-22	3-10	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.24	.28			
	22-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
Colonel---------	0-7	3-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	4.0-8.0	.20	.20	2	3	86
	7-17	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-2.0	.24	.28			
	17-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
DUD:												
Dixfield--------	0-5	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	5-24	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	24-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
Colonel---------	0-2	3-10	0.90-1.20	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.17	.20	2	8	0
	2-18	3-10	1.00-1.60	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.24	.28			
	18-65	3-10	1.65-1.95	0.06-0.6	0.08-0.15	0.0-2.9	0.0-0.5	.20	.24			
ECC:												
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
ECC:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
EMC:												
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
Monson----------	0-2	5-15	0.70-1.00	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	2-18	10-18	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	2.0-4.0	.28	.32			
	18-22	—	—	0.01-20	—	—	—	—	—			
EME:												
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
Monson----------	0-2	5-15	0.70-1.00	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	2-18	10-18	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	2.0-4.0	.28	.32			
	18-22	—	—	0.01-20	—	—	—	—	—			
EtB:												
Elliottsville---	0-7	5-15	0.90-1.10	0.6-2	0.22-0.35	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-17	10-18	1.10-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.28	.32			
	17-30	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	30-34	—	—	0.01-20	—	—	—	—	—			
Thorndike-------	0-7	8-10	1.00-1.30	0.6-2	0.12-0.24	0.0-2.9	2.0-8.0	.20	.24	1	7	38
	7-11	5-10	1.00-1.30	0.6-2	0.09-0.22	0.0-2.9	0.5-3.0	.17	.24			
	11-15	—	—	0.01-20	—	—	—	—	—			
EtC:												
Elliottsville---	0-7	5-15	0.90-1.10	0.6-2	0.22-0.35	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-17	10-18	1.10-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.28	.32			
	17-30	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	30-34	—	—	0.01-20	—	—	—	—	—			
Thorndike-------	0-7	8-10	1.00-1.30	0.6-2	0.12-0.24	0.0-2.9	2.0-8.0	.20	.24	1	7	38
	7-11	5-10	1.00-1.30	0.6-2	0.09-0.22	0.0-2.9	0.5-3.0	.17	.24			
	11-15	—	—	0.01-20	—	—	—	—	—			
EtD:												
Elliottsville---	0-7	5-15	0.90-1.10	0.6-2	0.22-0.35	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-17	10-18	1.10-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-3.0	.28	.32			
	17-30	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	30-34	—	—	0.01-20	—	—	—	—	—			
Thorndike-------	0-7	8-10	1.00-1.30	0.6-2	0.12-0.24	0.0-2.9	2.0-8.0	.20	.24	1	7	38
	7-11	5-10	1.00-1.30	0.6-2	0.09-0.22	0.0-2.9	0.5-3.0	.17	.24			
	11-15	—	—	0.01-20	—	—	—	—	—			
Fr:												
Fryeburg--------	0-10	2-13	1.10-1.35	0.6-2	0.20-0.40	0.0-2.9	2.0-6.0	.32	.32	5	5	56
	10-35	2-13	0.90-1.35	0.6-2	0.20-0.45	0.0-2.9	1.0-4.0	.49	.49			
	35-65	2-13	1.00-1.40	0.6-2	0.18-0.40	0.0-2.9	0.5-3.0	.49	.49			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
HeC:												
Hermon----------	0-2	2-6	0.85-1.20	2-20	0.07-0.15	0.0-2.9	0.0-2.0	.10	.17	5	8	0
	2-5	2-6	0.85-1.20	2-20	0.07-0.20	0.0-2.9	3.0-7.0	.10	.15			
	5-19	2-7	0.85-1.30	2-20	0.05-0.10	0.0-2.9	0.5-3.0	.10	.17			
	19-65	1-4	1.10-1.70	6-100	0.02-0.06	0.0-2.9	0.0-0.5	.10	.17			
HeD:												
Hermon----------	0-2	2-6	0.85-1.20	2-20	0.07-0.15	0.0-2.9	0.0-2.0	.10	.17	5	8	0
	2-5	2-6	0.85-1.20	2-20	0.07-0.20	0.0-2.9	3.0-7.0	.10	.15			
	5-19	2-7	0.85-1.30	2-20	0.05-0.10	0.0-2.9	0.5-3.0	.10	.17			
	19-65	1-4	1.10-1.70	6-100	0.02-0.06	0.0-2.9	0.0-0.5	.10	.17			
HMC:												
Hermon----------	0-2	2-6	0.85-1.20	2-20	0.07-0.15	0.0-2.9	0.0-2.0	.10	.17	5	8	0
	2-5	2-6	0.85-1.20	2-20	0.07-0.20	0.0-2.9	3.0-7.0	.10	.15			
	5-19	2-7	0.85-1.30	2-20	0.05-0.10	0.0-2.9	0.5-3.0	.10	.17			
	19-65	1-4	1.10-1.70	6-100	0.02-0.06	0.0-2.9	0.0-0.5	.10	.17			
Monadnock-------	0-5	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28	3	3	86
	5-27	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.0-1.0	.28	.32			
	27-65	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-0.0	.17	.24			
HME:												
Hermon----------	0-2	2-6	0.85-1.20	2-20	0.07-0.15	0.0-2.9	0.0-2.0	.10	.17	5	8	0
	2-5	2-6	0.85-1.20	2-20	0.07-0.20	0.0-2.9	3.0-7.0	.10	.15			
	5-19	2-7	0.85-1.30	2-20	0.05-0.10	0.0-2.9	0.5-3.0	.10	.17			
	19-65	1-4	1.10-1.70	6-100	0.02-0.06	0.0-2.9	0.0-0.5	.10	.17			
Monadnock-------	0-5	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28	3	3	86
	5-27	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.0-1.0	.28	.32			
	27-65	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-0.0	.17	.24			
Lc:												
Lovewell--------	0-11	2-14	0.95-1.35	0.6-2	0.20-0.35	0.0-2.9	2.0-8.0	.32	.32	5	3	86
	11-23	2-15	0.95-1.40	0.6-2	0.20-0.45	0.0-2.9	0.5-2.0	.49	.49			
	23-65	2-10	1.10-1.50	0.6-2	0.18-0.40	0.0-2.9	0.0-1.0	.49	.49			
Cornish---------	0-8	2-17	0.95-1.35	0.6-2	0.20-0.45	0.0-2.9	2.0-8.0	.32	.32	5	3	86
	8-62	2-12	0.95-1.45	0.6-2	0.18-0.45	0.0-2.9	0.5-2.0	.49	.49			
	62-65	1-8	1.10-1.50	0.6-100	0.04-0.25	0.0-2.9	0.0-1.0	.20	—			
Ld:												
Lovewell--------	0-11	2-14	0.95-1.35	0.6-2	0.20-0.35	0.0-2.9	2.0-8.0	.32	.32	5	3	86
	11-23	2-15	0.95-1.40	0.6-2	0.20-0.45	0.0-2.9	0.5-2.0	.49	.49			
	23-65	2-10	1.10-1.50	0.6-2	0.18-0.40	0.0-2.9	0.0-1.0	.49	.49			
Cornish---------	0-8	2-17	0.95-1.35	0.6-2	0.20-0.45	0.0-2.9	2.0-8.0	.32	.32	5	3	86
	8-62	2-12	0.95-1.45	0.6-2	0.18-0.45	0.0-2.9	0.5-2.0	.49	.49			
	62-65	1-8	1.10-1.50	0.6-100	0.04-0.25	0.0-2.9	0.0-1.0	.20	—			
LmE:												
Lyman----------	0-3	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28	1	8	0
	3-15	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	15-19	—	—	0.01-20	—	—	—	—	—			
Rock Outcrop----	0-60	—	—	—	—	—	—	—	—	—	8	0
Tunbridge-------	0-5	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24	2	8	0
	5-18	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.24			
	18-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
LNC:												
Lyman----------	0-3	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28	1	8	0
	3-15	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	15-19	—	—	0.01-20	—	—	—	—	—			
Tunbridge-------	0-5	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24	2	8	0
	5-18	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.24			
	18-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Abram----------	0-5	1-10	0.90-1.10	2-6	0.15-0.25	0.0-2.9	2.0-4.0	.15	.28	1	8	0
	5-9	—	—	0.01-20	—	—	—	—	—			
LNE:												
Lyman----------	0-3	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28	1	8	0
	3-15	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	15-19	—	—	0.01-20	—	—	—	—	—			
Tunbridge-------	0-5	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24	2	8	0
	5-18	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.24			
	18-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Abram----------	0-5	1-10	0.90-1.10	2-6	0.15-0.25	0.0-2.9	2.0-4.0	.15	.28	1	8	0
	5-9	—	—	0.01-20	—	—	—	—	—			
LyC:												
Lyman----------	0-3	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28	1	3	86
	3-15	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	15-19	—	—	0.01-20	—	—	—	—	—			
Tunbridge-------	0-5	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24	2	8	0
	5-18	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.24			
	18-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Rock Outcrop----	0-60	—	—	—	—	—	—	—	—	—	8	0
MaB:												
Madawaska-------	0-8	3-13	0.95-1.25	0.6-2	0.16-0.25	0.0-2.9	2.0-9.0	.28	.28	3	3	86
	8-24	2-12	1.00-1.50	0.6-2	0.10-0.22	0.0-2.9	0.5-4.0	.28	.28			
	24-65	0-5	1.25-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.17	.17			
MDB:												
Madawaska-------	0-8	3-13	0.95-1.25	0.6-2	0.16-0.25	0.0-2.9	2.0-9.0	.28	.28	3	3	86
	8-24	2-12	1.00-1.50	0.6-2	0.10-0.22	0.0-2.9	0.5-4.0	.28	.28			
	24-65	0-5	1.25-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.17	.17			
Allagash--------	0-5	3-13	0.95-1.25	0.6-2	0.16-0.22	0.0-2.9	0.0-2.0	.28	.28	3	3	86
	5-21	2-12	1.20-1.50	0.6-2	0.10-0.24	0.0-2.9	0.5-4.0	.28	.28			
	21-65	2-5	1.35-1.65	6-20	0.06-0.18	0.0-2.9	0.0-0.5	.28	.28			
MeB:												
Marlow----------	0-7	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	2.0-6.0	.24	.24	3	3	86
	7-22	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	22-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
MeC:												
Marlow----------	0-7	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	2.0-6.0	.24	.24	3	3	86
	7-22	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	22-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
MeD:												
Marlow----------	0-7	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	2.0-6.0	.24	.24	3	3	86
	7-22	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	22-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
MfB:												
Marlow----------	0-6	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	0.0-2.0	.20	.24	3	3	86
	6-23	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	23-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
MfC:												
Marlow----------	0-6	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	0.0-2.0	.20	.24	3	3	86
	6-23	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	23-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
MfD:												
Marlow----------	0-6	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	0.0-2.0	.20	.24	3	3	86
	6-23	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	23-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
MGD:												
Marlow----------	0-6	3-10	1.00-1.30	0.6-2	0.10-0.23	0.0-2.9	0.0-2.0	.20	.24	3	3	86
	6-23	3-10	1.30-1.60	0.6-2	0.06-0.20	0.0-2.9	0.5-2.0	.32	.37			
	23-65	3-10	1.70-2.05	0.06-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.20	.24			
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			
MhB:												
Masardis--------	0-3	5-12	0.85-1.15	2-6	0.12-0.23	0.0-2.9	0.0-2.0	.17	.17	2	3	86
	3-14	5-12	0.90-1.20	2-6	0.06-0.15	0.0-2.9	1.0-4.0	.10	.15			
	14-28	1-8	1.00-1.40	6-100	0.03-0.10	0.0-2.9	0.5-2.0	.10	.20			
	28-65	0-5	1.40-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
MhC:												
Masardis--------	0-3	5-12	0.85-1.15	2-6	0.12-0.23	0.0-2.9	0.0-2.0	.17	.17	2	3	86
	3-14	5-12	0.90-1.20	2-6	0.06-0.15	0.0-2.9	1.0-4.0	.10	.15			
	14-28	1-8	1.00-1.40	6-100	0.03-0.10	0.0-2.9	0.5-2.0	.10	.20			
	28-65	0-5	1.40-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
MhD:												
Masardis--------	0-3	5-12	0.85-1.15	2-6	0.12-0.23	0.0-2.9	0.0-2.0	.17	.17	2	3	86
	3-14	5-12	0.90-1.20	2-6	0.06-0.15	0.0-2.9	1.0-4.0	.10	.15			
	14-28	1-8	1.00-1.40	6-100	0.03-0.10	0.0-2.9	0.5-2.0	.10	.20			
	28-65	0-5	1.40-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
MKE:												
Masardis--------	0-3	5-12	0.85-1.15	2-6	0.12-0.23	0.0-2.9	0.0-2.0	.17	.17	2	3	86
	3-14	5-12	0.90-1.20	2-6	0.06-0.15	0.0-2.9	1.0-4.0	.10	.15			
	14-28	1-8	1.00-1.40	6-100	0.03-0.10	0.0-2.9	0.5-2.0	.10	.20			
	28-65	0-5	1.40-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
Adams----------	0-4	0-5	1.00-1.30	6-20	0.06-0.12	0.0-2.9	2.0-5.0	.17	.17	5	2	134
	4-28	0-5	1.10-1.45	6-20	0.03-0.10	0.0-2.9	1.0-3.0	.17	.17			
	28-65	0-5	1.20-1.50	20-100	0.03-0.04	0.0-2.9	0.0-0.5	.17	.17			
MLC:												
Masardis--------	0-3	5-12	0.85-1.15	2-6	0.12-0.23	0.0-2.9	0.0-2.0	.17	.17	2	3	86
	3-14	5-12	0.90-1.20	2-6	0.06-0.15	0.0-2.9	1.0-4.0	.10	.15			
	14-28	1-8	1.00-1.40	6-100	0.03-0.10	0.0-2.9	0.5-2.0	.10	.20			
	28-65	0-5	1.40-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
MLC:												
Sheepscot-------	0-4	3-5	1.00-1.30	0.6-6	0.11-0.21	0.0-2.9	2.0-6.0	.17	.17	2	3	86
	4-16	1-5	1.20-1.50	0.6-6	0.06-0.15	0.0-2.9	0.5-1.0	.10	.15			
	16-25	0-3	1.45-1.70	6-100	0.02-0.09	0.0-2.9	0.5-1.0	.10	.20			
	25-65	0-3	1.45-1.70	6-100	0.01-0.06	0.0-2.9	0.0-0.5	.05	.17			
Mm:												
Medomak---------	0-11	2-10	0.90-1.20	0.6-2	0.20-0.30	0.0-2.9	2.0-10	.32	.28	5	8	0
	11-36	2-10	1.10-1.35	0.6-2	0.20-0.30	0.0-2.9	0.5-2.0	.49	.49			
	36-65	2-10	1.30-1.50	0.6-2	0.20-0.30	0.0-2.9	0.0-2.0	.49	.49			
MNC:												
Monadnock-------	0-5	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28	3	3	86
	5-27	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.0-1.0	.28	.32			
	27-65	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-0.0	.17	.24			
Berkshire-------	0-4	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24	5	8	0
	4-32	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.32	.37			
	32-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-0.5	.24	.28			
MNE:												
Monadnock-------	0-5	1-8	0.80-1.20	0.6-2	0.10-0.20	0.0-2.9	3.0-8.0	.24	.28	3	3	86
	5-27	1-8	0.80-1.30	0.6-2	0.09-0.17	0.0-2.9	0.0-1.0	.28	.32			
	27-65	1-5	1.30-1.60	2-6	0.04-0.08	0.0-2.9	0.0-0.0	.17	.24			
Berkshire-------	0-4	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24	5	8	0
	4-32	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.32	.37			
	32-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-0.5	.24	.28			
MrB:												
Monarda---------	0-7	10-18	1.00-1.30	0.6-6	0.17-0.32	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-15	10-18	1.30-1.70	0.0015-2	0.15-0.32	0.0-2.9	0.0-4.0	.28	.32			
	15-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
MsB:												
Monarda---------	0-6	10-18	1.00-1.30	0.6-6	0.15-0.30	0.0-2.9	0.0-8.0	.20	.28	2	8	0
	6-17	10-18	1.30-1.70	0.0015-2	0.15-0.25	0.0-2.9	0.0-4.0	.28	.32			
	17-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
MTB:												
Monarda---------	0-6	10-18	1.00-1.30	0.6-6	0.15-0.30	0.0-2.9	0.0-8.0	.20	.28	2	8	0
	6-17	10-18	1.30-1.70	0.0015-2	0.15-0.25	0.0-2.9	0.0-4.0	.28	.32			
	17-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
Burnham---------	0-9	0-0	0.10-0.30	0.2-6	0.32-0.42	—	25-70	—	—	2	8	0
	9-25	10-18	1.30-1.70	0.2-0.6	0.16-0.35	0.0-2.9	0.5-10	.28	.32			
	25-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
Bucksport-------	0-3	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-99	—	—	3	8	0
	3-37	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-99	—	—			
	37-65	0-0	0.10-0.30	0.2-6	0.20-0.50	—	80-90	—	—			
MUB:												
Monarda---------	0-6	10-18	1.00-1.30	0.6-6	0.15-0.30	0.0-2.9	0.0-8.0	.20	.28	2	8	0
	6-17	10-18	1.30-1.70	0.0015-2	0.15-0.25	0.0-2.9	0.0-4.0	.28	.32			
	17-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
MVC:												
Monson----------	0-2	5-15	0.70-1.00	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	2-18	10-18	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	2.0-4.0	.28	.32			
	18-22	—	—	0.01-20	—	—	—	—	—			
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
Nb:												
Naumburg--------	0-7	1-5	1.20-1.50	2-6	0.05-0.09	0.0-2.9	3.0-7.0	.17	.17	5	2	134
	7-25	1-5	1.20-1.50	6-20	0.06-0.08	0.0-2.9	0.5-2.0	.17	.17			
	25-65	1-5	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.17	.17			
NS:												
Naumburg--------	0-7	1-5	1.20-1.50	2-6	0.05-0.09	0.0-2.9	3.0-7.0	.17	.17	5	2	134
	7-25	1-5	1.20-1.50	6-20	0.06-0.08	0.0-2.9	0.5-2.0	.17	.17			
	25-65	1-5	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.17	.17			
Searsport-------	0-10	0-0	0.55-0.75	0.2-6	0.20-0.45	—	80-99	—	—	2	8	0
	10-16	1-5	1.15-1.35	6-100	0.01-0.13	0.0-2.9	3.0-20	.17	.17			
	16-40	0-2	1.35-1.55	6-100	0.01-0.09	0.0-2.9	0.0-0.5	.17	.17			
	40-65	0-2	1.35-1.55	6-100	0.01-0.09	0.0-2.9	0.0-0.5	.10	.15			
NvB:												
Nicholville-----	0-10	2-18	1.20-1.50	0.6-2	0.16-0.22	0.0-2.9	2.0-6.0	.49	.49	5	5	56
	10-21	2-18	1.20-1.50	0.6-2	0.15-0.20	0.0-2.9	0.0-4.0	.64	.64			
	21-37	2-18	1.45-1.65	0.6-2	0.10-0.20	0.0-2.9	0.0-4.0	.64	.64			
	37-65	2-18	1.45-1.65	0.6-2	0.12-0.20	0.0-2.9	0.0-0.5	.49	.49			
NvC:												
Nicholville-----	0-10	2-18	1.20-1.50	0.6-2	0.16-0.22	0.0-2.9	2.0-6.0	.49	.49	5	5	56
	10-21	2-18	1.20-1.50	0.6-2	0.15-0.20	0.0-2.9	0.0-4.0	.64	.64			
	21-37	2-18	1.45-1.65	0.6-2	0.10-0.20	0.0-2.9	0.0-4.0	.64	.64			
	37-65	2-18	1.45-1.65	0.6-2	0.12-0.20	0.0-2.9	0.0-0.5	.49	.49			
PeB:												
Peacham---------	0-8	0-0	0.30-0.50	0.2-6	0.32-0.42	0.0-2.9	20-60	—	—	3	8	0
	8-20	3-10	1.20-1.40	0.6-2	0.11-0.22	0.0-2.9	0.5-10	.28	.32			
	20-65	3-10	1.80-2.00	0.0015-0.2	0.02-0.06	0.0-2.9	0.0-0.5	.28	.32			
Brayton---------	0-6	4-10	1.00-1.30	0.6-2	0.18-0.28	0.0-2.9	4.0-8.0	.20	.28	2	8	0
	6-14	4-10	1.40-1.65	0.6-2	0.12-0.28	0.0-2.9	0.5-2.0	.32	.37			
	14-65	4-10	1.70-2.00	0.06-0.6	0.01-0.06	0.0-2.9	0.0-0.5	.24	.28			
Pr:												
Pits----------	0-60	0-0	—	—	0.00-0.00	—	—	—	—	—	8	0
Ps:												
Pits----------	0-6	0-1	—	6-100	0.01-0.02	0.0-2.9	0.0-0.1	.02	—	—	8	0
	6-60	0-1	—	6-100	0.01-0.02	0.0-2.9	—	.02	—			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
RRE:												
Ricker----------	0-2	—	0.07-0.30	2-6	0.45-0.65	0.0-2.9	80-99	—	—	1	7	38
	2-5	—	0.15-0.60	2-6	0.35-0.45	0.0-2.9	20-60	—	—			
	5-7	3-18	1.35-1.80	0.6-6	0.06-0.18	0.0-2.9	0.0-0.5	.49	.55			
	7-11	—	—	0.01-20	—	—	—	—	—			
Rock Outcrop----	0-60	—	—	—	—	—	—	—	—	—	8	0
RSE:												
Ricker----------	0-2	—	0.07-0.30	2-6	0.45-0.65	0.0-2.9	80-99	—	—	1	7	38
	2-5	—	0.15-0.60	2-6	0.35-0.45	0.0-2.9	20-60	—	—			
	5-7	3-18	1.35-1.80	0.6-6	0.06-0.18	0.0-2.9	0.0-0.5	.49	.55			
	7-11	—	—	0.01-20	—	—	—	—	—			
Saddleback------	0-5	1-5	1.00-1.20	0.6-2	0.15-0.22	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	5-15	2-10	0.80-1.10	0.6-2	0.15-0.30	0.0-2.9	2.0-8.0	.28	.32			
	15-19	—	—	0.01-20	—	—	—	—	—			
RYE:												
Rock Outcrop----	0-60	—	—	—	—	—	—	—	—	—	8	0
Abram----------	0-5	1-10	0.90-1.10	2-6	0.15-0.25	0.0-2.9	2.0-4.0	.15	.28	1	8	0
	5-9	—	—	0.01-20	—	—	—	—	—			
Lyman----------	0-3	2-10	0.75-1.20	2-6	0.13-0.24	0.0-2.9	2.0-8.0	.20	.28	1	8	0
	3-15	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	15-19	—	—	0.01-20	—	—	—	—	—			
SAE:												
Saddleback------	0-5	1-5	1.00-1.20	0.6-2	0.15-0.22	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	5-15	2-10	0.80-1.10	0.6-2	0.15-0.30	0.0-2.9	2.0-8.0	.28	.32			
	15-19	—	—	0.01-20	—	—	—	—	—			
Mahoosuc--------	0-5	0-0	0.07-0.60	20-100	0.35-0.45	0.0-2.9	80-99	—	—	1	5	56
	5-65	0-0	—	20-100	0.00-0.01	0.0-2.9	0.0-0.5	.02	—			
Sisk----------	0-4	3-10	0.90-1.10	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	4-24	3-15	1.20-1.30	0.6-2	0.15-0.25	0.0-2.9	2.0-10	.32	.37			
	24-65	3-15	1.60-1.90	0.0015-0.6	0.06-0.12	0.0-2.9	0.0-0.5	.32	.37			
SKD:												
Sisk----------	0-4	3-10	0.90-1.10	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	4-24	3-15	1.20-1.30	0.6-2	0.15-0.25	0.0-2.9	2.0-10	.32	.37			
	24-65	3-15	1.60-1.90	0.0015-0.6	0.06-0.12	0.0-2.9	0.0-0.5	.32	.37			
Surplus---------	0-7	3-10	0.90-1.10	0.6-2	0.15-0.30	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	7-26	3-10	1.20-1.50	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.32	.37			
	26-65	3-15	1.60-1.90	0.0015-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.32	.37			
Sn:												
Sunday----------	0-9	0-5	1.25-1.55	6-100	0.08-0.17	0.0-2.9	1.0-3.0	.15	.15	5	2	134
	9-65	0-2	1.25-1.55	6-100	0.01-0.10	0.0-2.9	0.0-0.5	.15	.15			
SRC:												
Surplus---------	0-7	3-10	0.90-1.10	0.6-2	0.15-0.30	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	7-26	3-10	1.20-1.50	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.32	.37			
	26-65	3-15	1.60-1.90	0.0015-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.32	.37			
Bemis----------	0-13	3-18	1.20-1.65	0.6-2	0.12-0.25	0.0-2.9	0.0-8.0	.24	.28	2	8	0
	13-65	3-18	1.70-2.00	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.24	.28			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
SSC:												
Surplus---------	0-7	3-10	0.90-1.10	0.6-2	0.15-0.30	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	7-26	3-10	1.20-1.50	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.32	.37			
	26-65	3-15	1.60-1.90	0.0015-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.32	.37			
Saddleback------	0-5	1-5	1.00-1.20	0.6-2	0.15-0.22	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	5-15	2-10	0.80-1.10	0.6-2	0.15-0.30	0.0-2.9	2.0-8.0	.28	.32			
	15-19	—	—	0.01-20	—	—	—	—	—			
Ricker----------	0-2	—	0.07-0.30	2-6	0.45-0.65	0.0-2.9	80-99	—	—	1	7	38
	2-5	—	0.15-0.60	2-6	0.35-0.45	0.0-2.9	20-60	—	—			
	5-7	3-18	1.35-1.80	0.6-6	0.06-0.18	0.0-2.9	0.0-0.5	.49	.55			
	7-11	—	—	0.01-20	—	—	—	—	—			
SVC:												
Surplus---------	0-7	3-10	0.90-1.10	0.6-2	0.15-0.30	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	7-26	3-10	1.20-1.50	0.6-2	0.15-0.25	0.0-2.9	0.5-4.0	.32	.37			
	26-65	3-15	1.60-1.90	0.0015-0.6	0.05-0.12	0.0-2.9	0.0-0.5	.32	.37			
Sisk----------	0-4	3-10	0.90-1.10	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.32	3	8	0
	4-24	3-15	1.20-1.30	0.6-2	0.15-0.25	0.0-2.9	2.0-10	.32	.37			
	24-65	3-15	1.60-1.90	0.0015-0.6	0.06-0.12	0.0-2.9	0.0-0.5	.32	.37			
Sw:												
Swanville-------	0-7	10-35	1.00-1.30	0.6-2	0.22-0.35	0.0-2.9	3.0-8.0	.28	.28	3	5	56
	7-24	18-35	1.20-1.70	0.06-0.6	0.14-0.30	0.0-2.9	0.5-3.0	.49	.49			
	24-65	18-35	1.55-2.00	0.06-0.6	0.10-0.27	0.0-2.9	0.0-0.5	.49	.49			
SYB:												
Swanville-------	0-7	10-35	1.00-1.30	0.6-2	0.22-0.35	0.0-2.9	3.0-8.0	.28	.28	3	5	56
	7-24	18-35	1.20-1.70	0.06-0.6	0.14-0.30	0.0-2.9	0.5-3.0	.49	.49			
	24-65	18-35	1.55-2.00	0.06-0.6	0.10-0.27	0.0-2.9	0.0-0.5	.49	.49			
Boothbay--------	0-10	10-25	1.00-1.30	0.6-2	0.22-0.30	0.0-2.9	3.0-6.0	.32	.32	2	5	56
	10-18	18-35	1.20-1.50	0.06-0.6	0.14-0.22	0.0-2.9	0.5-2.0	.49	.49			
	18-65	18-35	1.55-2.00	0.06-0.6	0.10-0.20	0.0-2.9	0.0-0.5	.49	.49			
TeB:												
Telos----------	0-7	5-13	0.90-1.20	0.6-2	0.20-0.35	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-18	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-3.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
TeC:												
Telos----------	0-7	5-13	0.90-1.20	0.6-2	0.20-0.35	0.0-2.9	3.0-8.0	.28	.28	2	5	56
	7-18	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-3.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
TfB:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
TfC:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
THC:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea-bility (Ksat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
THC:												
Chesuncook------	0-4	5-15	0.70-0.90	0.6-2	0.18-0.29	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-18	10-18	0.70-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	18-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
TLB:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.10-0.20	0.0-2.9	0.0-2.0	.15	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
Monarda---------	0-6	10-18	1.00-1.30	0.6-6	0.10-0.15	0.0-2.9	0.0-5.0	.15	.28	2	8	0
	6-17	10-18	1.30-1.70	0.0015-2	0.15-0.25	0.0-2.9	0.0-4.0	.28	.32			
	17-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
TMB:												
Telos----------	0-4	5-13	0.70-1.00	0.6-2	0.15-0.25	0.0-2.9	0.0-2.0	.28	.28	3	8	0
	4-20	10-18	1.30-1.60	0.6-2	0.20-0.40	0.0-2.9	0.5-4.0	.32	.37			
	20-65	10-18	1.60-1.90	0.06-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.32	.37			
Monarda---------	0-6	10-18	1.00-1.30	0.6-6	0.15-0.30	0.0-2.9	0.0-8.0	.20	.28	2	8	0
	6-17	10-18	1.30-1.70	0.0015-2	0.15-0.25	0.0-2.9	0.0-4.0	.28	.32			
	17-65	10-18	1.70-1.95	0.0015-0.2	0.05-0.10	0.0-2.9	0.0-0.5	.28	.32			
Monson----------	0-2	5-15	0.70-1.00	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.24	.28	1	8	0
	2-18	10-18	1.30-1.60	0.6-2	0.20-0.30	0.0-2.9	2.0-4.0	.28	.32			
	18-22	—	—	0.01-20	—	—	—	—	—			
TOC:												
Thorndike-------	0-5	5-10	0.90-1.20	0.6-2	0.12-0.22	0.0-2.9	0.0-2.0	.17	.28	1	8	0
	5-14	5-10	1.00-1.30	0.6-2	0.09-0.22	0.0-2.9	0.5-4.0	.17	.24			
	14-18	—	—	0.01-20	—	—	—	—	—			
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
TOE:												
Thorndike-------	0-5	5-10	0.90-1.20	0.6-2	0.12-0.22	0.0-2.9	0.0-2.0	.17	.28	1	8	0
	5-14	5-10	1.00-1.30	0.6-2	0.09-0.22	0.0-2.9	0.5-4.0	.17	.24			
	14-18	—	—	0.01-20	—	—	—	—	—			
Elliottsville---	0-3	5-15	0.70-1.00	0.6-2	0.18-0.32	0.0-2.9	1.0-4.0	.24	.28	2	8	0
	3-18	10-18	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.28	.32			
	18-31	10-18	1.40-1.70	0.6-2	0.15-0.25	0.0-2.9	0.0-0.5	.28	.32			
	31-35	—	—	0.01-20	—	—	—	—	—			
TRC:												
Tunbridge-------	0-5	5-9	0.80-1.20	0.6-6	0.11-0.21	0.0-2.9	2.0-8.0	.20	.24	2	8	0
	5-18	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.24			
	18-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Berkshire-------	0-2	3-10	1.10-1.15	0.6-6	0.06-0.22	0.0-2.9	2.0-5.0	.20	.24	5	8	0
	2-32	3-10	1.15-1.30	0.6-6	0.10-0.20	0.0-2.9	0.5-2.0	.32	.37			
	32-65	1-10	1.30-1.60	0.6-6	0.10-0.18	0.0-2.9	0.0-0.5	.24	.28			
Dixfield--------	0-4	3-10	0.90-1.20	0.6-2	0.18-0.28	0.0-2.9	0.0-2.0	.17	.20	3	8	0
	4-25	3-10	1.00-1.60	0.6-2	0.20-0.30	0.0-2.9	0.5-4.0	.24	.28			
	25-65	3-10	1.65-1.95	0.06-0.6	0.08-0.20	0.0-2.9	0.0-0.5	.20	.24			

Table 15.--Physical Properties--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
TuB:												
Tunbridge-------	0-7	5-9	0.80-1.20	0.6-6	0.14-0.23	0.0-2.9	2.0-8.0	.24	.24	2	3	86
	7-16	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.20			
	16-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Lyman----------	0-7	2-10	0.75-1.20	2-6	0.08-0.25	0.0-2.9	1.0-4.0	.28	.28	1	3	86
	7-13	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	13-17	—	—	0.01-20	—	—	—	—	—			
TuC:												
Tunbridge-------	0-7	5-9	0.80-1.20	0.6-6	0.14-0.23	0.0-2.9	2.0-8.0	.24	.24	2	3	86
	7-16	3-9	1.20-1.40	0.6-6	0.10-0.21	0.0-2.9	2.0-6.0	.20	.20			
	16-32	3-7	1.20-1.50	0.6-6	0.09-0.15	0.0-2.9	1.0-2.0	.20	.24			
	32-36	—	—	0.01-20	—	—	—	—	—			
Lyman----------	0-7	2-10	0.75-1.20	2-6	0.08-0.25	0.0-2.9	1.0-4.0	.28	.28	1	3	86
	7-13	2-10	0.90-1.40	2-6	0.08-0.28	0.0-2.9	2.0-6.0	.32	.37			
	13-17	—	—	0.01-20	—	—	—	—	—			
Ud:												
Udorthents------	0-65	1-15	1.00-2.00	0.06-100	0.01-0.20	0.0-2.9	0.5-10	—	—	5	—	—
Urban Land------	0-6	—	—	—	0.00-0.00	—	—	—	—	—	—	—
W:												
Water----------	—	—	—	—	—	—	—	—	—	—	—	—

Table 16.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
AdB:				
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
AdC:				
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
AdD:				
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
AED:				
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
Colton	0-5	10-25	2.0-6.0	3.6-6.0
	5-28	5.0-30	1.0-2.0	3.6-6.0
	28-65	1.0-5.0	—	4.5-6.5
AFC:				
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
Croghan	0-5	5.0-20	3.0-9.0	3.6-6.0
	5-34	15-40	1.0-6.0	4.5-6.0
	34-65	2.0-10	0.5-1.0	4.5-6.0
AgA:				
Allagash	0-5	5.0-15	—	4.5-6.5
	5-21	4.0-15	—	4.5-6.5
	21-65	2.0-6.0	—	4.5-6.5
AgB:				
Allagash	0-5	5.0-15	—	4.5-6.5
	5-21	4.0-15	—	4.5-6.5
	21-65	2.0-6.0	—	4.5-6.5
AgC:				
Allagash	0-5	5.0-15	—	4.5-6.5
	5-21	4.0-15	—	4.5-6.5
	21-65	2.0-6.0	—	4.5-6.5
BeB:				
Berkshire	0-7	—	6.0-7.0	3.6-6.0
	7-30	—	3.0-4.0	3.6-6.0
	30-65	—	0.0-3.0	3.6-6.0
BeC:				
Berkshire	0-7	—	6.0-7.0	3.6-6.0
	7-30	—	3.0-4.0	3.6-6.0
	30-65	—	0.0-3.0	3.6-6.0

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
BkC:				
Berkshire	0-4	—	4.0-5.0	3.6-6.0
	4-32	—	3.0-4.0	3.6-6.0
	32-65	—	0.0-3.0	3.6-6.0
BkD:				
Berkshire	0-4	—	4.0-5.0	3.6-6.0
	4-32	—	3.0-4.0	3.6-6.0
	32-65	—	0.0-3.0	3.6-6.0
BoB:				
Boothbay	0-10	5.0-15	—	4.5-7.3
	10-18	4.0-9.0	—	4.5-7.3
	18-65	2.0-5.0	—	5.6-7.3
BoC:				
Boothbay	0-10	5.0-15	—	4.5-7.3
	10-18	4.0-9.0	—	4.5-7.3
	18-65	2.0-5.0	—	5.6-7.3
BpB:				
Brayton	0-7	—	4.0-9.0	3.6-6.0
	7-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
BrB:				
Brayton	0-6	—	3.0-6.0	3.6-6.0
	6-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
BrC:				
Brayton	0-6	—	3.0-6.0	3.6-6.0
	6-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
BSB:				
Brayton	0-6	—	3.0-6.0	3.6-6.0
	6-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
Colonel	0-6	—	4.0-8.0	3.6-6.5
	6-20	—	2.0-12	3.6-6.5
	20-65	1.0-2.0	—	4.5-6.5
BTB:				
Brayton	0-6	—	3.0-6.0	3.6-6.0
	6-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
Peacham	0-8	12-24	—	4.5-7.3
	8-20	3.0-14	—	4.5-7.3
	20-65	3.0-5.0	—	4.5-7.3
Markey	0-37	150-230	—	4.5-6.5
	37-65	1.0-3.0	—	4.5-7.3
BW:				
Bucksport	0-3	—	20-50	3.6-5.5
	3-37	—	20-50	3.6-6.0
	37-65	20-50	—	4.5-6.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
BW:				
Markey	0-37	150-230	—	4.5-6.5
	37-65	1.0-3.0	—	4.5-7.3
Ca:				
Charles	0-4	—	4.0-14	3.6-6.5
	4-58	—	1.0-4.0	3.6-6.5
	58-65	—	1.0-4.0	3.6-6.5
CG:				
Charles	0-4	—	4.0-14	3.6-6.5
	4-58	—	1.0-4.0	3.6-6.5
	58-65	—	1.0-4.0	3.6-6.5
Medomak	0-11	—	6.0-10	3.6-6.5
	11-36	—	5.0-11	3.6-6.5
	36-65	—	4.0-10	3.6-6.5
Cornish	0-8	4.0-11	—	4.5-6.5
	8-62	1.0-4.0	—	4.5-6.5
	62-65	1.0-2.0	—	4.5-6.5
ChB:				
Chesuncook	0-7	—	9.0-19	3.6-6.0
	7-20	—	2.0-14	3.6-6.0
	20-65	1.0-3.0	—	4.5-6.5
ChC:				
Chesuncook	0-7	—	9.0-19	3.6-6.0
	7-20	—	2.0-14	3.6-6.0
	20-65	1.0-3.0	—	4.5-6.5
ChD:				
Chesuncook	0-7	—	9.0-19	3.6-6.0
	7-20	—	2.0-14	3.6-6.0
	20-65	1.0-3.0	—	4.5-6.5
CkB:				
Chesuncook	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
CkC:				
Chesuncook	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
CkD:				
Chesuncook	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
CLD:				
Chesuncook	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
CnB:				
Colonel	0-7	—	5.0-10	3.6-6.5
	7-16	—	2.0-8.0	3.6-6.5
	16-65	1.0-2.0	—	4.5-6.5
CnC:				
Colonel	0-7	—	5.0-10	3.6-6.5
	7-16	—	2.0-8.0	3.6-6.5
	16-65	1.0-2.0	—	4.5-6.5
CoB:				
Colonel	0-6	—	4.0-8.0	3.6-6.5
	6-20	—	2.0-12	3.6-6.5
	20-65	1.0-2.0	—	4.5-6.5
CoC:				
Colonel	0-6	—	4.0-8.0	3.6-6.5
	6-20	—	2.0-12	3.6-6.5
	20-65	1.0-2.0	—	4.5-6.5
CPC:				
Colonel	0-6	—	4.0-8.0	3.6-6.5
	6-20	—	2.0-12	3.6-6.5
	20-65	1.0-2.0	—	4.5-6.5
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
CsB:				
Colton	0-5	10-25	2.0-6.0	3.6-6.0
	5-28	5.0-30	1.0-2.0	3.6-6.0
	28-65	1.0-5.0	—	4.5-6.5
CsC:				
Colton	0-5	10-25	2.0-6.0	3.6-6.0
	5-28	5.0-30	1.0-2.0	3.6-6.0
	28-65	1.0-5.0	—	4.5-6.5
CsD:				
Colton	0-5	10-25	2.0-6.0	3.6-6.0
	5-28	5.0-30	1.0-2.0	3.6-6.0
	28-65	1.0-5.0	—	4.5-6.5
CTC:				
Colton	0-5	10-25	2.0-6.0	3.6-6.0
	5-28	5.0-30	1.0-2.0	3.6-6.0
	28-65	1.0-5.0	—	4.5-6.5
Sheepscot	0-4	—	8.0-18	3.6-6.5
	4-16	—	1.0-6.0	3.6-6.5
	16-25	—	1.0-2.0	3.6-6.5
	25-65	0.0-1.0	—	4.5-6.5
CuB:				
Croghan	0-5	5.0-20	3.0-9.0	3.6-6.0
	5-34	15-40	1.0-6.0	4.5-6.0
	34-65	2.0-10	0.5-1.0	4.5-6.0

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
DfB:				
Dixfield	0-7	—	3.0-8.0	3.6-6.5
	7-24	1.0-6.0	—	4.5-6.5
	24-65	0.0-3.0	—	4.5-6.5
DfC:				
Dixfield	0-7	—	3.0-8.0	3.6-6.5
	7-24	1.0-6.0	—	4.5-6.5
	24-65	0.0-3.0	—	4.5-6.5
DfD:				
Dixfield	0-7	—	3.0-8.0	3.6-6.5
	7-24	1.0-6.0	—	4.5-6.5
	24-65	0.0-3.0	—	4.5-6.5
DgB:				
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
DgC:				
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
DgD:				
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
DMC:				
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
Marlow	0-6	—	—	3.6-6.0
	6-23	—	—	3.6-6.0
	23-65	—	—	3.6-6.0
DTC:				
Dixfield	0-7	—	3.0-8.0	3.6-6.5
	7-22	1.0-6.0	—	4.5-6.5
	22-65	0.0-3.0	—	4.5-6.5
Colonel	0-7	—	5.0-10	3.6-6.5
	7-17	—	2.0-8.0	3.6-6.5
	17-65	1.0-2.0	—	4.5-6.5
DUD:				
Dixfield	0-5	—	3.0-6.0	3.6-6.5
	5-24	1.0-10	—	4.5-6.5
	24-65	0.0-3.0	—	4.5-6.5
Colonel	0-2	—	4.0-8.0	3.6-6.5
	2-18	—	2.0-12	3.6-6.5
	18-65	1.0-2.0	—	4.5-6.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
ECC:				
Elliottsville--------	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
Chesuncook----------	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
Telos----------	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
EMC:				
Elliottsville--------	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
Monson----------	0-2	—	6.0-13	3.6-6.0
	2-18	—	8.0-15	3.6-6.0
	18-22	—	—	—
EME:				
Elliottsville--------	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
Monson----------	0-2	—	6.0-13	3.6-6.0
	2-18	—	8.0-15	3.6-6.0
	18-22	—	—	—
EtB:				
Elliottsville--------	0-7	—	8.0-15	3.6-5.5
	7-17	—	2.0-15	3.6-5.5
	17-30	—	1.0-3.0	4.5-6.0
	30-34	—	—	—
Thorndike----------	0-7	—	4.0-6.0	3.6-6.0
	7-11	—	2.0-5.0	3.6-6.0
	11-15	—	—	—
EtC:				
Elliottsville--------	0-7	—	8.0-15	3.6-5.5
	7-17	—	2.0-15	3.6-5.5
	17-30	—	1.0-3.0	4.5-6.0
	30-34	—	—	—
Thorndike----------	0-7	—	4.0-6.0	3.6-6.0
	7-11	—	2.0-5.0	3.6-6.0
	11-15	—	—	—
EtD:				
Elliottsville--------	0-7	—	8.0-15	3.6-5.5
	7-17	—	2.0-15	3.6-5.5
	17-30	—	1.0-3.0	4.5-6.0
	30-34	—	—	—

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
EtD:				
Thorndike	0-7	—	4.0-6.0	3.6-6.0
	7-11	—	2.0-5.0	3.6-6.0
	11-15	—	—	—
Fr:				
Fryeburg	0-10	3.0-15	—	5.1-6.5
	10-35	2.0-5.0	—	5.1-6.5
	35-65	1.0-3.0	—	5.1-6.5
HeC:				
Hermon	0-2	—	3.0-8.0	3.6-5.5
	2-5	—	2.0-4.0	3.6-5.5
	5-19	—	1.0-6.0	3.6-6.0
	19-65	0.0-1.0	—	5.1-6.0
HeD:				
Hermon	0-2	—	3.0-8.0	3.6-5.5
	2-5	—	2.0-4.0	3.6-5.5
	5-19	—	1.0-6.0	3.6-6.0
	19-65	0.0-1.0	—	5.1-6.0
HMC:				
Hermon	0-2	—	3.0-8.0	3.6-5.5
	2-5	—	2.0-4.0	3.6-5.5
	5-19	—	1.0-6.0	3.6-6.0
	19-65	0.0-1.0	—	5.1-6.0
Monadnock	0-5	—	—	3.6-6.0
	5-27	—	—	3.6-6.0
	27-65	—	—	3.6-6.0
HME:				
Hermon	0-2	—	3.0-8.0	3.6-5.5
	2-5	—	2.0-4.0	3.6-5.5
	5-19	—	1.0-6.0	3.6-6.0
	19-65	0.0-1.0	—	5.1-6.0
Monadnock	0-5	—	—	3.6-6.0
	5-27	—	—	3.6-6.0
	27-65	—	—	3.6-6.0
Lc:				
Lovewell	0-11	4.0-11	—	4.5-6.5
	11-23	1.0-5.0	—	4.5-6.5
	23-65	1.0-3.0	—	4.5-6.5
Cornish	0-8	4.0-11	—	4.5-6.5
	8-62	1.0-4.0	—	4.5-6.5
	62-65	1.0-2.0	—	4.5-7.3
Ld:				
Lovewell	0-11	4.0-11	—	4.5-6.5
	11-23	1.0-5.0	—	4.5-6.5
	23-65	1.0-3.0	—	4.5-6.5
Cornish	0-8	4.0-11	—	4.5-6.5
	8-62	1.0-4.0	—	4.5-6.5
	62-65	1.0-2.0	—	4.5-7.3

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
LmE:				
Lyman	0-3	—	—	3.6-6.0
	3-15	—	—	3.6-6.0
	15-19	—	—	—
Rock Outcrop	0-60	—	—	—
Tunbridge	0-5	20-50	5.0-7.0	3.6-6.0
	5-18	5.0-15	1.0-2.0	3.6-6.0
	18-32	—	—	5.1-6.5
	32-36	—	—	—
LNC:				
Lyman	0-3	—	—	3.6-6.0
	3-15	—	—	3.6-6.0
	15-19	—	—	—
Tunbridge	0-5	20-50	5.0-7.0	3.6-6.0
	5-18	5.0-15	1.0-2.0	3.6-6.0
	18-32	—	—	5.1-6.5
	32-36	—	—	—
Abram	0-5	—	3.0-5.0	3.6-5.5
	5-9	—	—	—
LNE:				
Lyman	0-3	—	—	3.6-6.0
	3-15	—	—	3.6-6.0
	15-19	—	—	—
Tunbridge	0-5	20-50	5.0-7.0	3.6-6.0
	5-18	5.0-15	1.0-2.0	3.6-6.0
	18-32	—	—	5.1-6.5
	32-36	—	—	—
Abram	0-5	—	3.0-5.0	3.6-5.5
	5-9	—	—	—
LyC:				
Lyman	0-3	—	—	3.6-6.0
	3-15	—	—	3.6-6.0
	15-19	—	—	—
Tunbridge	0-5	20-50	5.0-7.0	3.6-6.0
	5-18	5.0-15	1.0-2.0	3.6-6.0
	18-32	—	—	5.1-6.5
	32-36	—	—	—
Rock Outcrop	0-60	—	—	—
MaB:				
Madawaska	0-8	—	5.0-15	4.5-6.0
	8-24	—	2.0-15	4.5-6.0
	24-65	—	0.0-1.0	4.5-6.0
MDB:				
Madawaska	0-8	—	5.0-15	4.5-6.0
	8-24	—	2.0-15	4.5-6.0
	24-65	—	0.0-1.0	4.5-6.0

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
MDB:				
Allagash	0-5	5.0-15	—	4.5-6.5
	5-21	4.0-15	—	4.5-6.5
	21-65	2.0-6.0	—	4.5-6.5
MeB:				
Marlow	0-7	—	—	3.6-6.0
	7-22	—	—	3.6-6.0
	22-65	—	—	3.6-6.0
MeC:				
Marlow	0-7	—	—	3.6-6.0
	7-22	—	—	3.6-6.0
	22-65	—	—	3.6-6.0
MeD:				
Marlow	0-7	—	—	3.6-6.0
	7-22	—	—	3.6-6.0
	22-65	—	—	3.6-6.0
MfB:				
Marlow	0-6	—	—	3.6-6.0
	6-23	—	—	3.6-6.0
	23-65	—	—	3.6-6.0
MfC:				
Marlow	0-6	—	—	3.6-6.0
	6-23	—	—	3.6-6.0
	23-65	—	—	3.6-6.0
MfD:				
Marlow	0-6	—	—	3.6-6.0
	6-23	—	—	3.6-6.0
	23-65	—	—	3.6-6.0
MGD:				
Marlow	0-6	—	—	3.6-6.0
	6-23	—	—	3.6-6.0
	23-65	—	—	3.6-6.0
Dixfield	0-4	—	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
MhB:				
Masardis	0-3	—	8.0-18	3.6-6.0
	3-14	—	1.0-6.0	3.6-6.0
	14-28	—	1.0-2.0	3.6-6.0
	28-65	—	0.0-1.0	4.5-6.0
MhC:				
Masardis	0-3	—	8.0-18	3.6-6.0
	3-14	—	1.0-6.0	3.6-6.0
	14-28	—	1.0-2.0	3.6-6.0
	28-65	—	0.0-1.0	4.5-6.0
MhD:				
Masardis	0-3	—	8.0-18	3.6-6.0
	3-14	—	1.0-6.0	3.6-6.0
	14-28	—	1.0-2.0	3.6-6.0
	28-65	—	0.0-1.0	4.5-6.0

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
MKE:				
Masardis	0-3	—	8.0-18	3.6-6.0
	3-14	—	1.0-6.0	3.6-6.0
	14-28	—	1.0-2.0	3.6-6.0
	28-65	—	0.0-1.0	4.5-6.0
Adams	0-4	12-26	3.0-9.0	3.6-5.5
	4-28	10-23	2.0-4.0	4.5-6.0
	28-65	1.0-5.0	—	4.5-6.5
MLC:				
Masardis	0-3	—	8.0-18	3.6-6.0
	3-14	—	1.0-6.0	3.6-6.0
	14-28	—	1.0-2.0	3.6-6.0
	28-65	—	0.0-1.0	4.5-6.0
Sheepscot	0-4	—	8.0-18	3.6-6.5
	4-16	—	1.0-6.0	3.6-6.5
	16-25	—	1.0-2.0	3.6-6.5
	25-65	0.0-1.0	—	4.5-6.5
Mm:				
Medomak	0-11	—	6.0-10	3.6-6.5
	11-36	—	5.0-11	3.6-6.5
	36-65	4.0-10	—	3.6-6.5
MNC:				
Monadnock	0-5	—	—	3.6-6.0
	5-27	—	—	3.6-6.0
	27-65	—	—	3.6-6.0
Berkshire	0-4	—	—	3.6-6.0
	4-32	—	—	3.6-6.0
	32-65	—	—	3.6-6.0
MNE:				
Monadnock	0-5	—	—	3.6-6.0
	5-27	—	—	3.6-6.0
	27-65	—	—	3.6-6.0
Berkshire	0-4	—	—	3.6-6.0
	4-32	—	—	3.6-6.0
	32-65	—	—	3.6-6.0
MrB:				
Monarda	0-7	—	3.0-8.0	3.6-6.0
	7-15	—	1.0-6.0	4.5-6.0
	15-65	4.0-8.0	—	5.1-7.3
MsB:				
Monarda	0-6	—	2.0-7.0	3.6-6.0
	6-17	—	1.0-6.0	4.5-6.0
	17-65	4.0-8.0	—	5.1-7.3
MTB:				
Monarda	0-6	—	2.0-7.0	3.6-6.0
	6-17	—	1.0-6.0	4.5-6.0
	17-65	4.0-8.0	—	5.1-7.3

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
MTB:				
Burnham	0-9	—	12-44	3.6-6.0
	9-25	3.0-14	—	5.1-6.5
	25-65	3.0-5.0	—	5.1-7.3
Bucksport	0-3	—	20-50	3.6-5.5
	3-37	—	20-50	3.6-6.0
	37-65	20-50	—	4.5-6.5
MUB:				
Monarda	0-6	—	2.0-7.0	3.6-6.0
	6-17	—	1.0-6.0	4.5-6.0
	17-65	4.0-8.0	—	5.1-7.3
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
MVC:				
Monson	0-2	—	6.0-13	3.6-6.0
	2-18	—	8.0-15	3.6-6.0
	18-22	—	—	—
Elliottsville	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
Nb:				
Naumburg	0-7	—	—	3.6-5.5
	7-25	—	—	3.6-5.5
	25-65	—	—	4.5-6.5
NS:				
Naumburg	0-7	—	—	3.6-5.5
	7-25	—	—	3.6-5.5
	25-65	—	—	4.5-6.5
Searsport	0-10	—	20-50	3.6-6.5
	10-16	—	2.0-3.0	3.6-6.5
	16-40	1.0-2.0	—	4.5-6.5
	40-65	0.0-1.0	—	4.5-6.5
NvB:				
Nicholville	0-10	—	—	3.6-6.0
	10-21	—	—	4.5-6.0
	21-37	—	—	4.5-6.5
	37-65	—	—	4.5-6.5
NvC:				
Nicholville	0-10	—	—	3.6-6.0
	10-21	—	—	4.5-6.0
	21-37	—	—	4.5-6.5
	37-65	—	—	4.5-6.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
PeB:				
Peacham	0-8	—	—	4.5-7.3
	8-20	—	—	4.5-7.3
	20-65	—	—	4.5-7.3
Brayton	0-6	—	3.0-6.0	3.6-6.0
	6-14	3.0-13	—	5.1-6.5
	14-65	2.0-5.0	—	5.6-7.3
Pr:				
Pits	0-60	—	—	—
Ps:				
Pits	0-6	—	—	—
	6-60	—	—	—
RRE:				
Ricker	0-2	—	—	3.6-4.4
	2-5	—	—	3.6-4.4
	5-7	—	—	3.6-5.0
	7-11	—	—	—
Rock Outcrop	0-60	—	—	—
RSE:				
Ricker	0-2	—	—	3.6-4.4
	2-5	—	—	3.6-4.4
	5-7	—	—	3.6-5.0
	7-11	—	—	—
Saddleback	0-5	—	4.0-10	3.6-5.5
	5-15	—	2.0-13	3.6-5.5
	15-19	—	—	—
RYE:				
Rock Outcrop	0-60	—	—	—
Abram	0-5	—	3.0-5.0	3.6-5.5
	5-9	—	—	—
Lyman	0-3	—	—	3.6-6.0
	3-15	—	—	3.6-6.0
	15-19	—	—	—
SAE:				
Saddleback	0-5	—	4.0-10	3.6-5.5
	5-15	—	2.0-13	3.6-5.5
	15-19	—	—	—
Mahoosuc	0-5	—	30-50	3.6-4.5
	5-65	—	—	—
Sisk	0-4	—	4.0-6.0	3.6-5.5
	4-24	—	1.0-14	3.6-5.5
	24-65	—	1.0-2.0	3.6-5.5
SKD:				
Sisk	0-4	—	4.0-6.0	3.6-5.5
	4-24	—	1.0-14	3.6-5.5
	24-65	—	1.0-2.0	3.6-5.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
SKD:				
Surplus	0-7	—	4.0-6.0	3.6-5.5
	7-26	—	1.0-10	3.6-5.5
	26-65	—	0.0-2.0	4.5-5.5
Sn:				
Sunday	0-9	—	3.0-7.0	3.6-6.5
	9-65	0.0-1.0	—	4.5-6.5
SRC:				
Surplus	0-7	—	4.0-6.0	3.6-5.5
	7-26	—	1.0-10	3.6-5.5
	26-65	—	0.0-2.0	4.5-5.5
Bemis	0-13	—	5.0-12	3.6-5.5
	13-65	—	1.0-2.0	3.6-5.5
SSC:				
Surplus	0-7	—	4.0-6.0	3.6-5.5
	7-26	—	1.0-10	3.6-5.5
	26-65	—	0.0-2.0	4.5-5.5
Saddleback	0-5	—	4.0-10	3.6-5.5
	5-15	—	2.0-13	3.6-5.5
	15-19	—	—	—
Ricker	0-2	—	—	3.6-4.4
	2-5	—	—	3.6-4.4
	5-7	—	—	3.6-5.0
	7-11	—	—	—
SVC:				
Surplus	0-7	—	4.0-6.0	3.6-5.5
	7-26	—	1.0-10	3.6-5.5
	26-65	—	0.0-2.0	4.5-5.5
Sisk	0-4	—	4.0-6.0	3.6-5.5
	4-24	—	1.0-14	3.6-5.5
	24-65	—	1.0-2.0	3.6-5.5
Sw:				
Swanville	0-7	4.0-14	—	4.5-7.3
	7-24	3.0-8.0	—	4.5-7.3
	24-65	2.0-5.0	—	5.6-7.3
SYB:				
Swanville	0-7	4.0-14	—	4.5-7.3
	7-24	3.0-8.0	—	4.5-7.3
	24-65	2.0-5.0	—	5.6-7.3
Boothbay	0-10	—	5.0-15	4.5-7.3
	10-18	4.0-9.0	—	4.5-7.3
	18-65	2.0-5.0	—	5.6-7.3
TeB:				
Telos	0-7	—	10-20	3.6-6.0
	7-18	—	1.0-2.0	3.6-6.0
	18-65	0.0-2.0	—	5.1-6.5

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
TeC:				
Telos	0-7	—	10-20	3.6-6.0
	7-18	—	1.0-2.0	3.6-6.0
	18-65	0.0-2.0	—	5.1-6.5
TfB:				
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
TfC:				
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
THC:				
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
Chesuncook	0-4	—	10-15	3.6-6.0
	4-18	—	2.0-14	3.6-6.0
	18-65	1.0-3.0	—	4.5-6.5
TLB:				
Telos	0-4	—	1.0-5.0	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
Monarda	0-6	—	1.0-3.0	3.6-6.5
	6-17	1.0-6.0	—	4.5-7.3
	17-65	4.0-8.0	—	5.1-7.8
TMB:				
Telos	0-4	—	2.0-10	3.6-6.0
	4-20	—	1.0-2.0	3.6-6.0
	20-65	1.0-2.0	—	5.1-6.5
Monarda	0-6	—	2.0-7.0	3.6-6.0
	6-17	—	1.0-6.0	4.5-6.0
	17-65	4.0-8.0	—	5.1-7.3
Monson	0-2	—	6.0-13	3.6-6.0
	2-18	—	8.0-15	3.6-6.0
	18-22	—	—	—
TOC:				
Thorndike	0-5	—	3.0-6.0	3.6-6.0
	5-14	—	2.0-13	3.6-6.0
	14-18	—	—	—
Elliottsville	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
TOE:				
Thorndike	0-5	—	3.0-6.0	3.6-6.0
	5-14	—	2.0-13	3.6-6.0
	14-18	—	—	—

Table 16.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction
	In	meq/100 g	meq/100 g	pH
TOE:				
Elliottsville--------	0-3	—	6.0-13	3.6-5.5
	3-18	—	2.0-15	3.6-5.5
	18-31	—	1.0-3.0	4.5-6.0
	31-35	—	—	—
TRC:				
Tunbridge----------	0-5	20-50	5.0-7.0	3.6-6.0
	5-18	5.0-25	1.0-2.0	3.6-6.0
	18-32	5.0-15	—	5.1-6.5
	32-36	—	—	—
Berkshire----------	0-2	4.0-5.0	—	3.6-6.0
	2-32	3.0-4.0	—	3.6-6.0
	32-65	0.0-3.0	—	3.6-6.0
Dixfield----------	0-4	3.0-6.0	3.0-6.0	3.6-6.5
	4-25	1.0-10	—	4.5-6.5
	25-65	0.0-3.0	—	4.5-6.5
TuB:				
Tunbridge----------	0-7	20-50	6.0-8.0	3.6-6.0
	7-16	5.0-25	2.0-10	3.6-6.0
	16-32	5.0-15	—	5.1-6.5
	32-36	—	—	—
Lyman----------	0-7	—	—	3.6-6.0
	7-13	—	—	3.6-6.0
	13-17	—	—	—
TuC:				
Tunbridge----------	0-7	20-50	6.0-8.0	3.6-6.0
	7-16	5.0-25	2.0-10	3.6-6.0
	16-32	5.0-15	—	5.1-6.5
	32-36	—	—	—
Lyman----------	0-7	—	—	3.6-6.0
	7-13	—	—	3.6-6.0
	13-17	—	—	—
Ud:				
Udorthents----------	0-65	—	—	4.5-7.8
Urban Land----------	0-6	—	—	—
W:				
Water----------	—	—	—	—

Table 17.--Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydro-logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
AdB:									
Adams	A	Jan-Dec	>6.0	---	---	---	None	---	None
AdC:									
Adams	A	Jan-Dec	>6.0	---	---	---	None	---	None
AdD:									
Adams	A	Jan-Dec	>6.0	---	---	---	None	---	None
AED:									
Adams	A	Jan-Dec	>6.0	---	---	---	None	---	None
Colton	A	Jan-Dec	>6.0	---	---	---	None	---	None
AFC:									
Adams	A	Jan-Dec	>6.0	---	---	---	None	---	None
Croghan	B	January	1.5-2.0	>6.0	---	---	None	---	None
		February	1.5-2.0	>6.0	---	---	None	---	None
		March	1.5-2.0	>6.0	---	---	None	---	None
		April	1.5-2.0	>6.0	---	---	None	---	None
		May	1.5-2.0	>6.0	---	---	None	---	None
		November	1.5-2.0	>6.0	---	---	None	---	None
		December	1.5-2.0	>6.0	---	---	None	---	None
AgA:									
Allagash	B	Jan-Dec	>6.0	---	---	---	None	---	None
AgB:									
Allagash	B	Jan-Dec	>6.0	---	---	---	None	---	None
AgC:									
Allagash	B	Jan-Dec	>6.0	---	---	---	None	---	None
BeB:									
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
BeC:									
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
BkC:									
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
BkD:									
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
BoB:									
Boothbay	C	January	1.0-2.0	1.5-3.0	---	---	None	---	None
		February	1.0-2.0	1.5-3.0	---	---	None	---	None
		March	1.0-2.0	1.5-3.0	---	---	None	---	None
		April	1.0-2.0	1.5-3.0	---	---	None	---	None
		May	1.0-2.0	1.5-3.0	---	---	None	---	None
		November	1.0-2.0	1.5-3.0	---	---	None	---	None
		December	1.0-2.0	1.5-3.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
BoC:									
Boothbay	C	January	1.0-2.0	1.5-3.0	---	---	None	---	None
		February	1.0-2.0	1.5-3.0	---	---	None	---	None
		March	1.0-2.0	1.5-3.0	---	---	None	---	None
		April	1.0-2.0	1.5-3.0	---	---	None	---	None
		May	1.0-2.0	1.5-3.0	---	---	None	---	None
		November	1.0-2.0	1.5-3.0	---	---	None	---	None
		December	1.0-2.0	1.5-3.0	---	---	None	---	None
BpB:									
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
BrB:									
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
BrC:									
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
BSB:									
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
Colonel	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
BTB:									
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
Peacham	D	January	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		February	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		March	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		April	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		May	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		June	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		October	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		November	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
		December	0.0-0.5	0.5-1.5	0.0-1.0	Long	Frequent	---	None
Markey	A/D	January	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		February	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		March	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		April	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		May	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		June	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		November	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
		December	0.0-1.0	>6.0	0.0-1.0	Long	Frequent	---	None
BW:									
Bucksport	D	January	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		February	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		March	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		April	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		May	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		June	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		July	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		September	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		October	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		November	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		December	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
Markey	A/D	January	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		February	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		November	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		December	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
Ca:									
Charles	C	January	0.0-1.0	>6.0	---	---	None	---	None
		February	0.0-1.0	>6.0	---	---	None	---	None
		March	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		April	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		May	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		June	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		October	---	---	---	---	None	Brief	Frequent
		November	0.0-1.0	>6.0	---	---	None	---	None
		December	0.0-1.0	>6.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
CG:									
Charles	C	January	0.0-1.0	>6.0	---	---	None	---	None
		February	0.0-1.0	>6.0	---	---	None	---	None
		March	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		April	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		May	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		June	0.0-1.0	>6.0	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		October	---	---	---	---	None	Brief	Frequent
		November	0.0-1.0	>6.0	---	---	None	---	None
		December	0.0-1.0	>6.0	---	---	None	---	None
Medomak	D	January	0.0-0.5	>6.0	---	---	None	---	None
		February	0.0-0.5	>6.0	---	---	None	---	None
		March	0.0-0.5	>6.0	---	---	None	Long	Frequent
		April	0.0-0.5	>6.0	---	---	None	Long	Frequent
		May	0.0-0.5	>6.0	---	---	None	Long	Frequent
		June	0.0-0.5	>6.0	---	---	None	Long	Frequent
		July	---	---	---	---	None	Long	Frequent
		August	---	---	---	---	None	Long	Frequent
		September	0.0-0.5	>6.0	---	---	None	Long	Frequent
		October	0.0-0.5	>6.0	---	---	None	Long	Frequent
		November	0.0-0.5	>6.0	---	---	None	---	None
		December	0.0-0.5	>6.0	---	---	None	---	None
Cornish	C	January	0.5-1.5	>6.0	---	---	None	---	None
		February	0.5-1.5	>6.0	---	---	None	---	None
		March	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		April	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		May	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		July	---	---	---	---	None	Brief	Occasional
		August	---	---	---	---	None	Brief	Occasional
		September	---	---	---	---	None	Brief	Occasional
		October	---	---	---	---	None	Brief	Occasional
		November	0.5-1.5	>6.0	---	---	None	---	None
		December	0.5-1.5	>6.0	---	---	None	---	None
ChB:									
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
ChC:									
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
ChD:									
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
CkB:									
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
CkC:									
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
CkD:									
Chesuncook----------	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
CLD:									
Chesuncook----------	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
Telos----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
CnB:									
Colonel----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
CnC:									
Colonel----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
CoB:									
Colonel----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
CoC:									
Colonel----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
CPC:									
Colonel	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
CsB:									
Colton	A	Jan-Dec	>6.0	---	---	---	None	---	None
CsC:									
Colton	A	Jan-Dec	>6.0	---	---	---	None	---	None
CsD:									
Colton	A	Jan-Dec	>6.0	---	---	---	None	---	None
CTC:									
Colton	A	Jan-Dec	>6.0	---	---	---	None	---	None
Sheepscot	B	January	1.5-2.5	>6.0	---	---	None	---	None
		February	1.5-2.5	>6.0	---	---	None	---	None
		March	1.5-2.5	>6.0	---	---	None	---	None
		April	1.5-2.5	>6.0	---	---	None	---	None
		May	1.5-2.5	>6.0	---	---	None	---	None
		November	1.5-2.5	>6.0	---	---	None	---	None
		December	1.5-2.5	>6.0	---	---	None	---	None
CuB:									
Croghan	B	January	1.5-2.0	>6.0	---	---	None	---	None
		February	1.5-2.0	>6.0	---	---	None	---	None
		March	1.5-2.0	>6.0	---	---	None	---	None
		April	1.5-2.0	>6.0	---	---	None	---	None
		May	1.5-2.0	>6.0	---	---	None	---	None
		November	1.5-2.0	>6.0	---	---	None	---	None
		December	1.5-2.0	>6.0	---	---	None	---	None
DfB:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
DfC:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
DfD:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
DgB:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
DgC:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
DgD:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
DMC:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
Marlow	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
DTC:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
Colonel	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
DUD:									
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
Colonel	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
ECC:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
EMC:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Monson	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
EME:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Monson	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
EtB:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Thorndike	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
EtC:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Thorndike	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
EtD:									
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
Thorndike	C/D	Jan-Dec	>6.0	---	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
Fr:									
Fryeburg	B	March	>6.0	---	---	---	None	Brief	Occasional
		April	>6.0	---	---	---	None	Brief	Occasional
		May	>6.0	---	---	---	None	Brief	Occasional
		June	>6.0	---	---	---	None	Brief	Occasional
		July	>6.0	---	---	---	None	Brief	Occasional
		August	>6.0	---	---	---	None	Brief	Occasional
		September	>6.0	---	---	---	None	Brief	Occasional
		October	>6.0	---	---	---	None	Brief	Occasional
HeC:									
Hermon	A	Jan-Dec	>6.0	---	---	---	None	---	None
HeD:									
Hermon	A	Jan-Dec	>6.0	---	---	---	None	---	None
HMC:									
Hermon	A	Jan-Dec	>6.0	---	---	---	None	---	None
Monadnock	B	Jan-Dec	>6.0	---	---	---	None	---	None
HME:									
Hermon	A	Jan-Dec	>6.0	---	---	---	None	---	None
Monadnock	B	Jan-Dec	>6.0	---	---	---	None	---	None
Lc:									
Lovewell	B	January	1.5-3.0	>6.0	---	---	None	---	None
		February	1.5-3.0	>6.0	---	---	None	---	None
		March	1.5-3.0	>6.0	---	---	None	Brief	Occasional
		April	1.5-3.0	>6.0	---	---	None	Brief	Occasional
		May	1.5-3.0	>6.0	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		July	---	---	---	---	None	Brief	Occasional
		August	---	---	---	---	None	Brief	Occasional
		September	---	---	---	---	None	Brief	Occasional
		October	---	---	---	---	None	Brief	Occasional
		November	1.5-3.0	>6.0	---	---	None	---	None
		December	1.5-3.0	>6.0	---	---	None	---	None
Cornish	C	January	0.5-1.5	>6.0	---	---	None	---	None
		February	0.5-1.5	>6.0	---	---	None	---	None
		March	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		April	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		May	0.5-1.5	>6.0	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		July	---	---	---	---	None	Brief	Occasional
		August	---	---	---	---	None	Brief	Occasional
		September	---	---	---	---	None	Brief	Occasional
		October	---	---	---	---	None	Brief	Occasional
		November	0.5-1.5	>6.0	---	---	None	---	None
		December	0.5-1.5	>6.0	---	---	None	---	None
LNE:									
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Abram	D	Jan-Dec	>6.0	---	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
Ld:									
Lovewell	B	January	1.5-3.0	>6.0	---	---	None	---	None
		February	1.5-3.0	>6.0	---	---	None	---	None
		March	1.5-3.0	>6.0	---	---	None	Brief	Frequent
		April	1.5-3.0	>6.0	---	---	None	Brief	Frequent
		May	1.5-3.0	>6.0	---	---	None	Brief	Frequent
		June	---	---	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		October	---	---	---	---	None	Brief	Frequent
		November	1.5-3.0	>6.0	---	---	None	---	None
		December	1.5-3.0	>6.0	---	---	None	---	None
Cornish	C	January	0.5-1.5	>6.0	---	---	None	---	None
		February	0.5-1.5	>6.0	---	---	None	---	None
		March	0.5-1.5	>6.0	---	---	None	Brief	Frequent
		April	0.5-1.5	>6.0	---	---	None	Brief	Frequent
		May	0.5-1.5	>6.0	---	---	None	Brief	Frequent
		June	---	---	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		October	---	---	---	---	None	Brief	Frequent
		November	0.5-1.5	>6.0	---	---	None	---	None
		December	0.5-1.5	>6.0	---	---	None	---	None
LmE									
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
LNC:									
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Abram	D								
		Jan-Dec	>6.0	---	---	---	None	---	None
LyC:									
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	---	---	---	None	---	None
MaB:									
Madawaska	B	January	1.5-3.0	>6.0	---	---	None	---	None
		February	1.5-3.0	>6.0	---	---	None	---	None
		March	1.5-3.0	>6.0	---	---	None	---	None
		April	1.5-3.0	>6.0	---	---	None	---	None
		May	1.5-3.0	>6.0	---	---	None	---	None
		November	1.5-3.0	>6.0	---	---	None	---	None
		December	1.5-3.0	>6.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
MDB:									
Madawaska----------	B	January	1.5-3.0	>6.0	---	---	None	---	None
		February	1.5-3.0	>6.0	---	---	None	---	None
		March	1.5-3.0	>6.0	---	---	None	---	None
		April	1.5-3.0	>6.0	---	---	None	---	None
		May	1.5-3.0	>6.0	---	---	None	---	None
		November	1.5-3.0	>6.0	---	---	None	---	None
		December	1.5-3.0	>6.0	---	---	None	---	None
Allagash----------	B	Jan-Dec	>6.0	---	---	---	None	---	None
MeB:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MeC:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MeD:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MfB:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MfC:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MfD:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
MGD:									
Marlow----------	C	March	1.5-2.5	1.5-2.5	---	---	None	---	None
		April	1.5-2.5	1.5-2.5	---	---	None	---	None
Dixfield----------	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
MhB:									
Masardis----------	A	Jan-Dec	>6.0	---	---	---	None	---	None
MhC:									
Masardis----------	A	Jan-Dec	>6.0	---	---	---	None	---	None
MhD:									
Masardis----------	A	Jan-Dec	>6.0	---	---	---	None	---	None
MKE:									
Masardis----------	A	Jan-Dec	>6.0	---	---	---	None	---	None
Adams----------	A	Jan-Dec	>6.0	---	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
MLC:									
Masardis	A	Jan-Dec	>6.0	---	---	---	None	---	None
Sheepscot	B	January	1.5-2.5	>6.0	---	---	None	---	None
		February	1.5-2.5	>6.0	---	---	None	---	None
		March	1.5-2.5	>6.0	---	---	None	---	None
		April	1.5-2.5	>6.0	---	---	None	---	None
		May	1.5-2.5	>6.0	---	---	None	---	None
		November	1.5-2.5	>6.0	---	---	None	---	None
		December	1.5-2.5	>6.0	---	---	None	---	None
Mm:									
Medomak	D	January	0.0-0.5	>6.0	---	---	None	---	None
		February	0.0-0.5	>6.0	---	---	None	---	None
		March	0.0-0.5	>6.0	---	---	None	Long	Frequent
		April	0.0-0.5	>6.0	---	---	None	Long	Frequent
		May	0.0-0.5	>6.0	---	---	None	Long	Frequent
		June	0.0-0.5	>6.0	---	---	None	Long	Frequent
		July	---	---	---	---	None	Long	Frequent
		August	---	---	---	---	None	Long	Frequent
		September	0.0-0.5	>6.0	---	---	None	Long	Frequent
		October	0.0-0.5	>6.0	---	---	None	Long	Frequent
		November	0.0-0.5	>6.0	---	---	None	---	None
		December	0.0-0.5	>6.0	---	---	None	---	None
MNC:									
Monadnock	B	Jan-Dec	>6.0	---	---	---	None	---	None
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
MNE:									
Monadnock	B	Jan-Dec	>6.0	---	---	---	None	---	None
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
MrB:									
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
MsB:									
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
MTB:									
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
Burnham	D	January	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		February	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		March	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		April	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		May	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		June	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		July	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		October	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		November	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
		December	0.0-0.5	0.0-1.0	0.0-1.0	Long	None	---	None
Bucksport	D	January	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		February	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		March	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		April	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		May	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		June	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		July	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		September	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		October	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		November	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
		December	0.0-0.5	>6.0	0.0-1.0	Long	None	---	None
MUB:									
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
MVC:									
Monson	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
MVC:									
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
Nb:									
Naumburg	C	January	0.5-1.5	>6.0	---	---	None	---	None
		February	0.5-1.5	>6.0	---	---	None	---	None
		March	0.5-1.5	>6.0	---	---	None	---	None
		April	0.5-1.5	>6.0	---	---	None	---	None
		May	0.5-1.5	>6.0	---	---	None	---	None
		December	0.5-1.5	>6.0	---	---	None	---	None
NS:									
Naumburg	C	January	0.5-1.5	>6.0	---	---	None	---	None
		February	0.5-1.5	>6.0	---	---	None	---	None
		March	0.5-1.5	>6.0	---	---	None	---	None
		April	0.5-1.5	>6.0	---	---	None	---	None
		May	0.5-1.5	>6.0	---	---	None	---	None
		December	0.5-1.5	>6.0	---	---	None	---	None
Searsport	D	January	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		February	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		July	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		September	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		October	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		November	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
		December	0.0-1.0	>6.0	0.0-1.0	Long	None	---	None
NvB:									
Nicholville	C	January	1.5-2.0	2.0-3.0	---	---	None	---	None
		February	1.5-2.0	2.0-3.0	---	---	None	---	None
		March	1.5-2.0	2.0-3.0	---	---	None	---	None
		April	1.5-2.0	2.0-3.0	---	---	None	---	None
		May	1.5-2.0	2.0-3.0	---	---	None	---	None
		November	1.5-2.0	2.0-3.0	---	---	None	---	None
		December	1.5-2.0	2.0-3.0	---	---	None	---	None
NvC:									
Nicholville	C	January	1.5-2.0	2.0-3.0	---	---	None	---	None
		February	1.5-2.0	2.0-3.0	---	---	None	---	None
		March	1.5-2.0	2.0-3.0	---	---	None	---	None
		April	1.5-2.0	2.0-3.0	---	---	None	---	None
		May	1.5-2.0	2.0-3.0	---	---	None	---	None
		November	1.5-2.0	2.0-3.0	---	---	None	---	None
		December	1.5-2.0	2.0-3.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
PeB:									
Peacham	D	January	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		February	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		March	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		April	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		May	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		June	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		October	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		November	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
		December	0.0-0.5	0.5-1.5	0.0-1.0	Long	None	---	None
Brayton	C	January	0.0-1.0	0.5-2.0	---	---	None	---	None
		February	0.0-1.0	0.5-2.0	---	---	None	---	None
		March	0.0-1.0	0.5-2.0	---	---	None	---	None
		April	0.0-1.0	0.5-2.0	---	---	None	---	None
		May	0.0-1.0	0.5-2.0	---	---	None	---	None
		June	0.0-1.0	0.5-2.0	---	---	None	---	None
		October	0.0-1.0	0.5-2.0	---	---	None	---	None
		November	0.0-1.0	0.5-2.0	---	---	None	---	None
		December	0.0-1.0	0.5-2.0	---	---	None	---	None
Pr:									
Pits	---	Jan-Dec	---	---	---	---	None	---	None
Ps:									
Pits	A	Jan-Dec	---	---	---	---	None	---	None
RRE:									
Ricker	A	Jan-Dec	>6.0	---	---	---	None	---	None
Rock Outcrop	D	Jan-Dec	>6.0	---	---	---	None	---	None
RSE:									
Ricker	A	Jan-Dec	>6.0	---	---	---	None	---	None
Saddleback	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
RYE:									
Rock Outcrop	D	Jan-Dec	>6.0	---	---	---	None	---	None
Abram	D	Jan-Dec	>6.0	---	---	---	None	---	None
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
SAE:									
Saddleback	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Mahoosuc	A	Jan-Dec	>6.0	---	---	---	None	---	None
Sisk	C	March	2.5-3.5	2.5-3.0	---	---	None	---	None
		April	2.5-3.5	2.5-3.0	---	---	None	---	None
		May	2.5-3.5	2.5-3.0	---	---	None	---	None
SKD:									
Sisk	C	March	2.5-3.5	2.5-3.0	---	---	None	---	None
		April	2.5-3.5	2.5-3.0	---	---	None	---	None
		May	2.5-3.5	2.5-3.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
SKD:									
Surplus	C	January	1.0-2.0	1.5-2.5	---	---	None	---	None
		February	1.0-2.0	1.5-2.5	---	---	None	---	None
		March	1.0-2.0	1.5-2.5	---	---	None	---	None
		April	1.0-2.0	1.5-2.5	---	---	None	---	None
		May	1.0-2.0	1.5-2.5	---	---	None	---	None
		October	1.0-2.0	1.5-2.5	---	---	None	---	None
		November	1.0-2.0	1.5-2.5	---	---	None	---	None
		December	1.0-2.0	1.5-2.5	---	---	None	---	None
Sn:									
Sunday	A	March	>6.0	---	---	---	None	Brief	Occasional
		April	>6.0	---	---	---	None	Brief	Occasional
		May	>6.0	---	---	---	None	Brief	Occasional
		June	>6.0	---	---	---	None	Brief	Occasional
		July	>6.0	---	---	---	None	Brief	Occasional
		August	>6.0	---	---	---	None	Brief	Occasional
		September	>6.0	---	---	---	None	Brief	Occasional
		October	>6.0	---	---	---	None	Brief	Occasional
SRC:									
Surplus	C	January	1.0-2.0	1.5-2.5	---	---	None	---	None
		February	1.0-2.0	1.5-2.5	---	---	None	---	None
		March	1.0-2.0	1.5-2.5	---	---	None	---	None
		April	1.0-2.0	1.5-2.5	---	---	None	---	None
		May	1.0-2.0	1.5-2.5	---	---	None	---	None
		October	1.0-2.0	1.5-2.5	---	---	None	---	None
		November	1.0-2.0	1.5-2.5	---	---	None	---	None
		December	1.0-2.0	1.5-2.5	---	---	None	---	None
Bemis	C	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		September	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
SSC:									
Surplus	C	January	1.0-2.0	1.5-2.5	---	---	None	---	None
		February	1.0-2.0	1.5-2.5	---	---	None	---	None
		March	1.0-2.0	1.5-2.5	---	---	None	---	None
		April	1.0-2.0	1.5-2.5	---	---	None	---	None
		May	1.0-2.0	1.5-2.5	---	---	None	---	None
		October	1.0-2.0	1.5-2.5	---	---	None	---	None
		November	1.0-2.0	1.5-2.5	---	---	None	---	None
		December	1.0-2.0	1.5-2.5	---	---	None	---	None
Saddleback	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Ricker	A	Jan-Dec	>6.0	---	---	---	None	---	None
SVC:									
Surplus	C	January	1.0-2.0	1.5-2.5	---	---	None	---	None
		February	1.0-2.0	1.5-2.5	---	---	None	---	None
		March	1.0-2.0	1.5-2.5	---	---	None	---	None
		April	1.0-2.0	1.5-2.5	---	---	None	---	None
		May	1.0-2.0	1.5-2.5	---	---	None	---	None
		October	1.0-2.0	1.5-2.5	---	---	None	---	None
		November	1.0-2.0	1.5-2.5	---	---	None	---	None
		December	1.0-2.0	1.5-2.5	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table Upper limit	Water table Lower limit	Ponding Surface water depth	Ponding Duration	Ponding Frequency	Flooding Duration	Flooding Frequency
			Ft	Ft	Ft				
SVC:									
Sisk----------	C	March	2.5-3.5	2.5-3.0	---	---	None	---	None
		April	2.5-3.5	2.5-3.0	---	---	None	---	None
		May	2.5-3.5	2.5-3.0	---	---	None	---	None
Sw:									
Swanville----------	C	January	0.0-1.0	0.5-3.0	---	---	None	---	None
		February	0.0-1.0	0.5-3.0	---	---	None	---	None
		March	0.0-1.0	0.5-3.0	---	---	None	---	None
		April	0.0-1.0	0.5-3.0	---	---	None	---	None
		May	0.0-1.0	0.5-3.0	---	---	None	---	None
		October	0.0-1.0	0.5-3.0	---	---	None	---	None
		November	0.0-1.0	0.5-3.0	---	---	None	---	None
		December	0.0-1.0	0.5-3.0	---	---	None	---	None
SYB:									
Swanville----------	C	January	0.0-1.0	0.5-3.0	---	---	None	---	None
		February	0.0-1.0	0.5-3.0	---	---	None	---	None
		March	0.0-1.0	0.5-3.0	---	---	None	---	None
		April	0.0-1.0	0.5-3.0	---	---	None	---	None
		May	0.0-1.0	0.5-3.0	---	---	None	---	None
		October	0.0-1.0	0.5-3.0	---	---	None	---	None
		November	0.0-1.0	0.5-3.0	---	---	None	---	None
		December	0.0-1.0	0.5-3.0	---	---	None	---	None
Boothbay----------	C	January	1.0-2.0	1.5-3.0	---	---	None	---	None
		February	1.0-2.0	1.5-3.0	---	---	None	---	None
		March	1.0-2.0	1.5-3.0	---	---	None	---	None
		April	1.0-2.0	1.5-3.0	---	---	None	---	None
		May	1.0-2.0	1.5-3.0	---	---	None	---	None
		November	1.0-2.0	1.5-3.0	---	---	None	---	None
		December	1.0-2.0	1.5-3.0	---	---	None	---	None
TeB:									
Telos----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
TeC:									
Telos----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
TfB:									
Telos----------	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
TfC:									
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
THC:									
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
Chesuncook	C	March	1.5-2.0	2.0-2.5	---	---	None	---	None
		April	1.5-2.0	2.0-2.5	---	---	None	---	None
		May	1.5-2.0	2.0-2.5	---	---	None	---	None
TLB:									
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
TMB:									
Telos	C	January	0.5-1.5	1.0-2.0	---	---	None	---	None
		February	0.5-1.5	1.0-2.0	---	---	None	---	None
		March	0.5-1.5	1.0-2.0	---	---	None	---	None
		April	0.5-1.5	1.0-2.0	---	---	None	---	None
		May	0.5-1.5	1.0-2.0	---	---	None	---	None
		June	0.5-1.5	1.0-2.0	---	---	None	---	None
		October	0.5-1.5	1.0-2.0	---	---	None	---	None
		November	0.5-1.5	1.0-2.0	---	---	None	---	None
		December	0.5-1.5	1.0-2.0	---	---	None	---	None

Table 17.--Water Features--Continued

Map symbol and soil name	Hydro-logic group	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
			Ft	Ft	Ft				
TMB:									
Monarda	D	January	0.0-1.0	0.5-1.5	---	---	None	---	None
		February	0.0-1.0	0.5-1.5	---	---	None	---	None
		March	0.0-1.0	0.5-1.5	---	---	None	---	None
		April	0.0-1.0	0.5-1.5	---	---	None	---	None
		May	0.0-1.0	0.5-1.5	---	---	None	---	None
		June	0.0-1.0	0.5-1.5	---	---	None	---	None
		October	0.0-1.0	0.5-1.5	---	---	None	---	None
		November	0.0-1.0	0.5-1.5	---	---	None	---	None
		December	0.0-1.0	0.5-1.5	---	---	None	---	None
Monson	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
TOC:									
Thorndike	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
TOE:									
Thorndike	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Elliottsville	B	Jan-Dec	>6.0	---	---	---	None	---	None
TRC:									
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Berkshire	B	Jan-Dec	>6.0	---	---	---	None	---	None
Dixfield	C	January	1.5-2.5	2.0-3.0	---	---	None	---	None
		February	1.5-2.5	2.0-3.0	---	---	None	---	None
		March	1.5-2.5	2.0-3.0	---	---	None	---	None
		April	1.5-2.5	2.0-3.0	---	---	None	---	None
		November	1.5-2.5	2.0-3.0	---	---	None	---	None
		December	1.5-2.5	2.0-3.0	---	---	None	---	None
TuB:									
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
TuC:									
Tunbridge	C	Jan-Dec	>6.0	---	---	---	None	---	None
Lyman	C/D	Jan-Dec	>6.0	---	---	---	None	---	None
Ud:									
Udorthents	C	January	2.0-3.5	>6.0	---	---	None	---	None
		February	2.0-3.5	>6.0	---	---	None	---	None
		March	2.0-3.5	>6.0	---	---	None	---	None
		April	2.0-3.5	>6.0	---	---	None	---	None
		May	2.0-3.5	>6.0	---	---	None	---	None
		November	2.0-3.5	>6.0	---	---	None	---	None
		December	2.0-3.5	>6.0	---	---	None	---	None
Urban Land	---	January	2.0-6.0	>6.0	---	---	None	---	None
		February	2.0-6.0	>6.0	---	---	None	---	None
		March	2.0-6.0	>6.0	---	---	None	---	None
		April	2.0-6.0	>6.0	---	---	None	---	None
		May	2.0-6.0	>6.0	---	---	None	---	None
		November	2.0-6.0	>6.0	---	---	None	---	None
		December	2.0-6.0	>6.0	---	---	None	---	None
W:									
Water	---	Jan-Dec	---	---	---	---	None	---	None

Table 18.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
AdB:					
Adams	---	---	Low	Low	High
AdC:					
Adams	---	---	Low	Low	High
AdD:					
Adams	---	---	Low	Low	High
AED:					
Adams	---	---	Low	Low	High
Colton	---	---	Low	Low	High
AFC:					
Adams	---	---	Low	Low	High
Croghan	---	---	Moderate	Low	High
AgA:					
Allagash	---	---	Moderate	Low	High
AgB:					
Allagash	---	---	Moderate	Low	High
AgC:					
Allagash	---	---	Moderate	Low	High
BeB:					
Berkshire	---	---	Moderate	Low	High
BeC:					
Berkshire	---	---	Moderate	Low	High
BkC:					
Berkshire	---	---	Moderate	Low	High
BkD:					
Berkshire	---	---	Moderate	Low	High
BoB:					
Boothbay	Firm substratum	18-36	High	Moderate	Moderate
BoC:					
Boothbay	Firm substratum	18-36	High	Moderate	Moderate
BpB:					
Brayton	Dense substratum	10-25	High	High	Moderate
BrB:					
Brayton	Dense substratum	10-25	High	High	Moderate
BrC:					
Brayton	Dense substratum	10-25	High	High	Moderate
BSB:					
Brayton	Dense substratum	10-25	High	High	Moderate
Colonel	Dense substratum	10-24	High	Moderate	Moderate

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In			
BTB:					
Brayton	Dense substratum	10-25	High	High	Moderate
Peacham	Dense substratum	10-20	High	Moderate	High
Markey	---	---	High	High	Low
BW:					
Bucksport	---	---	High	Moderate	High
Markey	---	---	High	High	Low
Ca:					
Charles	---	---	High	High	Moderate
CG:					
Charles	---	---	High	High	Moderate
Medomak	---	---	High	High	Moderate
Cornish	---	---	High	High	Moderate
ChB:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
ChC:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
ChD:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
CkB:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
CkC:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
CkD:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
CLD:					
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
Telos	Dense substratum	15-21	High	Moderate	Moderate
CnB:					
Colonel	Dense substratum	10-24	High	Moderate	Moderate
CnC:					
Colonel	Dense substratum	10-24	High	Moderate	Moderate
CoB:					
Colonel	Dense substratum	10-24	High	Moderate	Moderate
CoC:					
Colonel	Dense substratum	10-24	High	Moderate	Moderate
CPC:					
Colonel	Dense substratum	10-24	High	Moderate	Moderate
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
CsB:					
Colton	---	---	Low	Low	High

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
CsC:					
Colton	---	---	Low	Low	High
CsD:					
Colton	---	---	Low	Low	High
CTC:					
Colton	---	---	Low	Low	High
Sheepscot	---	---	Low	Low	High
CuB:					
Croghan	---	---	Moderate	Low	High
DfB:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DfC:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DfD:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DgB:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DgC:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DgD:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
DMC:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
DTC:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
Colonel	Dense substratum	10-24	High	Moderate	Moderate
DUD:					
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
Colonel	Dense substratum	10-24	High	Moderate	Moderate
ECC:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Chesuncook	Dense substratum	18-26	Moderate	Low	Moderate
Telos	Dense substratum	13-21	High	Moderate	Moderate
EMC:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Monson	Bedrock (lithic)	10-20	Moderate	Low	High
EME:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Monson	Bedrock (lithic)	10-20	Moderate	Low	High

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Potential for frost action	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In			
EtB:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Thorndike	Bedrock (lithic)	10-20	Moderate	Moderate	High
EtC:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Thorndike	Bedrock (lithic)	10-20	Moderate	Moderate	High
EtD:					
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Thorndike	Bedrock (lithic)	10-20	Moderate	Moderate	High
Fr:					
Fryeburg	---	---	High	Low	Moderate
HeC:					
Hermon	---	---	Low	Low	High
HeD:					
Hermon	---	---	Low	Low	High
HMC:					
Hermon	---	---	Low	Low	High
Monadnock	---	---	Low	Low	High
HME:					
Hermon	---	---	Low	Low	High
Monadnock	---	---	Low	Low	High
Lc:					
Lovewell	---	---	High	Moderate	Moderate
Cornish	---	---	High	High	Moderate
Ld:					
Lovewell	---	---	High	Moderate	Moderate
Cornish	---	---	High	High	Moderate
LmE:					
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
Rock Outcrop	Bedrock (lithic)	0-0	None	---	---
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
LNC:					
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Abram	Bedrock (lithic)	1-10	Low	Low	High
LNE:					
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Abram	Bedrock (lithic)	1-10	Low	Low	High

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
LyC:					
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Rock Outcrop	Bedrock (lithic)	0-0	None	---	---
MaB:					
Madawaska	---	---	Moderate	Moderate	High
MDB:					
Madawaska	---	---	Moderate	Moderate	High
Allagash	---	---	Moderate	Low	High
MeB:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MeC:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MeD:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MfB:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MfC:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MfD:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
MGD:					
Marlow	Dense substratum	18-32	Moderate	Low	Moderate
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
MhB:					
Masardis	---	---	Low	Low	Moderate
MhC:					
Masardis	---	---	Low	Low	Moderate
MhD:					
Masardis	---	---	Low	Low	Moderate
MKE:					
Masardis	---	---	Low	Low	Moderate
Adams	---	---	Low	Low	High
MLC:					
Masardis	---	---	Low	Low	Moderate
Sheepscot	---	---	Low	Low	High
Mm:					
Medomak	---	---	High	High	Moderate
MNC:					
Monadnock	---	---	Low	Low	High
Berkshire	---	---	Moderate	Low	High

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
MNE:					
Monadnock	---	---	Low	Low	High
Berkshire	---	---	Moderate	Low	High
MrB:					
Monarda	Dense substratum	12-24	High	High	High
MsB:					
Monarda	Dense substratum	12-24	High	High	High
MTB:					
Monarda	Dense substratum	12-24	High	High	High
Burnham	Dense substratum	6-16	High	High	Moderate
Bucksport	---	---	High	Moderate	High
MUB:					
Monarda	Dense substratum	12-24	High	High	High
Telos	Dense substratum	13-21	High	Moderate	Moderate
MVC:					
Monson	Bedrock (lithic)	10-20	Moderate	Low	High
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
Telos	Dense substratum	13-31	High	Moderate	Moderate
Nb:					
Naumburg	---	---	Moderate	High	High
NS:					
Naumburg	---	---	Moderate	High	High
Searsport	---	---	Moderate	High	High
NvB:					
Nicholville	---	---	High	Low	Moderate
NvC:					
Nicholville	---	---	High	Low	Moderate
PeB:					
Peacham	Dense substratum	10-20	High	Moderate	High
Brayton	Dense substratum	10-25	High	High	Moderate
Pr:					
Pits	Bedrock (lithic)	0-0	None	---	---
Ps:					
Pits	---	---	None	---	---
RRE:					
Ricker	Bedrock (lithic)	2-26	Low	High	High
Rock Outcrop	Bedrock (lithic)	0-0	None	---	---
RSE:					
Ricker	Bedrock (lithic)	2-26	Low	High	High
Saddleback	Bedrock (lithic)	10-25	Moderate	Low	High

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
RYE:					
Rock Outcrop	Bedrock (lithic)	0-0	None	---	---
Abram	Bedrock (lithic)	1-10	Low	Low	High
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
SAE:					
Saddleback	Bedrock (lithic)	10-25	Moderate	Low	High
Mahoosuc	Bedrock (lithic)	40-40	Low	Low	Low
Sisk	Dense substratum	20-36	Moderate	Low	High
SKD:					
Sisk	Dense substratum	20-36	Moderate	Low	High
Surplus	Dense substratum	20-30	High	Moderate	High
Sn:					
Sunday	---	---	Low	Low	Moderate
SRC:					
Surplus	Dense substratum	20-30	High	Moderate	High
Bemis	Dense substratum	7-20	High	High	Moderate
SSC:					
Surplus	Dense substratum	20-30	High	Moderate	High
Saddleback	Bedrock (lithic)	10-25	Moderate	Low	High
Ricker	Bedrock (lithic)	2-26	Low	High	High
SVC:					
Surplus	Dense substratum	20-30	High	Moderate	High
Sisk	Dense substratum	20-36	Moderate	Low	High
Sw:					
Swanville	Firm substratum	18-40	High	High	Low
SYB:					
Swanville	Firm substratum	18-40	High	High	Low
Boothbay	Firm substratum	18-40	High	Moderate	Moderate
TeB:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
TeC:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
TfB:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
TfC:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
THC:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
Chesuncook	Dense substratum	15-26	Moderate	Low	Moderate

Table 18.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In			
TLB:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
Monarda	Dense substratum	12-24	High	High	High
TMB:					
Telos	Dense substratum	13-21	High	Moderate	Moderate
Monarda	Dense substratum	12-30	High	High	High
Monson	Bedrock (lithic)	10-20	Moderate	Low	High
TOC:					
Thorndike	Bedrock (lithic)	10-20	Moderate	Moderate	High
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
TOE:					
Thorndike	Bedrock (lithic)	10-20	Moderate	Moderate	High
Elliottsville	Bedrock (lithic)	20-40	Moderate	Low	Moderate
TRC:					
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Berkshire	---	---	Moderate	Low	High
Dixfield	Dense substratum	18-26	High	Moderate	Moderate
TuB:					
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
TuC:					
Tunbridge	Bedrock (lithic)	20-40	Moderate	High	High
Lyman	Bedrock (lithic)	10-20	Moderate	Low	High
Ud:					
Udorthents	---	---	---	---	---
Urban Land	---	---	None	---	---
W:					
Water	---	---	---	---	---

Table 19.--Classification of the Soils

Soil name	Family or higher taxonomic class
Abram	Lithic Udorthents, loamy, mixed, acid, frigid
Adams	Typic Haplorthods, sandy, mixed, frigid
Allagash	Typic Haplorthods, coarse-loamy over sandy or sandy-skeletal, mixed, frigid
Bemis	Aeric Cryaquepts, coarse-loamy, mixed, acid
Berkshire	Typic Haplorthods, coarse-loamy, mixed, frigid
Boothbay	Aquic Dystric Eutrochrepts, fine-silty, mixed, frigid
Brayton	Aeric Haplaquepts, coarse-loamy, mixed, nonacid, frigid
Bucksport	Typic Borosaprists, euic
Burnham	Histic Humaquepts, coarse-loamy, mixed, nonacid, frigid
Charles	Aeric Fluvaquents, coarse-silty, mixed, nonacid, frigid
Chesuncook	Typic Haplorthods, coarse-loamy, mixed, frigid
Colonel	Aquic Haplorthods, coarse-loamy, mixed, frigid
Colton	Typic Haplorthods, sandy-skeletal, mixed, frigid
Cornish	Fluvaquentic Dystrochrepts, coarse-silty, mixed, frigid
Croghan	Aquic Haplorthods, sandy, mixed, frigid
Dixfield	Typic Haplorthods, coarse-loamy, mixed, frigid
Elliottsville	Typic Haplorthods, coarse-loamy, mixed, frigid
Fryeburg	Fluventic Dystrochrepts, coarse-silty, mixed, frigid
Hermon	Typic Haplorthods, sandy-skeletal, mixed, frigid
Lovewell	Fluvaquentic Dystrochrepts, coarse-silty, mixed, frigid
Lyman	Lithic Haplorthods, loamy, mixed, frigid
Madawaska	Aquic Haplorthods, coarse-loamy over sandy or sandy-skeletal, mixed, frigid
Mahoosuc	Typic Borofolists, dysic
Markey	Terric Borosaprists, sandy or sandy-skeletal, mixed, euic
Marlow	Typic Haplorthods, coarse-loamy, mixed, frigid
Masardis	Typic Haplorthods, sandy-skeletal, mixed, frigid
Medomak	Fluvaquentic Humaquepts, coarse-silty, mixed, nonacid, frigid
Monadnock	Typic Haplorthods, coarse-loamy over sandy or sandy-skeletal, mixed, frigid
Monarda	Aeric Haplaquepts, coarse-loamy, mixed, acid, frigid
Monson	Lithic Haplorthods, loamy, mixed, frigid
Naumburg	Aeric Haplaquods, sandy, mixed, frigid
Nicholville	Aquic Haplorthods, coarse-silty, mixed, frigid
Peacham	Histic Humaquepts, coarse-loamy, mixed, nonacid, frigid
Ricker	Lithic Borofolists, dysic
Saddleback	Humic Lithic Cryorthods, loamy, mixed
Searsport	Histic Humaquepts, sandy, mixed, frigid
Sheepscot	Typic Haplorthods, sandy-skeletal, mixed, frigid
Sisk	Humic Cryorthods, coarse-loamy, mixed
Sunday	Typic Udipsamments, mixed, frigid
Surplus	Typic Cryorthods, coarse-loamy, mixed
Swanville	Aeric Haplaquepts, fine-silty, mixed, nonacid, frigid
Telos	Aquic Haplorthods, coarse-loamy, mixed, frigid
Thorndike	Lithic Haplorthods, loamy-skeletal, mixed, frigid
Tunbridge	Typic Haplorthods, coarse-loamy, mixed, frigid
Udorthents	Udorthents

Table 20.--Relationship of the Soil Series in the Survey Area to Landscape Position, Parent Material, and Drainage

Parent Material	Excessively drained	Somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	SOILS ON UPLANDS						
Very shallow or shallow organic material	Ricker	Ricker	Ricker				
Deep and very deep, thin organic material over fragmental colluvium		Mahoosuc					
Very shallow, moderately coarse textured glacial till derived mainly from mica schist and phyllite and some granite and gneiss	Abram						
Shallow, moderately coarse textured glacial till derived mainly from mica schist and phyllite and some granite and gneiss		Lyman					
Shallow, medium textured and moderately coarse textured glacial till that has a cryic temperature regime			Saddleback				
Shallow, medium textured channery glacial till derived from phyllite or slate		Thorndike					
Shallow, medium textured glacial till derived mainly from slate, phyllite, or schist		Monson					
Moderately deep, medium texturedand moderately coarse textured glacial till derived mainly from mica schist, gneiss, or phyllite			Tunbridge				
Moderately deep, medium textured glacial till derived mainly from slate, phyllite or slate			Elliottsville				
Very deep, moderately coarse textured and coarse textured glacial till derived mainly from granite, gneiss, and mica schist		Hermon	Monadnock				

Table 20.--Relationship of the Soil Series in the Survey Area to Landscape Position, Parent Material, and Drainage--Continued

Parent Material	Excessively drained	Somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	SOILS ON UPLANDS						
Very deep, moderately coarse textured, dense glacial till derived mainly from mica schist and phyllite and some gneiss or granite			Marlow	Dixfield	Colonel	Brayton	Peacham
Very deep, medium textured and moderately coarse textured glacial till derived mainly from mica schist and phyllite and some gneiss and granite			Berkshire				
Very deep, medium textured and moderately coarse textured dense glacial till that has a cryic temperature regime			Sisk	Surplus	Surplus	Bemis	
Very deep, medium textured dense glacial till derived mainly from slate, phyllite, or schist				Chesuncook	Telos	Monarda	Burnham
Very deep, moderately coarse textured material over gravelly, coarse textured material	Colton			Sheepscot			
Very deep, medium textured and moderately coarse textured material over gravelly coarse textured material		Masardis					
Very deep, coarse textured material		Adams		Croghan	Naumburg	Naumburg	Searsport
Very deep, moderately coarse textured material over coarse textured material			Allagash	Madawaska	Madawaska		
	SOILS ON LACUSTRINE PLAINS						
Very deep, medium textured material				Nicholville			
Very deep, medium textured material over moderately fine textured and medium textured material				Boothbay	Boothbay	Swanville	

Table 20.--Relationship of the Soil Series in the Survey Area to Landscape Position, Parent Material, and Drainage--Continued

Parent Material	Excessively drained	Somewhat excessively drained	Well drained	Moderately well drained	Somewhat poorly drained	Poorly drained	Very poorly drained
	SOILS ON FLOOD PLAINS						
Very deep, coarse textured material	Sunday						
Very deep, medium textured material over medium textured or coarse textured material			Fryeburg	Lovewell	Cornish	Charles	Medomak
	SOILS IN SWAMPS AND BOGS						
Moderately deep to coarse material, well decomposed herbaceous, mossy, or woody fiber							Markey
Very deep, well decomposed herbaceous, mossy, or woody fiber							Bucksport

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